AGENDA
YAKIMA CITY COUNCIL
STUDY SESSION
February 27, 2024
City Hall -- Council Chambers - 129 N 2nd Street, Yakima, WA
5:00 p.m. Study Session --- This meeting will be conducted in person, live streamed at www.yakimawa.gov/council/live-stream/ and telecast live on Y-PAC, Spectrum Cable Channel 194. You may also participate via Zoom: https://cityofyakima.zoom.us/j/97458314153 or call in by dialing 1-253-215-8782 | Webinar ID: 974 5831 4153 | Passcode: 410697 --- Individuals who wish to provide public comment remotely are encouraged to submit a Public Comment Request Form online at: www.yakimawa.gov/council/public-comment no later than 3:00 p.m. on the day of the meeting. If you wish to provide public comment in-person, please fill out a "Request for Appearance" form and hand it to the City Clerk before you address City Council.

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1. Roll Call
2. Public comment (allow 15 minutes)
3. Update on Cascade Millsite Parkway
4. Presentation of the City Space Study
5. Update on 40th Ave & Chestnut Traffic Analysis
6. Adjournment

The next meeting is a City Council regular meeting on March 5, 2024, at 5:30 p.m. in the City Hall Council Chambers

Any invocation that may be offered before the official start of the Council meeting shall be the voluntary offering of a private citizen, to and for the benefit of the Council. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the Council, and the Council does not endorse the religious beliefs or views of this, or any other speaker.

A Council packet is available for review at the City Clerk's Office and on-line at www.yakimawa.gov. The City provides special accommodations, such as hearing devices, wheelchair space or language interpreters, for City meetings. Anyone needing special assistance please contact the City Clerk's office at (509) 575-6037 at least two business days prior to the meeting. All meetings are live streamed on the City of Yakima website at www.yakimawa.gov and telecast live on Y-PAC, Spectrum Cable Channel 194.

BUSINESS OF THE CITY COUNCIL
YAKIMA, WASHINGTON
AGENDA STATEMENT

Item No. 3.
For Meeting of: February 27, 2024

ITEM TITLE: Update on Cascade Millsite Parkway

SUBMITTED BY: Scott Schafer, Director of Public Works
*Bill Preston, City Engineer

SUMMARY EXPLANATION:

The City of Yakima (City) Engineering will provide an update on past projects, current design and construction efforts, along with funding and environmental status related to the Cascade Mill Site property.

Color copies of the backup material can be viewed at the following link:

https://yakimawa.box.com/s/0criy9jx3lphy3935wrkl1zxlzhlgdgq

ITEM BUDGETED: NA

STRATEGIC PRIORITY: Public Trust and Accountability

APPROVED FOR SUBMITTAL BY THE CITY MANAGER

RECOMMENDATION:

Informational Only

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Backup material	2/16/2024	Backup Material
🗋	Bravo Blvd plansheet	2/16/2024	Backup Material

East West Corridor (Yakima Mill Site) White Paper

Background:

The City of Yakima is a committed partner of a multi-jurisdictional grouping of transportation projects increasing regional connectivity titled, "The East-West Corridor." There are three major projects that comprise the East-West Corridor and the region's efforts to improve access, improve safety, and provide economic development.

- Yakima County is constructing a 4 lane roadway, including roundabouts at key intersections, an undercrossing of I-82, and a new bridge over the Yakima River.
- The City of Yakima is constructing Bravo Company Blvd, also a 4 lane roadway with roundabouts, connecting with the County's project, as well as traveling through the Mill Site. Bravo Company Blvd will connect with H Street, which will also be improved, to connect with the Principal Arterial of N 1st Street.
- WSDOT will add an additional lane in each direct on I-82, as well as provide an interchange to connect to the County and City roadways.

The City's project, Bravo Company Blvd traverses the old Cascade Mill Site which closed in 2006 and has remained undeveloped. Both the Yakima County project, and WSDOT's improvements will alleviate the congestion that now chokes Yakima Avenue into downtown.

City's projects:

- **Bravo Co Blvd – Stage 1**: This project connects to Fair Ave on the south, and just crosses the RR tracks to the north. Lochner Inc. is providing the design for the project and is scheduled to provide 100% ad ready plans by the April 1, 2024.
- **Bravo Co Blvd – Stage 2**: This project connects H Street on the West with the Stage 1 project just north of the RR tracks. Lochner Inc. has included the design of the project in their scope and will ad ready by April 1, 2024
- **H Street**: Reconstruct H Street from the end of Phase 2 to N. 1st. Three lane roadway with sidewalks, bike lanes, and multiuse path.
- **I-82 Sewer addition:** This project provides for the design and partial construction of a new sewer trunk line along I-82 through the Mill Site property. The project is scheduled to begin design in early 2024 utilizing RH2 as our consultant. It is NOT part of the coalition of projects and thus is NOT part of NEPA.

Current status:

- 2021 removed the MSW from the R/W for Phase 1.
- Ad ready plans for Bravo Co Blvd. Stage 1 and 2 April 1, 2024.
- Working on an Interim Action Work Plan with DOE to install underground utilities in Phase 2.
- H Street reconstruction needs funding for Design, R/W, and Construction.
- Need to get RH2 under contract for design in April, 2024.
- Awaiting NEPA approval from FHWA.
- Monthly updates to DOE to keep them informed of project progress.
- We were having regular meetings with Yakama Nation, however those have trailed off

Funding:

- Approx. $23.5M spent to date at the site. Various projects, many different funding sources.

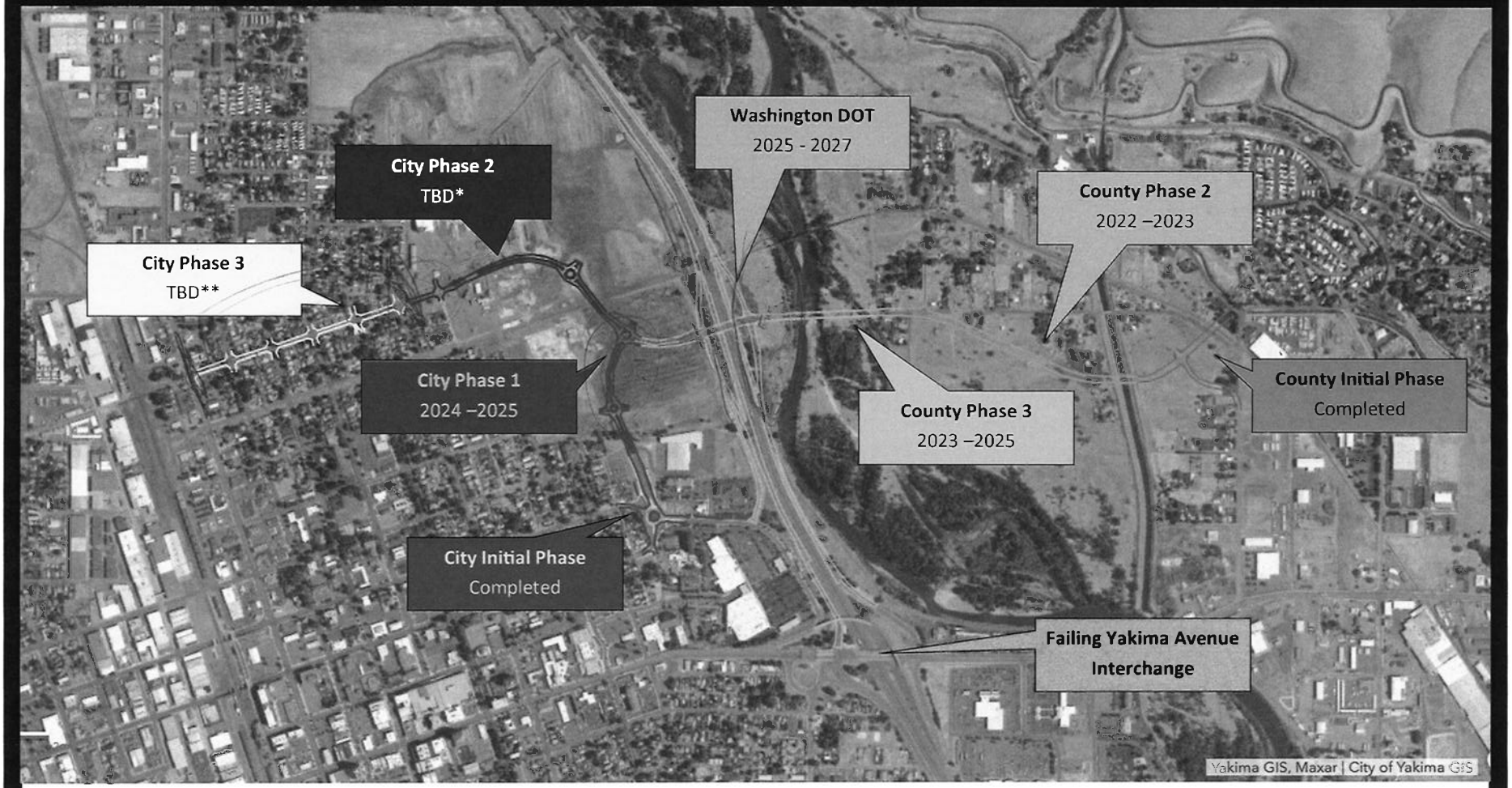
- Phase 1 - $4M in ARPA funds budgeted. Used to match $4M LIFT funds (Local Infrastructure Finance Tool)
- Phase 2 – No funding for Construction at this time.
- The City has applied for RAISE/INFRA grants for 5 years in a row and haven't been able to secure any funding for H Street. Other funding attempts have also been unsuccessful.
- I-82 Sewer funded with $2M ARPA and $3M DOE funds.

Next steps:

- Support Yakima County in NEPA completion efforts.
- Be ready to go to ad as quickly as possible once the NEPA is approved.
- Complete the IAWP for the underground utilities for Phase 2.
- Work with DOE to develop the next cleanup effort/option utilizing their grants.
- Continue to seek funding for all phases of the project.
- Keep DOE and Yakama Nation informed of progress.

East West Corridor and Yakima Cascade Mill Vicinity Improvements

City of Yakima, Yakima County, and Washington State Department of Transportation
Estimated Construction Timelines



Notes

* City Phase 2 schedule is influenced by development activities.

** City Phase 3 schedule is dependent on acquiring non-LIFT funding for "H" Street Improvements

CAT
349E
CAT
DEF

Curve Table: BC Line							
Curve #	Length	Radius	Delta	Tangent	Chord Direction	Start Point	End Point
1	121.73	510.00	13.6753	61.15	N64° 42' 53.48"E	(1640015.55,467173.54)	(1640125.35,467225.71)
2	165.42	972.00	9.7512	82.91	N62° 45' 10.10"E	(1640178.78,467250.25)	(1640325.67,467334.90)
4	724.37	600.00	69.1724	413.70	S73° 03' 05.49"E	(1641539.66,466997.90)	(1642191.25,466899.31)

Curve Table: BC Line							
Curve #	Length	Radius	Delta	Tangent	Chord Direction	Start Point	End Point
5	51.29	120.00	24.4899	26.04	N25° 27' 22.03"W	(1641345.27,465203.95)	(1641323.39,465249.91)
6	16.43	49.00	19.2141	8.29	N28° 05' 36.48"W	(1641923.38,465249.92)	(1641915.66,465264.35)
7	72.16	750.00	5.5124	36.11	N21° 14' 33.48"W	(1641854.22,465448.17)	(1641826.09,465515.40)
8	584.75	650.00	51.5438	313.83	N2° 45' 45.63"E	(1641594.55,466053.79)	(1641621.79,466618.36)

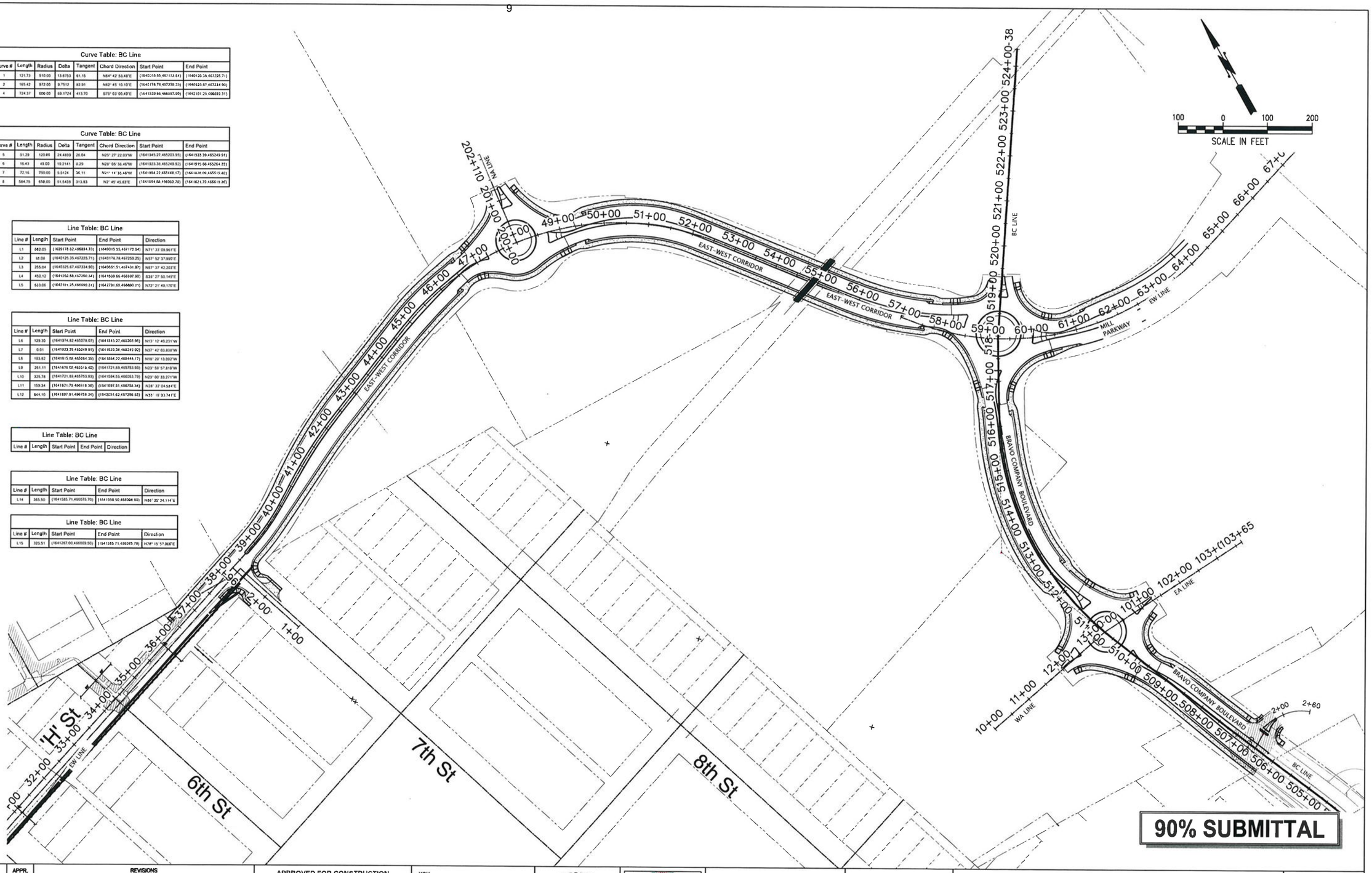
Line Table: BC Line				
Line #	Length	Start Point	End Point	Direction
L1	882.05	(1639178.82,466884.73)	(1640015.55,467173.54)	N71° 33' 08.961"E
L2	63.08	(1640125.35,467225.71)	(1640178.78,467250.25)	N53° 52' 37.990"E
L3	255.04	(1640325.67,467334.90)	(1640651.51,467431.07)	N83° 37' 42.203"E
L4	450.12	(1641252.88,467250.34)	(1641539.66,466997.90)	S38° 27' 50.145"E
L5	533.06	(1642191.25,466899.31)	(1642791.60,466800.21)	N72° 21' 49.178"E

Line Table: BC Line				
Line #	Length	Start Point	End Point	Direction
L6	129.30	(1641974.82,465578.01)	(1641345.27,465203.95)	N13° 12' 40.231"W
L7	0.01	(1641923.29,465249.91)	(1641923.38,465241.92)	N37° 42' 03.838"W
L8	193.82	(1641915.66,465264.35)	(1641854.22,465448.17)	N18° 29' 13.092"W
L9	261.11	(1641838.09,465515.40)	(1641721.69,465753.93)	N23° 58' 57.819"W
L10	325.78	(1641721.69,465753.93)	(1641594.55,466053.79)	N23° 00' 33.271"W
L11	159.34	(1641621.79,466618.36)	(1641697.91,466758.34)	N28° 32' 04.534"E
L12	644.10	(1641697.91,466758.34)	(1642051.62,467296.53)	N33° 15' 33.741"E

Line Table: BC Line				
Line #	Length	Start Point	End Point	Direction

Line Table: BC Line				
Line #	Length	Start Point	End Point	Direction
L14	365.50	(1641585.71,466075.70)	(1641930.50,466094.60)	N86° 20' 24.114"E

Line Table: BC Line				
Line #	Length	Start Point	End Point	Direction
L15	325.51	(1641267.00,466009.50)	(1641585.71,466075.70)	N78° 15' 57.968"E



NO.	DATE	BY	APPR.	REVISIONS

APPROVED FOR CONSTRUCTION

ENGINEERING MANAGER DATE

PROJECT MANAGER DATE

PROJECT ENGINEER DATE

KGH DESIGNED BY

GJB DRAWN BY

JRT CHECKED BY

RAM APPROVED BY

DATE: 07/08/2022

Robert Alton Meousen, State of Washington, 33772, Registered Professional Engineer

CITY OF YAKIMA

LOCHNER

HLA Holmpton, Lantum Associates, Inc. Civil Engineering • Land Surveying • Planning

CITY OF YAKIMA
BRAVO COMPANY BOULEVARD

ALINGMENT AND CONTROL PLAN

DWG. NAME/NUMBER

ACP

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BUSINESS OF THE CITY COUNCIL
YAKIMA, WASHINGTON
AGENDA STATEMENT

Item No. 4.
For Meeting of: February 27, 2024

ITEM TITLE: Presentation of the City Space Study

SUBMITTED BY: Rosylen Oglesby, Assistant Manager

SUMMARY EXPLANATION:

To present the City of Yakima Space Study and discuss study highlights. The study provides an assessment of the several City-owned facilities including:

Future City Hall (Bank of America Building)
Current City Hall Facility
Zais Law and Justice Center
Special Assault Unit (Y-PAC)
Police Annex
ONDS Buidling

The study includes an analysis of spatial requirements my major function housed in these facilities, as well as recommendations on adjacencies to promote efficiencies, improve the public experience in accessing municipal services, along with options for redistribution of City departments across several buildings. The report validates that not all buildings currently in use would be needed in the future and can be declared surplus and made available for economic development purposes.

Finally, the study provides some planning level cost estimates and a rough schedule for implementation.

The study is a first step in the larger process of visioning and developing a municipal campus that will serve the community over the next several decades. Further refinements based on further Council and public input, and professional analysis, as well as potential for phasing of improvements, and development of a financing plan will occur over the next several months.

ITEM BUDGETED: No

STRATEGIC PRIORITY: Economic Development

APPROVED FOR SUBMITTAL BY THE CITY MANAGER

RECOMMENDATION:

ATTACHMENTS:

	Description	Upload Date	Type
🗋	City of Yakima Space Study	2/15/2024	Backup Material
🗋	Presentation	2/15/2024	Presentation

PRE-DESIGN REPORT
YAKIMA SPACE STUDY
CITY OF YAKIMA

PROJECT #2022-040
JULY 11, 2023

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9.2 SURVEY RESPONSES

9.3 LIST OF RECENT MAINTENANCE/REPAIRS

9.4 ALTERNATE EXPLORATIONS

9.5 MEETING NOTES

9.6 DETAIL COST ESTIMATES

1.0 EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

The purpose of this space planning study is to explore options for redistribution of City departments across several buildings with the aim to increase efficiency, enhance the public experience at City Hall in particular, and utilize recently acquired property. Consolidation of departments may also allow for certain properties to be repurposed for economic redevelopment.

Over a five month process, a program/space list for each department was developed, internal space adjacencies were reviewed, and test fits into various city buildings were explored. This report contains the final results for department locations, summarized per building below:

CITY HALL *(FORMERLY BANK OF AMERICA)*
City Manager, City Council, Council Chambers, City Clerks, Capitol Theater, YPAC/YCTV, Police Department Training, and Police Department storage.

CITY HALL ANNEX *(FORMERLY CITY HALL)*
Finance, Utilities, Purchasing, Codes, Planning, Engineering, Human Resources, IT, Facilities, and Economic Development/ONDS.

SAU BUILDING *(FORMERLY YPAC)*
Police Department Special Assault Unit, Internal Affairs, Recruiting/Training, and Traffic Unit.

RICHARD A. ZAIS, JR. CENTER FOR LAW AND JUSTICE
All departments remain in their current locations on the first floor, Legal Center will grow to take over the back-up dispatch room on the second floor.

As a result of this plan, both the ONDS building and Police Department Training/Special Services Facility will be able to be vacated.

BUDGET

As part of the study, current conditions of existing facilities were assessed. The estimates included in this report encompass the cost of replacing mechanical and electrical systems in order to bring the buildings in compliance with current codes.

It is estimated based on current conditions that all of the projects listed above, including site work at the City Hall/City Hall Annex block, could be accomplished for approximately $27 million. This does not include soft costs or costs associated with phased construction. See Budget section and appendix for more detail.

PHASING/SCHEDULE

To optimize the construction process for all projects, it is recommended to initiate the renovation of City Hall as the first step. This will facilitate the vacating and subsequent renovation of the current YPAC building. It will also allow departments to be relocated from City Hall Annex, enabling the commencement of remodeling work in that area.

The work at the Legal Center can begin as soon as the back-up dispatch center is moved, as no other departments are involved.

2.0 SCOPE OF STUDY

PURPOSE

The purpose of this space planning study is to explore options for redistribution of City departments across several buildings with the aim to increase efficiency, enhance the public experience at City Hall in particular, and utilize recently acquired property. Consolidation of departments may also allow for certain properties to be repurposed for economic redevelopment.

On March 17, 2018, the Yakima City Council adopted the following mission statement to declare the manner in which municipal government shall provide services:

To provide outstanding services that meet the community's needs. To govern responsibly by effectively managing and protecting public resources. To build trust in government through openness, diverse leadership, and communication. To ensure the safety of our residents through responsible 21st century policing. To support the youth of our community so that they can reach their full potential. To strategically focus on enhancing Yakima's quality of life.

The space study supports this mission statement by using the following Guiding Principles as the framework for the process.

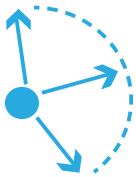
GUIDING PRINCIPLES

Service First

Efficient, friendly, interpersonal treatment

Approachable

Serve unique population needs of all citizens



Catalyst

Stimulate redevelopment, public use in Second Street vicinity

Maximize Existing Assets

Creative, effective re-use of existing spaces

Embrace DEI

Serve staff needs of diversity, equity, inclusion

PROCESS

Programming:
Questionnaires were distributed to City of Yakima department heads, and their responses were subsequently reviewed during individual interviews. Interview discussions uncovered many details about department operations; functionality, interaction with other departments, and spatial needs. The Design Team also toured existing buildings to assess their current conditions.

Following the interviews, a space list was developed for each department, taking into account functional requirements described. Office and cubicle sizes were standardized across all departments based on these needs. Additionally, relationship diagrams for each department were developed based on the program list in order to confirm required adjacencies and connections to other departments. The core Space Study Committee reviewed and reached a consensus on the space list and associated diagrams.

Development Concepts:
Existing buildings were modeled in Revit based on drawings provided and modifications observed during building tours. Resulting floor plans were used as the basis of analysis for locating departments.

Several concepts for remodeling of the City Hall Annex (former City Hall), City Hall (former Bank of America building), and SAU (former YPAC Building) were explored. These early concepts are included in the appendix of this report. The second floor of the Richard A. Zais, Jr. Center for Law and Justice was found to need only somewhat minor modifications to meet current programmatic needs. The preferred concepts for all buildings were then refined into the approved versions included in the body of this report.

Space / Building Analysis:
The Police Department Training Facility and site are intended to be repurposed for future development. The uses in this facility will be relocated to another city building, as described in this report.

The Police Annex, located behind the Richard A. Zais, Jr. Center for Law and Justice, is primarily used for storage of police evidence. A basic building condition assessment has been included as part of this report.

A West Side Police Annex is anticipated to be brought into the city properties sometime in the future as the need arises. No analysis of potential existing building acquisition was conducted as part of this report.

The ONDS (Office of Neighborhood Development Services) Building is planned to be vacated and this department co-located with the Economic Development Department.

Relocation of CYU into existing city facilities occurred during this study, allowing the building lease to be terminated.

Capitol Theatre Management relocation analysis has been included as part of this report, which allows the termination of the current facility lease.

3.0 SUMMARY OF INTERVIEWS AND DISCUSSIONS

3.0 SUMMARY OF INTERVIEWS AND DISCUSSIONS

The following summary of department needs is based on department interviews, questionnaire responses, building tours, and Building Committee discussions over a five-month period.

REGARDING EXISTING DEPARTMENTS/SPACES:

CITY MANAGER
- Should be near Council Chambers, City Council office, and City Clerks, with a direct connection to the Council Chambers

CITY COUNCIL/COUNCIL CHAMBERS
- Council Chambers need to be able to seat one hundred audience members.
- Conference Room for executive session and Control Room must be directly adjacent
- City Council office should be near the Council Chambers and City Manager offices
- Council Chambers must have an exit for Council Members behind the dais
- Council Members should have the ability to access the conference room or office prior to entering the chambers, while keeping their interaction with the public to a minimum.

IT
- Need to move to an upper level, out of the basement
- Server to remain in current location. Wiring needs to be reconfigured and raised off the floor to alleviate any potential flooding risk.
- Limited interface with other departments, at Help Desk
- Three separate groups within IT, should be near each other but acoustically separate

CITY CLERKS
- Should be near City Manager office suite and Council Chambers
- Required enclosed, secure, area for storage of city records

ONDS
- Will move from current building to be near Community Development
- Shop space will also be relocated, to a space separate from offices.
- Economic Development Manager, Assistant, and Grant Writer will be in the same office suite
- Some public interface

COMMUNICATION AND PUBLIC AFFAIRS
- Director office to be near City Clerks
- Includes Y-PAC/YCTV, will move out of current building
- Studios can be reduced from two to one
- Editing bays can be reduced from five to three
- Need garage space for dedicated vehicle

COMMUNITY DEVELOPMENT
Requires frequent public interface
Storage spaces can be in the basement
Should be near Engineering

FINANCE
- Would prefer that all divisions (Financial Services, Purchasing, and Utility Services) be on one floor
- Utility Services requires frequent public interface

HUMAN RESOURCES
- Require most employees to be within offices
- Some public interface

PUBLIC WORKS/ENGINEERING
- Most of public works is in a separate building from Engineering and will not be moving
- Should be near Community Development
- Would like to be near Finance

CAPITOL THEATRE
- Will move out of their current leased space
- All offices other than the Executive Director's can be workstations if necessary
- Conference room and break room can be shared, but need a dedicated "huddle" space

LEGAL CENTER
- Existing office suite needs to expand, should remain on the second floor
- Back-up dispatch can move, but server needs to remain in current location
- Law library is no longer needed, room can be repurposed

MUNICIPAL COURTS
- Spaces to remain as they are
- A second small conference room (for six) was requested for the occasions when there is more than one trial going on at once and they need a second jury room
- The clerks' transaction window needs to be modified to meet ADA guidelines

POLICE

- Most units within the Justice Center will remain as they are
- The units within the Special Services building across the street from the Justice Center will be moved.
    - •Training will be moved to the City Hall basement
    - •SAU, Internal Affairs, Training/Recruiting, and Traffic will move to the former Y-PAC building
- Storage currently housed on the 3rd floor of the City Hall Annex (old City Hall) will move to the City Hall basement
- The storage annex will remain in use but needs some upgrades.
- The current feeling is that a West Annex for the police department will not be necessary for several years.

YAMA (YAKIMA MUSIC EN ACCION)

- Not a program funded by the city, not currently housed in city buildings
- Determined that the program required too much space to fit within current city owned buildings

REGARDING PROGRAMMING OF DEPARTMENTS:

- Conference rooms, break rooms, and lobbies can be shared.
- Office and workstation sizes should be standardized across departments.

For more detailed information regarding discussions, see meeting notes contained in the appendix.

DEPARTMENT INTERVIEWEES:

- Bob Harrison, City Manager
- Rosylen Oglesby, Assistant City Manager
- Cally Price, City Manager Assistant
- Sonya Claar Tee, City Clerks
- Brandy Bradford, City Clerks
- Randy Beehler, Communication and Public Affairs
- Sara Watkins, Legal Center
- Patricia Martinez, Legal Center
- Cynthia Martinez, Legal Center
- Jodi Stephens, Municipal Courts
- Joan Davenport, Community Development
- Joseph Calhoun, Community Development
- Glenn Denman, Community Development
- Rosalinda Ibarra, Community Development
- Charlie Robin, Capitol Theatre
- Carol West, Capitol Theatre
- Cat McMillen, Capitol Theatre
- Meghan Darragh, Capitol Theatre
- Kimberly Domine, Finance
- Christina Payer, Finance
- James Dean, Finance
- Scott Schafer, Public Works, Engineering, Facilities
- Bill Preston, Public Works, Engineering, Facilities
- Kerry Jones, Public Works, Engineering, Facilities
- Randy Pitney, Facilities
- Chief Matt Murray, Police Department
- Connie Mendoza, Human Resources
- John Carney, Information Technology Services
- Mike Robles, Information Technology Services
- Stephen Yu, Information Technology Services
- Randy Bonds Jr, Information Technology Services
- Stephanie Hsu, YAMA
- Alex Pualani, YAMA

BUILDING COMMITTEE MEMBERS:

- Rosylen Oglesby, Assistant City Manager
- Sara Watkins, City Attorney
- Lt. Ira Cavin, Yakima Police Department
- Jennifer Ferrer-Santa Ines, Finance Director
- Joan Davenport, Community Development Director

For more detailed information regarding discussions, see the meeting notes contained in the appendix.

HIGH-LEVEL DEPARTMENT SHIFTS

- City Manager, City Clerks, and City Council will move from the existing City Hall (City Hall Annex) to the new City Hall.
- Capital Theatre will move to the new City Hall
- Y-PAC will move to the new City Hall
- ONDS will move to the City Hall Annex.

4.0 EXISTING FACILITIES ASSESSMENT

4.1 CITY HALL *FORMERLY BANK OF AMERICA*

According to city records, the former Bank of America building located at the corner of 2nd Street and Pendleton Way was initially constructed in 1952. Remodel drawings provided indicate a date of 1979. Presently, the building stands vacant.

LAYOUT

The first floor area is approximately 12,925 sf and consists of two large rooms with story-and-a-half-high ceilings, two vaults at the north end, an office area at the east end, and one single user toilet room near the street side entry. There are two unconnected mezzanines, one at the far north end accessed only by stair and a second at the far east end which can be accessed either by stair or elevator. The elevator also extends to the basement, which is approximately 9,800 sf and mostly consists of mechanical/electrical rooms, storage rooms, former meeting spaces, and multi-user men's and women's restrooms. Altogether the building is approximately 28,000 sf. The elevator is operational; however, it requires upgrades or replacement.

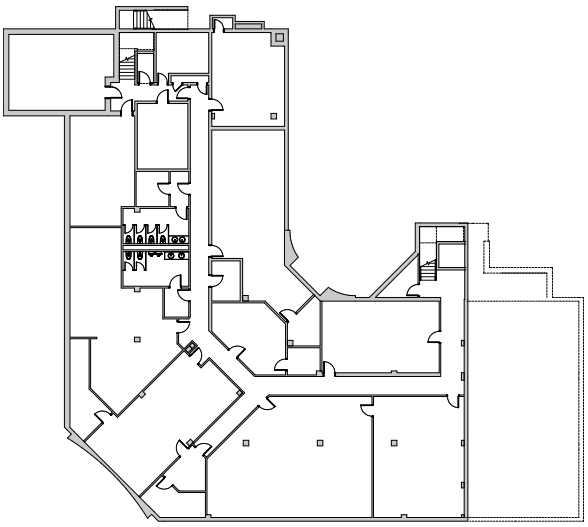
EXTERIOR WALL SYSTEMS

The exterior walls consist of concrete panels with furring on the interior. It is expected that exterior storefront will require replacement when the building is remodeled.

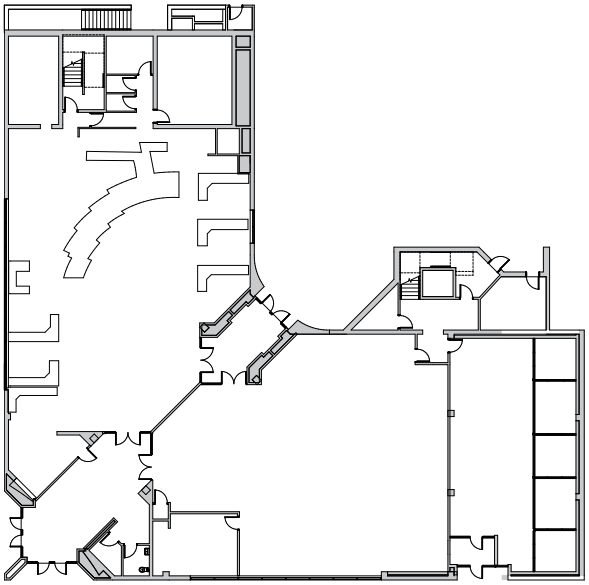
CITY HALL

INTERIOR WALL SYSTEMS

According to remodel drawings, the interior partitions are constructed using metal studs and gypsum wall board (GWB), excluding the construction of existing vaults.



BASEMENT



LEVEL 01

MEZZANINE

ROOF SYSTEMS

The roof construction consists of structural steel girder trusses and steel joists, with concrete formed over expanded metal lath. See structural narrative for more detail. The roofing is built-up asphalt with gravel ballast; the installation date is unknown but it is expected that full replacement is necessary.

FINISHES

The interior finishes are generally in fair condition, although the ceilings are poor condition due to roof leaks and a significant portion of the flooring needs replacement due to wear and age. A hazardous materials survey should be done prior to any construction activities. In particular, the resilient flooring in the basement is of a type that is commonly associated with asbestos content and should be treated as suspect.

CASEWORK/FIXTURES/EQUIPMENT

Built-in bank teller stations and workstations remain in the west side of the first floor of the building and will need to be removed for new construction. Glass partitions and workstations remain at the east end office area on both the first floor and mezzanine. The basement contains miscellaneous casework including remnants of two kitchenettes.

SITE

The building is located within the Central Business District (CBD). Public Facilities are a Class (1) permitted use in this area per Yakima Municipal Code 15.04. The site is within the CBD Parking Exempt Area per YMC 15.06, therefore there is no requirement for onsite parking stalls.

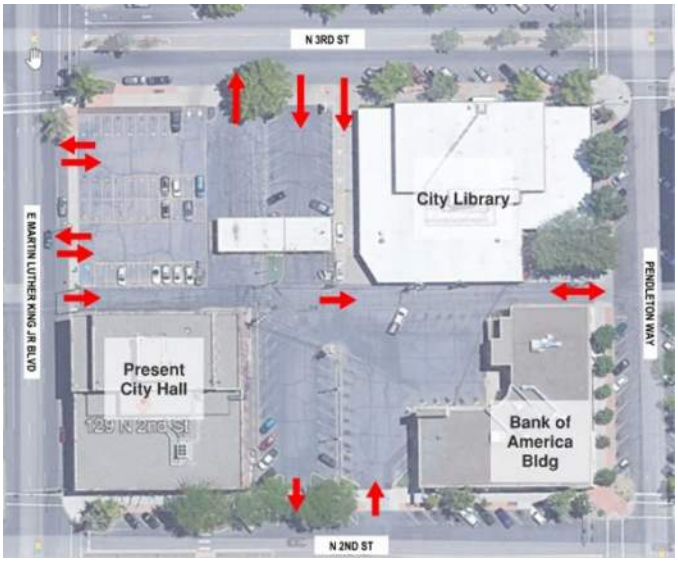
CODE ANALYSIS

Construction Type appears to be Type IIB, non-sprinkled. Exposed structure in the basement reveals concrete (non-combustible) columns and floor construction. Existing height and area comply with current code (IBC) by not exceeding code maximum for a type B occupancy classification.

MEANS OF EGRESS EXIT

ACCESS POINT LOCATIONS

The vehicular access points to the property are properly spaced away from the active intersections of E Martin Luther King Jr. Blvd, N 2nd St, and N 3rd St. Access points have been modified/restricted to Enter Only and Exit Only access points due to the alignment of the parking.



There are three access points along Martin Luther King J. Blvd that are for delivery access and visitor parking (unsigned). The number of visitor access points is creating additional decision points for drivers on Martin Luther King J. Blvd. The access points are at midpoints between the primary signalized intersections and align with cross-street alleys.

THREE ACCESS POINTS ALONG MARTIN LUTHER KING J. BLVD

ACCESS CONDITION

The condition of the access points are currently acceptable. The access on 2nd St and Martin Luther King Jr Blvd is cracking and depressing possibly due to freeze-thaw and drainage issues.

ACCESS ON 2ND ST AND MARTIN LUTHER KING JR BLVD

SIDEWALKS

EXISTING PARKING LOT

The existing parking lot does not have any designated internal pedestrian circulation paths. Currently, after a vehicle has parked, employees/ guests walk down the aisles or against the buildings that have utility encroachments and trash receptacles in the way.

EXISTING PARKING LOT

2ND STREET SIDEWALKS

Sections of sidewalks along 2nd Street have recently been replaced and are in good condition. There are still sections at the front door of City Hall and near the street trees that were not replaced and are out of compliance/ thresholds per ADA requirements for gaps

2ND STREET SIDEWALKS

PENDLETON WAY

The intersection of Pendleton Way and N 2nd St consists of bulb-outs. The curb ramps at this NW corner of the intersection are not ADA-compliant based on landing requirements. The stamped concrete is also in poor condition immediately outside of the ramp. The remainder of the sidewalk along Pendleton is in good condition within the pedestrian access route. There is a settlement or heaving occurring immediately outside of the pedestrian access route between the stamped concrete and unstamped surface.

PENDLETON AND N 2ND STREET INTERSECTION

N 3RD STREET

Most of the sidewalk on this street section is in good condition for surface, width, and slope. There is an approximate 30-ft section of sidewalk that has large cracks that have resulted in gaps outside of ADA tolerances.

3RD STREET SIDEWALKS

E MARTIN LUTHER KING JR BLVD

The existing pedestrian path along this section consists of multiple driveway access points. The current configurations of the driveways do not meet current ADA requirements.

E. MARTIN LUTHER KING JR BLVD SIDEWALKS

LANDSCAPING

There is little to no landscaping located within the property resulting in no shade or protection from the extreme summer heat. Yakima City Code (YCC) does not require off-street parking in the downtown district, but YCC 15.06.090 Required landscaping of parking areas does references landscaping standards this block does not meet.

Existing street trees along 2nd Street have grown to full maturity. Trees should be assessed for replacement as they have been creating sidewalk and roadway issues by a certified arborist.

Street trees along Pendleton should also be evaluated for replacement.

There is no streetscape landscaping located on E Martin Luther King Jr Blvd.

IRRIGATION

At the time of inspection, irrigation was not in operation due to the time of the season. It is estimated that the only irrigation is located at the mid-block crossing on 2nd Street. The system is drip irrigation for the bulb out plantings.

ACCESSIBILITY

The existing parking to the three buildings on this site has been developed independently with each building development/owner/use. Not all existing accessibility stalls have fully compliant pedestrian access paths to the building entrances. There is a lack of close proximity to the entrances and route barriers that do not make these spots fully accessible to all.

We estimate that there are between 101-150 off-street parking stalls on this site for all three buildings. Per ADA code that would require a minimum of 4 Standard ADA stalls and 1 Van Accessible stall. The City should strive to provide more than the minimum for these sites as they are an essential service to the public.

AMENITIES

PARKING CAPACITY

During the field study the parking lot was full. It was observed during the entire study over 15 vehicles wandering through the site trying to find open parking spaces. It is apparent that the number of parking spaces is an important factor to this site for employees and guests to the public buildings. With the Bank of America building not currently occupied, parking capacity will be further stressed once new occupants.

PARKING FLOW

The existing site and building were developed independently for distinct uses. Now that some of those businesses (Bank of America) are no longer operational, some of their site circulation methods are no longer applicable. This has resulted in structures and unusable space.

LIGHTING

The existing lighting in the parking lot does not meet YCC 15.06.100 Lighting of parking lots. New fixtures may be located in the proposed landscape islands for some protection.
There are currently light poles located on the East side of 2nd Street, however they are in conflict with the large trees and may not be performing optimally.

The space between buildings could have pedestrian-scaled lighting fixtures such as bollards and lower light poles; any additional lighting would increase the security of the open space, especially in densely planted areas.

EV CHARGING

The existing site does not have electric vehicle parking amenities. Per YCC 15.06.035 Electric vehicle charging stations are allowed.

BUS SHELTER

There is an existing bus stop located on Martin Luther King Jr. Blvd next to City Hall. There is a combination bench and bus sign. There is no shelter for bus riders to wait under during the hot summer or cold winter season, and this is a frequently-used stop.

TRASH FACILITIES

Existing trash receptacles are located based on individual development and previous building uses. Trash is located primarily in the center of the parking area that is accessible to waste services but is not using the best use of space. Old trash enclosures are no longer being utilized and occupying space.

PROJECT OVERVIEW

The building is an existing bank branch at 101 N. 2nd Street in Yakima, Washington. At the time of the visit, the original construction drawings were not available for review. The existing bank is approximately 26,000 square feet and has a main floor (12,600 square feet), basement (9,700 square feet) and two mezzanines (east mezzanine 2,100 square feet and west mezzanine - 1,500 square feet). The original date of construction is unclear, but there was a bank renovation in 1979 and the construction drawings for the renovation are available for use.

STRUCTURAL SYSTEM

Although the original construction documents aren't available, it is likely that the building construction is comprised of conventional concrete spread footings with a concrete slab on grade in the basement. The main floor is a cast-in-place concrete slab that is supported on the perimeter basement walls and interior concrete columns.

The second floor mezzanine appears to be a cast-in-place concrete slab supported by the exterior concrete bearing walls and interior concrete columns.

The roof is comprised of a concrete slab and mesh supported by open web steel joists and spaced approximately 3'-6" on center. The exterior concrete walls provide vertical support at the building perimeter and concrete columns support the interior bearing points. The area over the lobby has an interstitial space of approximately 10 feet for HVAC ducting and electrical service.

As outlined in the International Existing Building Code (IEBC), any new alterations that cause an increase in the existing load-carrying gravity elements by more than 5 percent, shall be replaced or altered as needed to carry the required loads as required by the current International Building Code (IBC).

LATERAL FORCE RESISTING SYSTEM

The lateral force resisting system is the concrete walls acting as shearwalls around the perimeter of the building. Any new alterations that increase the design lateral loads or where the alteration decreases the capacity of any existing lateral load carrying element should be avoided.

If the lateral system is altered in a way that increases the forces or decreases the capacity of the lateral load carrying elements by more than 10 percent, the structure must be upgraded to meet the requirements of the IBC.

OVERALL ASSESSMENT

The facility is in very good condition and still in the early stages of the building's overall life expectancy. During the site visit, there were no visible signs of deterioration or damage to the exterior closure or interior framing elements.

Programing space that can be categorized as essential, such as ambulance, fire or police services that can change the building's structural risk category from II to IV (as described in chapter 16 of the IBC) should be avoided.

Since the facility does not appear to be undergoing a change of occupancy, DCI does not anticipate any upgrades or modifications to the existing framing systems. Although slight modifications in the form of new openings in the floor and exterior walls are anticipated, no upgrades to the building's gravity or lateral systems are predicted.

The former BofA building had a major renovation in 1979. Since then, there have been other undocumented renovations that have replaced all the original mechanical systems. Based on equipment information, it appears the current mechanical system was installed in the late 1990's or early 2000's.

MECHANICAL SYSTEMS

The original mechanical equipment in the basement was abandoned in place and replaced with gas fired furnaces with remote condensing units. The furnaces are in the attic space above the ceilings of both the main floor and the mezzanines.

HEATING SYSTEMS

The building is served by multiple furnaces that use natural gas to provide heat. In addition, there are electric radiant heaters on some of the perimeter spaces. Other perimeter heaters appear to be from the original system and are not operational.

COOLING SYSTEMS

Each furnace has a DX coil served by the outdoor condensing units. The condensing units use R-22 refrigerant which has been outlawed and is becoming increasingly difficult and costly to replace.

CONTROLS

There are no central controls for the mechanical equipment. Each furnace and condensing unit combination uses its own thermostat to regulate temperature in its zone.

PLUMBING SYSTEMS

Domestic hot water for the building is served by a single residential style electric hot water heater. There is no recirculation system. Existing fixtures are in restrooms and a basement level break room.

FIRE SPRINKLER

The building is not sprinkled.

The former BoA building had a major renovation in 1979. Since then, there have been other un-documented renovations that have altered some or all of the electrical distribution system.

SERVICE AND DISTRIBUTION

The building normal electrical services are derived from PP owned 480Y/277V 37.5kVA pole mounted transformers. The service conductors from these transformers utilize four 4" risers down the pole and across the parking lot and enter the basement main electrical room. The main service equipment is a Square D Power Style 480Y/277V, 3PH 4W 60Hz 1200A switchboard. This switchboard is in fair condition but is reaching the end of its useful life. The building electrical distribution is laid out as shown in Appendix Figure 2.

PANELBOARDS & ENCLOSED BREAKERS

Branch Panelboards are a mix of surface mount Square D NQOB panelboards and old Westinghouse distribution and branch panelboards. They are in fair condition but reaching end of useful life. The Westinghouse panelboards especially are no longer serviced and should be replaced.

ENGINE/GENERATOR

There is no generator on this building.

GROUNDING

Equipment grounding conductors were observed in feeders and branch circuits.

METERING

There is a utility meter on the exterior wall of the building.

RENEWABLES

There are not currently any renewable energy systems installed in this building.

LIGHTING AND BRANCH WIRING

Lighting throughout the building was recessed downlights and surface mounted troffers in the main lobby and recessed flat panel 2' by 4' fixtures in the ACT drop ceiling in office and conference areas. Utility spaces had surface mount wraparound and linear industrial fixtures.

EGRESS AND EXIT LIGHTING

Exit lighting is green LED type and provided with battery backup.

EXTERIOR LIGHTING

The only exterior / site lighting in the facility parking areas are from utility light poles.

LIGHTING CONTROLS

Majority of spaces utilized local manual on/off wall switches for lighting controls. No daylighting controls are present.

OTHER ELECTRICAL SYSTEMS - FIRE ALARM

The fire alarm system was not observed during the site walk through.

ENERGY CODE DEFICIENCIES

The following Energy Code deficiencies were observed at the time of the walk through:

- Existing lighting controls do not include controls for daylighting, occupancy, or manual dimming.
- Existing receptacles located within offices, classrooms and work areas are not controlled via occupancy.
- Existing fluorescent lighting fixtures are estimated to exceed the allowed watts per square foot that is allowed for this building type.
- Main and sub metering is not present for energy metering of electric loads such as lighting and mechanical systems.

4.2 CITY HALL ANNEX *FORMERLY CITY HALL*

Originally built in 1948, the existing City Hall building has undergone several minor renovations throughout the years but no major full building remodels or upgrades.

LAYOUT

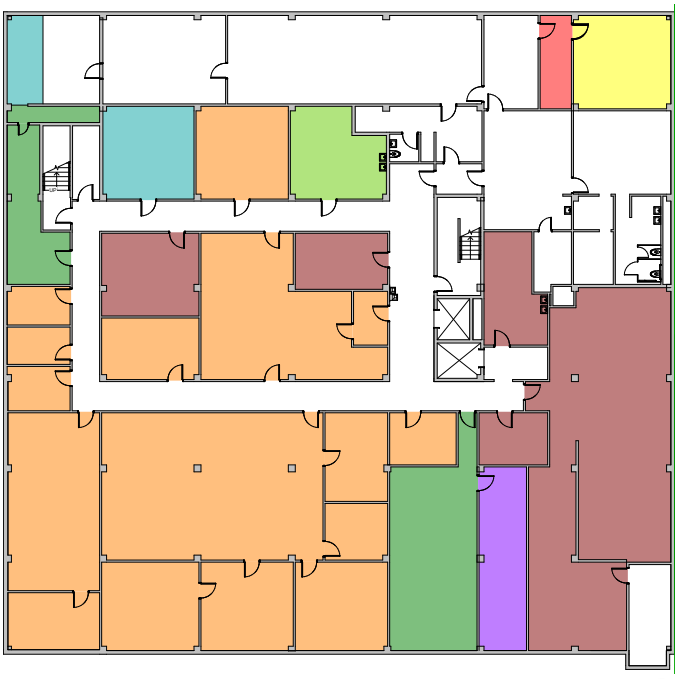
The building footprint is approximately 17,790 sf. The basement, first, and second floors fill the footprint, while the third steps back to approximately 7,700 sf and the fourth reduces to 5,520sf. A fifth-floor penthouse houses only mechanical equipment and is accessed by a ship's ladder from the fourth floor.

The building was constructed to house the city jail on the third and fourth floors. However, once the jail was relocated to the Richard A. Zais, Jr. Center for Law and Justice, those floors underwent a complete removal of interior components. Currently, both floors remain unoccupied and are primarily used for storage purposes. They are served by both elevators but there is only one stair tower available. Although there is an existing fire escape in place, to comply with current building code, the addition of a second stair would be required if offices or workstations are to be introduced on those floors. It is worth noting that both elevators have recently been replaced.

Floor to floor heights vary between 10'-4" at the fourth floor, 10'-6" at the basement and third floor, and 12'-3" at the first and second floors. Special attention will need to be given to routing of new mechanical and electrical systems in order to maintain reasonable ceiling heights in the new layout.

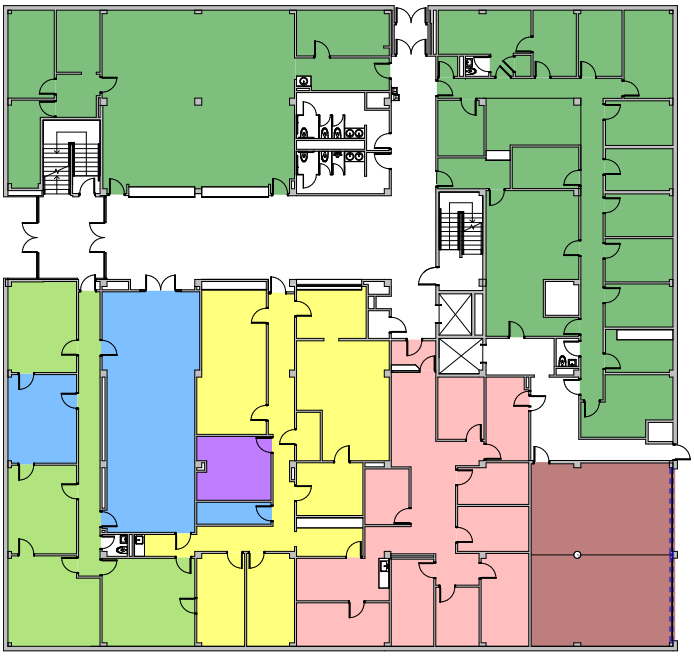
CITY HALL ANNEX

CODES FACILITIES CITY MANAGER ECONOMIC DEV.
FINANCE IT CAPITOL THEATRE CITY CLERKS



EXISTING BASEMENT

CITY COUNCIL HR CITY MANAGER
FINANCE FACILITIES CITY CLERKS



EXISTING LEVEL 01

EXTERIOR WALL SYSTEMS

The exterior wall construction consists of brick veneer over metal stud framing with a concrete parapet cap. The structural framing system is made up of concrete columns and floor slabs, see structural narrative for more detail. First and second floor exterior windows pop out slightly from the brick veneer; no records were found to indicate that they had ever been replaced. Windows on the third and fourth floors were replaced in 2010.

INTERIOR WALL SYSTEMS

Interior wall systems appear to be gypsum wall board over metal studs.

ROOF SYSTEMS

The roof is a built up membrane roof. Though documents were not available to confirm the installation date, it is expected that it is of an age that it needs to be replaced.

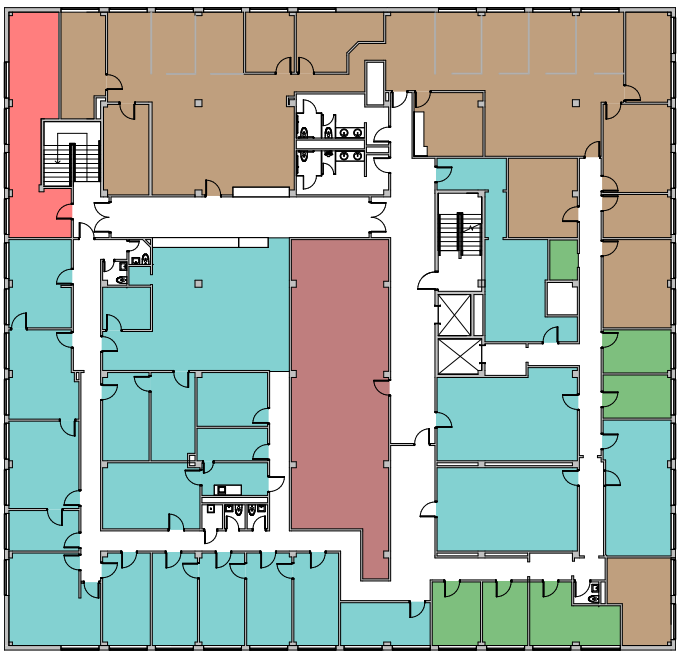
FINISHES

Interior finishes are generally in good condition. A hazardous materials survey should be done prior to any construction.
Doors are also generally in good condition, though there is a variety of hardware styles throughout the building. Not all types meet current ADA guidelines. There are also some door configurations that do not have the required clearances for current code.

CASEWORK/FIXTURES/EQUIPMENT

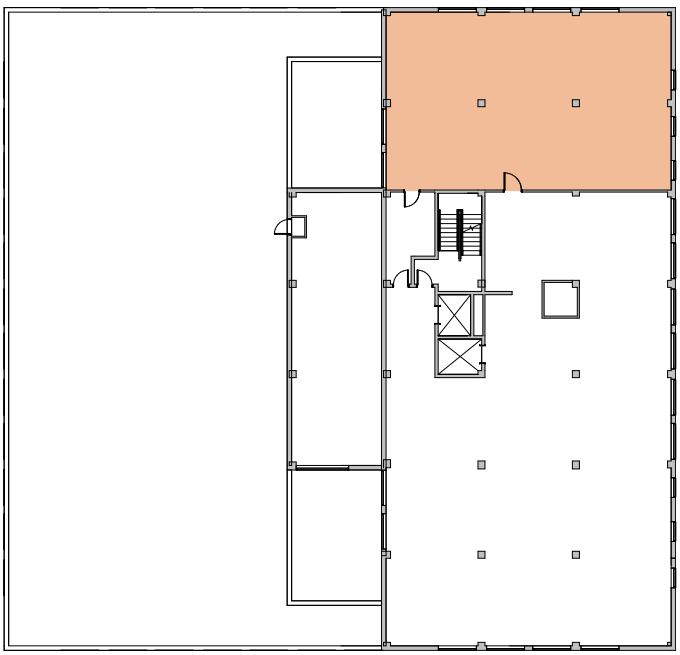
The main server for the City resides in the basement. This is not ideal due to the potential for flooding, but it has not been an issue. Wiring for the server runs under the floor, if the server remains in its current location re-routing the wiring should be considered.

CODES FACILITIES ONDS
FINANCE ENGINEERING



EXISTING LEVEL 02

YPD STORAGE



EXISTING LEVEL 03

SITE

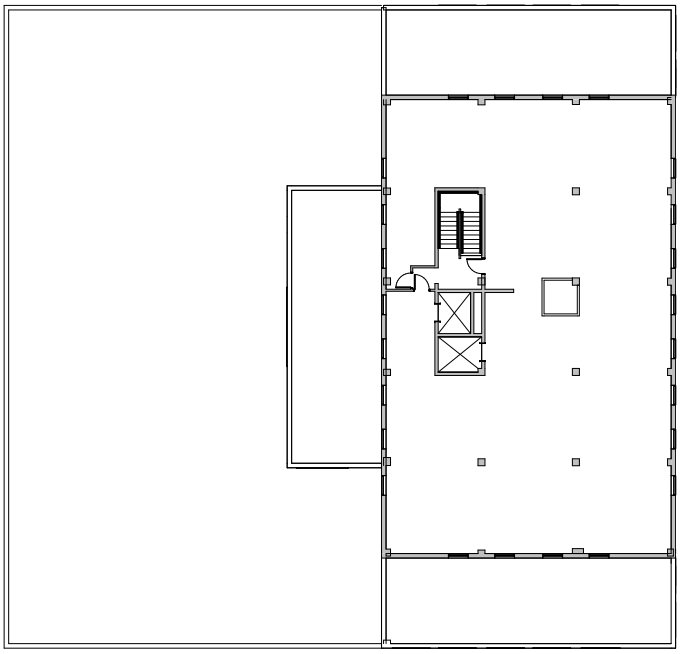
The building is located within the Central Business District (CBD). The site is located within the CBD Parking Exempt Area per YMC 15.06, therefore there is no requirement for onsite parking stalls.

CODE ANALYSIS

The building appears to be Type IIB construction, with all floors except the basement unsprinkled.

Multi-user (public) toilet rooms were renovated in 1985 to include ADA stalls. However, while the reconfiguration met code at the time, they do not meet current requirements. All single user toilet rooms remain in the original configuration and do not meet current ADA clearance requirements.

The building meets current code for Type IIB construction, B occupancy for height and area. However, while it is assumed that the building met code for stories at time of construction, currently IBC only allows 3 stories for unsprinkled building of this type and occupancy.



EXISTING LEVEL 04

CITY HALL ANNEX ENTRANCE

PROJECT OVERVIEW

The building is currently functioning as the city hall located at 129 N 2nd Street in Yakima, Washington. The building was built in 1948 and the original construction documents are available for use. The building is a 4-story concrete building with a basement and the approximate size of the building is 67,000 square feet. The design loads noted on the drawings are for a typical office and are within the guidelines of the International Building Code (IBC) loading criteria.

STRUCTURAL SYSTEM

The basement consists of 9 inch thick concrete walls supporting the first floor slab at the perimeter and interior concrete columns supported by conventional concrete foundations.

The main structural system is a cast-in-place concrete columns with concrete beams and joists supporting 4 ½ inch thick concrete slabs. In isolated locations, the slab is 2 ½" thick and has a 2" topping slab.

As outlined in the International Existing Building Code (IEBC), any new alterations that cause an increase in the existing load-carrying gravity elements by more than 5 percent, shall be replaced or altered as needed to carry the required loads as required by the current International Building Code (IBC).

LATERAL FORCE RESISTING SYSTEM

The lateral force resisting system is the concrete walls acting as shearwalls around the perimeter of the building and around the stair and elevator cores. Any new alterations that increase the design lateral loads or where the alteration decreases the capacity of any existing lateral load carrying element should be avoided.

If the lateral system is altered in a way that increases the forces or decreases the capacity of the lateral load carrying elements by more than 10 percent, the structure must be upgraded to meet the requirements of the current IBC.

OVERALL ASSESSMENT

The facility is in good condition and is still within the building's overall life expectancy. During the site visit, there were no visible signs of deterioration or damage to the exterior closure or interior framing elements.

Programing space that can be categorized as essential, such as ambulance, fire or police services that can change the building's structural risk category from II to IV (as described in chapter 16 of the IBC) should be avoided.

Since the facility does not appear to be undergoing a change of occupancy, DCI does not anticipate any upgrades or modifications to the existing framing systems. Although slight modifications in the form of new openings in the floor and exterior walls are anticipated, no upgrades to the building's gravity or lateral systems are predicted.

Yakima City Hall was originally constructed in 1948. There have been two documented revisions, one in 1988 and one in 1998. Plans exist for the original design and the 1988 modifications. The 1988 remodel had minor tenant improvement changes made to the mechanical system. There are no plans that indicate what, if any, changes were made to the mechanical system in 1998 remodel. The third and fourth floors are no longer in use and most mechanical systems serving these areas have been demolished. The remaining equipment serving the basement, first floor and second floor are mostly original to the building. The exceptions are the boilers and the chiller which were installed in 1996. The chiller is slated for replacement sometime in 2023/2024.

MECHANICAL SYSTEMS

The three active floors are served by a multi-zone air handling unit (MZ-AHU) with hot and chilled water coils. There are a total of twelve zones serving the three floors. Each zone has a re-cooling coil in the duct main serving the zone and perimeter spaces have radiant heaters on the exterior wall. The third and fourth floors do not appear to be conditioned and the original perimeter heating has been removed. The active floors were noticeably warm and facility staff indicated that they tried to control heat to the zones through manual dampers to each zone.

All the duct and piping insulation appears to contain asbestos. Any changes to these will require remediation.

HEATING SYSTEMS

At some point the original steam heating system with a converter for heating water was demolished and replaced with a heating hot water system. The MZ-AHU had its steam heating coil replaced with a heating hot water coil and the existing steam piping (a steam header and the piping that ran to the old MZ-AHU's coil) were re-used for the heating water system. The heating water system does not have any glycol and has not had any chemical treatment in the last 10 years. The existing hydronic pipes are over 75 years old except for a few places where they are over 25 years old. Between the age and the lack of chemical treatment in the heating water system, the condition of the pipes is a significant concern.

COOLING SYSTEMS

The original cooling system was demolished in 1996 and replaced with an air-cooled chiller serving the MZ-AHU and the re-cooling coils. The buffer tank, pumps, expansion tank, and other chilled water accessories are in the 2nd floor mechanical room.

CONTROLS

The original controls were pneumatic and are in the process of being replaced with electric controls. The smaller spaces within a zone have thermostatic controls to trim temperature in that local area. The means of how this control was accomplished is not clear, but it is likely managed through dampers to reduce airflow as there were no heating or cooling terminal units in these areas indicated on plans. Facility staff indicated that many of these thermostats and controls are broken as they do not change space temperatures when the thermostat is adjusted.

PLUMBING SYSTEMS

Domestic hot water for the building is served by a single residential style gas-fired hot water heater. There is no hot water recirculation system. Existing fixtures are mostly sinks and restrooms with urinals, water closets and lavatories. All fixtures on the third and fourth floors have been demolished.

FIRE SPRINKLERS

There are fire sprinklers serving the basement. All other floors have no sprinklers.

City Hall was originally constructed in 1948. Since then, there have been at least two documented renovations, in 1988 and 1998. The 1988 renovation was limited in scope – and changes to the electrical system were largely in existing panel "H" and the branch circuits serving the first floor. The 1998 renovation was much more extensive, involving a replacement of the Electrical distribution starting with the service entrance switchboard and continuing through the panelboards and branch devices in the basement, first and second floors. The third and fourth floor panels have remained untouched since the original 1948 installation.

SERVICE AND DISTRIBUTION

The building has two normal electrical services derived from PP owned 480Y/277V and 208Y/120V pole mounted transformers. The service conductors from these transformers utilize risers down the pole and across the parking lot and enter the basement main electrical room. The 208Y/120V main service equipment is a Cutler-Hammer Pow-R-Line 208Y/120V, 3PH 4W 60Hz 2000A switchboard. This switchboard is in good condition but is 25 years old and reaching the end of its useful life. It is not mounted on a housekeeping pad, which poses a flood risk with it's current location in the basement. The 480Y/277V main service equipment is a Cutler-Hammer Pow-R-Line C 480Y/277V, 3PH, 4W 60Hz 800A Panelboard. The building electrical distribution is laid out as shown in Appendix Figure 1.

PANELBOARDS & ENCLOSED BREAKERS

Branch Panelboards are largely recessed GE A-Series Panelboards. They are in good condition, but also 25 years old and reaching end of useful life. The mechanical panelboard in the air handler room is a Cutler-Hammer Pow-R-Line PRL2a board in good condition installed in 2000. Eaton Surge suppression devices are located on branch panelboard serving sensitive electronic equipment. The panelboards in the 3rd and 4th floor are the original Trumbull Elec MFG CO branch panels from 1948. These are in poor condition and will need to be demolished.

ENGINE/GENERATOR

There is an existing NEC 702 generator in the garage. It is a Cummins 100kVA, 208Y/120V 3PH 60Hz unit with a day tank below. This is connected to a 225A 208Y/120V, 3PH 4W Cummins transfer switch on the wall in the garage. This then serves the SPS Panel in the transformer room.

GROUNDING

A bare copper ground conductor was observed at the main service switchboard, presumably the Grounding Electrode Conductor (GEC) to the buried Grounding Electrode. Equipment grounding conductors were observed in feeders and branch circuits.

METERING

There is a utility meter on the exterior wall of the building.

RENEWABLES

There are not currently any renewable energy systems installed in this building.

LIGHTING AND BRANCH WIRING

Lighting throughout the building was recessed troffers where there is ACT drop ceiling, with retrofit LED bulbs and drivers. This is the case for roughly 80% of the occupied spaces. A few renovated spaces, such as the IT area in the basement, had replaced the old ice cube troffer housings with LED architectural troffers. Utility spaces had surface mount wraparound fixtures.

EGRESS AND EXIT LIGHTING

Exit lighting is green LED type and provided with battery backup. Egress lighting is accomplished with emergency battery units (EBUs) on the walls along the path of egress.

EXTERIOR LIGHTING

The only exterior / site lighting in the facility parking areas are from utility light poles.

LIGHTING CONTROLS

Occupied office areas largely utilized local ceiling occupancy sensors with wall switch manual overrides. Utility spaces and unoccupied areas of the building utilized manual on/off wall switches for lighting. No daylighting controls are present.

OTHER ELECTRICAL SYSTEMS - FIRE ALARM

The fire alarm control panel is located in a communications room in the basement. The existing fire alarm system is a Fire-Lite product by Honeywell. Strobes, speakers, panic switches, manual pull stations and annunciators were observed throughout the building. There is a Halon system for the basement server room as well, with fire alarm bell and control panel located just outside.

ENERGY CODE DEFICIENCIES

The following Energy Code deficiencies were observed at the time of the walk through:

- Existing lighting controls do not include controls for daylighting, occupancy, or manual dimming.
- Existing receptacles located within offices, classrooms and work areas are not controlled via occupancy.
- While the majority of the basement, 1st and second floors have been retrofitted with LED bulbs, any existing fluorescent lighting fixtures are estimated to exceed the allowed watts per square foot that is allowed for this building type.
- Main and sub metering is not present for energy metering of electric loads such as lighting and mechanical systems.

EXISTING DATA NETWORK SERVICE

The majority of network cabling and associated connectivity observed on the tour of the City Hall building is designed to support a maximum data network throughput of 100 megabits per second. All the horizontal data cabling systems observed within City Hall had at least one component, either cable or connectivity, rated to perform no higher than Category 5. Some of the systems observed appear to leverage legacy high pair count telephone cabling to distribute Ethernet network connectivity throughout the section of the building previously occupied by the Yakima Police Department.

Routing of existing data cabling throughout City Hall is problematic in that significant lengths of cable are unsupported along the pathway, and tightly applied zip ties, which are applied at random to groups of unshielded twisted pair data cabling throughout the building. In many areas of the building horizontal data network cabling routes between floors and through conduit sleeves without the application of fire stopping methodologies, making these areas a potential life safety and flame propagation risk.

The Basement Data Center is a raised floor environment with existing computer room air conditioning equipment in place. City information systems personnel stated that data center power backup is presently dependent upon UPS units within data center equipment racks until the building-wide back-up power generator comes online. It was understood by Stantec during the site visit that an evaluation by city IT staff is underway to determine what would be required to relocate the City Hall Data Center above the basement level.

EXISTING VOICE NETWORK SERVICE

Observations along with conversations with city personnel during the site visit indicate voice services are being migrated from the existing PBX based system to a VoIP telephone system on a user-by-user basis. Details of this effort were not discussed with Stantec during the site visit.

EXISTING WIRELESS ACCESS POINTS

Cisco Wireless Access Points are present at various locations throughout the buildings toured. Cisco Catalyst 9800 Series Wireless Controllers were observed in the Basement Data Center.

EXISTING ELECTRONIC SECURITY SYSTEMS

There was no substantial security camera system within City Hall observed during the tour. A Lenel Access Control System is presently active within City Hall and mostly controls doors not ordinarily used by the public. Panic alarm button at Mayor's Seat in Council Chambers is the only means by which the panic alarm system can be activated within this area.

CELLULAR DISTRIBUTED ANTENNA SYSTEM (DAS)

No cellular coverage reinforcement DAS system was observed in any of the facilities toured. The cellular coverage is less than optimal within various areas of these facilities.

EMERGENCY RESPONDER RADIO COVERAGE SYSTEM (ERRCS)

No ERRCS DAS system was observed in any of the facilities toured.

EXISTING CITY HALL

The existing City Hall building contains multiple departments and configurations, along with the council chambers. The third and fourth floors are largely unfinished, unoccupied and used for storage.

Overall the office spaces include continuous acoustic tile ceiling which is providing the bulk of the absorption to the space.

COUNCIL CHAMBERS

The existing council chambers included a perforated ceiling tile. It was unclear if absorption was added beyond the tiles, but the room did not seem overly lively when carrying a normal conversation. The reverberation time within the council chambers was tested during our site visit. The reverberation time was found to be around 0.45 seconds, which is provide an appropriate room response for this type of space. Figure 1 shows an image of the exisitng council chambers.

As part of the schematic design, we will work with the users to determine the appropriate room response for all occupied spaces.

EXISTING COUNCIL CHAMBERS

EXISTING COUNCIL CHAMBERS

4.3 RICHARD A. ZAIS, JR. CENTER FOR LAW AND JUSTICE

Built in 1996 with an addition constructed in 2004, the Law and Justice building houses the Yakima Police Department, Courts, Legal Center, and City Jail. Various remodels have occurred in the different departments as needs arise.

LAYOUT

The main entrance leads to a public lobby off of which are secure entrances to the courts, police department, and stairs leading to the legal center on the second floor.

EXTERIOR WALL SYSTEMS

Exterior walls consist of brick veneer over metal studs, with a metal fascia at the roof line. Walls and storefront windows appear to be in good condition.

INTERIOR WALL SYSTEMS

Interior walls for the city jail section of the building consist of painted CMU. The majority of the rest of the building is metal studs with painted gypsum wall board. One wall of the eastern courtroom is brick veneer, prior to the addition the section was an exterior wall.

ROOF SYSTEMS

The majority of the roofing material is concrete tile, with single ply membrane roofing at the mechanical equipment wells.

FINISHES

Finishes throughout the building interior appear to be well maintained and in good condition.

SITE

The building is located within the General Commercial District (GC) downtown.

There are 127 parking stalls on site, with 67 of those within a locked enclosure. There is an additional associated parking lot across Spruce Street, with another 75 parking stalls.

CODE ANALYSIS

The original building construction was based on the 1991 UBC. Under that code the Type I occupancy portion of the building was classified as construction type IIFR. Per today's code this would be considered type IB. The occupancy type B portion of the building was classified as type IIN, which today would be type IIB. The building is fully sprinkled.

MEANS OF EGRESS EXIT

ACCESS POINT LOCATIONS

Access points to the site are located on three sides of the building complex and appear to be functioning well for size, capacity, and location.

SIDEWALKS

EXISTING PARKING LOT

Existing sidewalks exist within the interior of the project site. There are clear sidewalk connections from exit/entrance doors. The path between the Accessibility stalls and the crossing at the front door consisted of running slopes in excess of 4% to access the path to the front door. See Accessibility for additional comments.

N 3RD STREET

There is an existing sidewalk along 3rd Street. The existing curb ramp at the mid-block crossing is not compliant to requirements due to slopes. There are also panels that have settled and created edges in excess of ¼". The corner of S 3rd St and E Spruce St the curb ramp is not compliant due to excessive slopes.

N 3RD STREET SIDEWALKS

E SPRUCE ST

This section of the sidewalk consists of existing utility boxes that do not have slip-resistant lids. The pedestrian crossing at 2nd Street has a non-compliant ADA ramp due to width and slope.

UTILITY BOXES IN E SPRUCE STREET SIDEWALK

2ND STREET SIDEWALKS

The sidewalks on this side of the property have long sections with a cross slope over 2%. 2% is the maximum cross slope for ADA-compliant sidewalks.

2ND STREET SIDEWALKS SLOPE

E WALNUT ST

The sidewalks on this side of the property have long sections with a cross slope over 2%. 2% is the maximum cross slope for ADA-compliant sidewalks.

LANDSCAPING

The existing property comprises landscaping and appears to meet YCC requirements/expectations.

IRRIGATION

The existing irrigation system was not in operation due to the time of the season. It appears that the non-sodded areas are on a drip irrigation system.

ACCESSIBILITY

The existing Accessible parking stalls located at the front of the building do not have the most straightforward path to the main entrance and require the user to operate in the parking aisle to access the crosswalk to the front door.

EXISTING ACCESSIBLE PARKING STALLS

AMENITIES

PARKING CAPACITY

At the time of the field observation, parking capacity appeared to be adequate across the entire site at the guest, employee, and secured fencing location.

LIGHTING

The field observation was conducted during daylight hours. Based on type/size/height of light standards, it appears the front parking lot is not fully illuminated.

EV CHARGING

No publicly accessible EV charging stations are available on the property.

BUS SHELTER

There is no bus shelter observed on site.

TRASH FACILITIES

During the field observation, the waste facility pickup was observed. The existing trash containers have to be left out on the shoulder/ roadway due to the inaccessibility of the designated area.

EXISTING TRASH FACILITIES

PROJECT OVERVIEW

The building is currently serving as the police, courtroom, and jail facility at 200 S 3rd Street in Yakima, Washington. The existing building is approximately 53,000 square feet and has one 2,700 square foot addition. The original construction was permitted under the 1991 Uniform Building Code (UBC) and was classified as an "Essential Facility" per UBC Table No. 23-K.

STRUCTURAL SYSTEM

The first floor is a reinforced 4-inch thick concrete slab-on-grade with conventional spread footings at the interior columns and a conventional stemwall and footing at the perimeter walls and columns.

The second floor is a concrete topping slab on metal deck supported by wide-flange beams with a total slab thickness of 5 ½ inches.The roof framing is 1 ½ inch metal roof decking and open web steel joists supported by wide-flange beams and girders.

LATERAL FORCE RESISTING SYSTEM

The lateral force resisting system consists of braced frames from the first floor to the second floor and moment frames from the second floor to the roof. Any new alterations that increase the design lateral loads or where the alteration decreases the capacity of any existing lateral load carrying element should be avoided.

If the lateral system is altered in a way that increases the forces or decreases the capacity of the lateral load carrying elements by more than 10 percent, the structure must be upgraded to meet the requirements of the current IBC.

OVERALL ASSESSMENT

The facility is in very good condition and still in the early stages of the building's overall life expectancy. During the site visit, there were no visible signs of deterioration or damage to the exterior closure or interior framing elements.

Since the facility does not appear to be undergoing a change of occupancy or use, DCI does not anticipate any upgrades or modifications to the existing framing systems. Although slight modifications in the form of new openings in the floor and exterior walls are anticipated, no upgrades to the building's gravity or lateral systems are predicted.

MECHANICAL SYSTEMS

The original building uses multiple variable air volume (VAV) rooftop air handling units. Each unit has a system of hot water reheat terminal units to serve individual areas. The court room addition adds three more single zone packaged rooftop units.

HEATING SYSTEMS

The air handling units for both the original building and the addition all use gas fired heating. The terminal unit reheat is a hot water system fed from a boiler in the 2nd floor mechanical room. The pumps, expansion tank and associated accessories are also in the 2nd floor mechanical room.

COOLING SYSTEMS

The original air handlers all use chilled water cooling from the roof mounted chiller. The pumps, expansion tank and associated accessories are in the 2nd floor mechanical room. The packaged units serving the courtroom addition use packaged DX cooling.

CONTROLS

There is no information available on the existing controls for the YPD L&J.

PLUMBING SYSTEMS

Domestic water heaters are in the 2nd floor mechanical room. The system is recirculated but likely does not meet current code requirements for maximum length of pipe from the heated main.

FIRE SPRINKLERS

The building is fully sprinkled with three risers. One riser serves the jail, the remaining two serve the two floors of the building.

SERVICE AND DISTRIBUTION

The building normal electrical services are derived from a PP owned 480Y/277V pad mounted transformer. The service conductors from this transformer run underground into the main electrical room located on the first floor. The main service equipment is a Square D Power Style 480Y/277V, 3PH 4W 60Hz 1200A switchboard. This switchboard is in good condition but is nearly 30 years old and reaching the end of its useful life. The building electrical distribution is laid out as shown in Appendix Figure 5.

PANELBOARDS & ENCLOSED BREAKERS

Branch Panelboards are largely surface mount Square D NEHB style Panelboards mounted in dedicated electrical rooms. They are in good condition, but also 30 years old and reaching end of useful life. Leviton Surge suppression devices are located on the main service switchboard and branch panelboards serving sensitive electronic equipment.

BRANCH DEVICES

The original design for branch circuits on this building included substantial floor ducts throughout office and conference type spaces. Workstations and floor mounted equipment are fed from power whips and floor boxes in these floor ducts.

ENGINE/GENERATOR

There is an existing NEC 702 generator in a dedicated generator room on the exterior of the building. It is a Cummins 100kVA, 208Y/120V 3PH 60Hz unit with a day tank below. This is connected to a 260A 208Y/120V, 3PH 4W Cummins transfer switch on the wall. This then serves the EMH1 Panel in the main electrical room.

GROUNDING

Equipment grounding conductors were observed in feeders and branch circuits. Grounding was not observed during the walkthrough, but may have been integral to the main service equipment.

METERING

There is a utility meter on the exterior wall of the building.

RENEWABLES

There are not currently any renewable energy systems installed in this building.

LIGHTING AND BRANCH WIRING

Lighting throughout the building was recessed downlights and suspended indirect linear fixtures where there is ACT drop ceiling. This is the case for roughly 80% of the occupied spaces. Utility spaces had linear strip fixtures.

EGRESS AND EXIT LIGHTING

Exit lighting is green LED type and provided with battery backup. Egress lighting is accomplished with emergency battery units (EBUs) on the walls along the path of egress.

EXTERIOR LIGHTING

The only exterior / site lighting in the facility parking areas are from utility light poles.

LIGHTING CONTROLS

Occupied office areas largely utilized local ceiling occupancy sensors with wall switch manual overrides. Utility spaces and unoccupied areas of the building utilized manual on/off wall switches for lighting. No daylighting controls are present.

OTHER ELECTRICAL SYSTEMS - FIRE ALARM

The fire alarm control panel is located in the second floor communications room. The existing fire alarm system is a Notifier product by Honeywell. Strobes, speakers, panic switches, manual pull stations and annunciators were observed throughout the building.

ENERGY CODE DEFICIENCIES

The following Energy Code deficiencies were observed at the time of the walk through:

- Existing lighting controls do not include controls for daylighting, occupancy, or manual dimming.
- Existing receptacles located within offices, classrooms and work areas are not controlled via occupancy.

- Existing fluorescent lighting fixtures are estimated to exceed the allowed watts per square foot that is allowed for this building type.

4.4 SPECIAL ASSAULT UNIT (SAU) *(FORMERLY Y-PAC BUILDING)*

Located at 124 S. 2nd Street, the single story building was built in 1915 according to city records. Based on sketches provided it appears that interior was renovated for Y-PAC/YCTV use in the late 1990s.

LAYOUT

The approximately 5,790 sf building currently houses the offices, two studios, five editing bays, storage areas, and equipment for Yakima Public Affairs Channel (Y-PAC) and Yakima Community Television (YCTV).

YCTV / Y-PAC EXTERIOR

EXTERIOR WALL SYSTEMS

Exterior walls appear to be load bearing brick, veneer materials vary at each side of the building – the east façade is exposed brick with terra cotta detailing, south façade is painted brick, north façade is metal panel, and the west façade is a combination of painted brick and metal panel. There are two roll up doors on the west façade, one into the larger studio and another into the garage. The roof has been recently replaced.

FINISHES

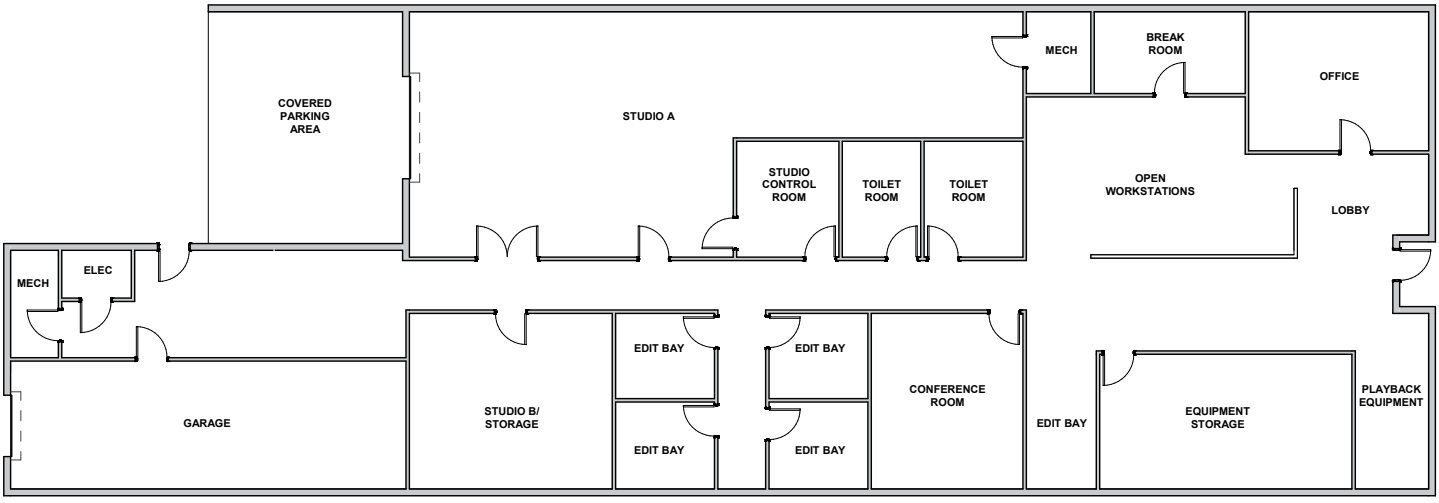
Interior finishes have been well maintained and are in good condition.

SITE

The building is located within the CBD zone of downtown and has a detached parking lot available for use by employees and the public.

CODE ANALYSIS

Roof structure was entirely enclosed and therefore type was unable to be confirmed, however based on Structural's recommendation that it is likely wood framing the building type is assumed to be VB. Per current code, allowable area for occupancy type B in an unsprinkled building is 9,000sf. Sprinklers are not required for this occupancy.



EXISTING FLOOR PLAN

PROJECT OVERVIEW

The building consists of a single-story structure that is currently being used as the office of the Yakima Public Affairs Channel and is located at 124 S 2nd Street in Yakima, Washington. The structure is approximately 6,000 square feet with a carport off the west end and adjacent to the alley.

STRUCTURAL SYSTEM

Although the original construction documents aren't available, it is likely that the building is comprised of wood beams spanning north south and supported by concrete pilasters on the exterior walls and an interior column. Wood joists likely span between the wood beam elements and support the roof decking. At the time of the visit, no attempt was made to uncover the existing roof elements.

The exterior building walls of the office are comprised of roof supporting concrete pilasters and infilled with unreinforced masonry (URM) walls.

As outlined in the International Existing Building Code (IEBC), any new alterations that cause an increase in the existing load-carrying gravity elements by more than 5 percent, shall be replaced or altered as needed to carry the required loads as required by the current International Building Code (IBC).

LATERAL FORCE RESISTING SYSTEM

The lateral force resisting system appears to be the URM acting as shearwalls around the perimeter of the building for both the office and the shop. Any new alterations, that increase the design lateral loads or where the alteration decreases the capacity of any existing lateral load carrying element should be avoided.

If the lateral system is altered in a way that increases the forces or decreases the capacity of the lateral load carrying elements by more than 10 percent, the structure must be upgraded to meet the requirements of the IBC.

OVERALL ASSESSMENT

The facility is in fair condition. During the site visit, there were no visible signs of water intrusion, damage to the exterior closure, or damaged interior framing elements. Programing space that can be categorized as essential, such as ambulance, fire or police services that can change the building's structural risk category from II to IV (as described in chapter 16 of the IBC) should be avoided.

Since the facility does not appear to be undergoing a change of occupancy and is currently functioning adequately as office space, DCI does not anticipate any upgrades or modifications to the existing framing systems. Although slight modifications in the form of new openings in the floor and exterior walls are anticipated, no upgrades to the building's gravity or lateral systems are predicted.

Drawings are not available for the Y-PAC building. The existing equipment is approximately 25 years old except for one condensing unit that was recently replaced.

MECHANICAL SYSTEMS

The building is served by two gas fired furnaces with DX cooling coils. Remote condensing units are located on the roof. Each system has its own thermostatic control.

PLUMBING SYSTEMS

Domestic hot water for the building is served by a single residential style electric hot water heater. There is no recirculation system. Existing fixtures are in restrooms and the break room.

FIRE SPRINKLER

The building is not sprinkled.

Original and renovation construction drawings were not available for the Y-PAC. There appeared to be a mixture of original electrical equipment ~35yrs old and a more recent panel addition ~25 years old.

SERVICE AND DISTRIBUTION

The building normal electrical services are derived from Pacific Power (PP) owned 240/120V pole mounted transformer. The service conductors from these transformers are aerials to a weatherhead on the building's northwest corner. These service conductors enter into an electrical room via a conduit to a wall mounted utility meter.

The conductors from the utility meter secondary enter a trough and route to a wall mounted Siemens 100A panel, a Square D 100A 240V disconnect switch, and a Cutler-Hammer disconnect switch. This equipment is in poor condition and is past the end of it's maintainable life and should be replaced. One of the disconnects then feeds a Siemens 125A recessed panelboard in another room. This panelboard was added to support the addition of studio lighting in two rooms in the building. This Siemens 125A panel is in good condition.

ENGINE/GENERATOR

There is no generator on this building.

METERING

There is a utility meter on the wall of the electrical room.

RENEWABLES

There are not currently any renewable energy systems installed in this building.

LIGHTING AND BRANCH WIRING

Lighting throughout the building was recessed fluorescent flat panels in ACT drop ceiling. Utility spaces had linear industrial fixtures.

EGRESS AND EXIT LIGHTING

Exit lighting is green LED type and provided with battery backup.

EXTERIOR LIGHTING

There are exterior wall packs in the parking area.

LIGHTING CONTROLS

Interior spaces utilized local manual on/off wall switches for lighting controls. No daylighting controls are present.

OTHER ELECTRICAL SYSTEMS - FIRE ALARM

The fire alarm control panel is located in a mechanical room next to the electrical room. The existing fire alarm system is a Honeywell product. Strobes, speakers, panic switches, manual pull stations and annunciators were observed throughout the building.

ENERGY CODE DEFICIENCIES

The following Energy Code deficiencies were observed at the time of the walk through:

- Existing lighting controls do not include controls for daylighting, occupancy, or manual dimming.
- Existing receptacles located within offices, classrooms and work areas are not controlled via occupancy.
- Existing fluorescent lighting fixtures are estimated to exceed the allowed watts per square foot that is allowed for this building type.

4.5 EXISTING POLICE ANNEX

The police storage facility consists of two adjacent buildings. The larger building located at 210 S 2nd St was built in 1945 and the adjacent building to the south was built in 1920. No drawings were available for review, but per City records the buildings are 10,500 sf and 3,125 sf respectively.

LAYOUT

The building at 210 S. 2nd is mostly open storage with overhead coiling doors at the east and west ends. There is a mezzanine above the front quarter of the building that has access to the roof at the east end and access to a catwalk over the storage area to the west.

EXTERIOR WALLS

The exterior walls are constructed of structural masonry. Portions of the walls within the 1920 building have been furred.

ROOF SYSTEM

The observable portion of the roof at the east side of the building is in poor condition. It appears that repairs have been made over the years, but the material is cracking and most of the flashing section along the east parapet is missing.

FINISHES

Interior finishes are generally in poor condition, but the building appears to function as needed for storage. Given the age of the buildings a hazardous material survey should be conducted prior to any modifications.

The flooring in the southeast corner of the mezzanine has deteriorated somewhat. Though not yet a hazard, it is in need of repair.

SITE

The buildings are located within the General Commercial District (GC) downtown.

CODE ANALYSIS

Building construction type for both buildings is assumed to be VB. Current code lists the allowable area for occupancy type S-1 storage in an unsprinkled building as 9,000sf; factoring in allowable increases for open area brings it up to 10,530sf per floor.

Because the larger building is used to store motor vehicles, an automatic sprinkler system should be added.

EXISTING POLICE ANNEX

EXISTING POLICE ANNEX

PROJECT OVERVIEW

The building consists of a single-story structure that is currently being used as storage space for the Yakima Police Department and is located at 210 S 2nd Street in Yakima, Washington. The main structure is approximately 10,000 square feet with a 1,500 square foot mezzanine at the east end of the building. There is also an adjacent building that shares a common wall and has an approximate size of 3,000 square feet.

STRUCTURAL SYSTEM

The main building's roof framing was exposed and visible from inside and consisted of heavy timber girder trusses clear spanning north-south to the exterior walls supporting wood joists spanning east-west to the girder trusses. The mezzanine floor was similar to the roof framing and had wood joists spanning between the bottom chords of the girder trusses. The exterior walls were board formed concrete bearing walls with integral pilasters at the girder truss locations.

The adjacent building framing was similar to the main building with wood joists clear spanning north-south to the exterior board formed concrete walls.

As outlined in the International Existing Building Code (IEBC), any new alterations that cause an increase in the existing load-carrying gravity elements by more than 5 percent, shall be replaced or altered as needed to carry the required loads as required by the current International Building Code (IBC).

LATERAL FORCE RESISTING SYSTEM

The lateral force resisting system appears to be the board formed concrete walls acting as shearwalls around the perimeter of the building for both the main building and the smaller adjacent building. Any new alterations, that increase the design lateral loads or where the alteration decreases the capacity of any existing lateral load carrying element should be avoided.

If the lateral system is altered in a way that increases the forces or decreases the capacity of the lateral load carrying elements by more than 10 percent, the structure must be upgraded to meet the requirements of the IBC.

OVERALL ASSESSMENT

The facility is in fair to poor condition. During the site visit, the flashing between the roof and the west parapet was missing and provided an avenue for water intrusion. The roof framing had been replaced with prefabricated trusses in the east portion of the building. There appeared to be charring on some the roof members in the western part of the building indicating there had been a fire at some point in the building's lifespan. No attempt was made to identify the depth of the charring. The exterior walls didn't appear to have any damage and had minor cracks.

Programing space that can be categorized as essential, such as ambulance, fire or police services that can change the building's structural risk category from II to IV (as described in chapter 16 of the IBC) should be avoided.

Since the facility does not appear to be undergoing a change of occupancy and is currently functioning adequately as storage space, DCI does not anticipate any upgrades or modifications to the existing framing systems. Although slight modifications in the form of new openings in the floor and exterior walls are anticipated, no upgrades to the building's gravity or lateral systems are predicted.

4.5 EXISTING POLICE ANNEX *MECHANICAL ASSESSMENT - MW ENGINEERS*

The YPD Annex consists of two buildings, one used as a warehouse and the other for document storage. Drawings for the Annexes were not available. The planned work for the annexes is related to storage and will likely have minimal effects on the existing mechanical systems. The existing mechanical systems are all 25 years or more old.

MECHANICAL SYSTEMS

The building is served by gas fired unit heaters in the warehouse area. The thermostats are set to maintain the space at 65°F. There were reports of the space being cold in the winter, but not below freezing. The office area is served by a rooftop unit with gas heat and DX cooling. Each system has its own thermostatic control.

PLUMBING SYSTEMS

None

FIRE SPRINKLER

The building is not sprinkled.

SERVICE AND DISTRIBUTION

The warehouse building normal electrical service is derived from Pacific Power (PP) owned 240/120V pole mounted transformer. The service conductors from this transformer to an aerial to a weatherhead and utility meter on the building's exterior wall. These service conductors enter into an electrical room via a conduit to a wall mounted utility meter.

The conductors from the utility meter secondary route to a wall mounted Cutler-Hammer 200A main service panelboard. This equipment is in fair condition but is past the end of it's maintainable life and should be replaced. This is the only panelboard in the warehouse building.

The document storage building normal electrical service is derived from Pacific Power (PP) owned 240/120V pole mounted transformer. The service conductors from this transformer to an aerial to a weatherhead and utility meter on the building's exterior wall. These service conductors enter into an electrical room via a conduit to a wall mounted utility meter.

The conductors from the utility meter secondary route to a wall mounted Siemens 200A main service panelboard. This equipment is in fair condition but is past the end of it's maintainable life and should be replaced. This is the only panelboard in the document storage building.

ENGINE/GENERATOR

There is no generator on either of these building.

METERING

There is a utility meter on the exterior wall for both the warehouse and document storage buildings.

RENEWABLES

There are not currently any renewable energy systems installed in these buildings.

LIGHTING AND BRANCH WIRING

Lighting throughout the warehouse building was linear industrial fixtures with T5 bulbs. Lighting in the document storage building was recessed fluorescent flat panels in ACT drop ceiling.

EGRESS AND EXIT LIGHTING

Exit lighting is green LED type and provided with battery backup.

EXTERIOR LIGHTING

There are exterior wall packs in the parking area.

LIGHTING CONTROLS

Interior spaces utilized local manual on/off wall switches for lighting controls. No daylighting controls are present.

D5090 OTHER ELECTRICAL SYSTEMS - FIRE ALARM

The fire alarm system was not observed during the site walk through.

ELECTRICAL SYSTEMS GENERAL – DESIGN CONSIDERATIONS

The architectural work is expected to be minimal, if any at these two facilities As a result, the only modifications to the electrical systems will be improvements to meet life safety codes. This includes rooftop maintenance receptacle, egress lighting and fire alarm. Energy code violations will also be noted for owner awareness.

LIGHTING AND BRANCH WIRING – DESIGN CONSIDERATIONS

Egress and Exit Lighting: Exit lighting is green LED type and provided with battery backup. Egress lighting shall be accomplished with emergency battery units (EBUs) on the ceiling and walls along the path of egress.
A rooftop GFCI receptacle with in-use weatherproof cover shall be provided for maintenance personnel working on rooftop mechanical equipment.

OTHER ELECTRICAL SYSTEMS DESIGN CONSIDERATIONS - FIRE ALARM

The fire alarm system was not observed during the walk through. Branch fire alarm devices shall be updated to match any floor plan changes. New head end and end point devices shall be provided as required by NFPA.

EXISTING CODE DEFICIENCIES

The following Code deficiencies were observed at the time of the walk through and will need to be remedied during renovation

- Storage within dedicated electrical working space – any materials and equipment not related to electrical distribution system shall be removed from electrical spaces.
- There is no outlet present on rooftop for servicing mechanical equipment.

ENERGY CODE DEFICIENCIES

The following Energy Code deficiencies were observed at the time of the walk through:

- Existing lighting controls do not include controls for daylighting, occupancy, or manual dimming.
- Existing fluorescent lighting fixtures are estimated to exceed the allowed watts per square foot that is allowed for this building type.

SUSTAINABILITY AND ENERGY UTILIZATION

- Washington State Energy Code (WSEC)
    - Energy efficient transformers
    - Energy efficient lighting and lighting controls
    - Occupancy based receptacle controls
    - Renewable energy
- LEED
    - Exterior lighting with light pollution reduction measures
    - Manual lighting controls for at least 90% of individual occupied spaces
    - Electric vehicle charging for 10% of available parking spaces
    - Roof solar array for onsite renewable energy production
    - Advanced metering
    - Demand response ready

APPLICABLE CODES AND STANDARDS

- General
    - International Building Code
    - International Fire Code
    - Americans with Disabilities Act (ADA)
    - Underwriters Laboratories (UL)
    - Local Codes and Ordinances
- Electrical
    - National Electrical Code (NFPA 70)
    - International Fire Code (IFC)
    - Regulations of the State Fire Marshal
    - Washington State Department of Labor and Industries
    - Washington Administrative Code
    - Washington State Non-Residential Energy Code
    - Illuminating Engineers Society of North America (IESNA)

EXISTING DATA NETWORK SERVICE

The Yakima Police Department headquarters facility appears to be cabled with an intent to follow the Category 5 cabling standard in place at the time of construction. Cabling labeled Category 6 was found to be terminated on some patch panels within the facility. There is a separate room near the former Police Dispatch Center that contains a telecommunications equipment room with an adjoining data server room. Stantec did not achieve access to this server room to make observations at the time of site visit.

EXISTING VOICE NETWORK SERVICE

Avaya PBX equipment resides in the systems equipment room adjacent to the room formerly used as the Police Dispatch Center. No current operational challenges with voice telephone services were evident at the time of site visit.

EXISTING WIRELESS ACCESS POINTS

The Wi-Fi components presently in use could not be identified at the time of site visit. Wireless controller equipment could not be identified as access to the Police Data Center was not available.

CELLULAR DISTRIBUTED ANTENNA SYSTEM (DAS)

No cellular coverage reinforcement DAS system was observed in any of the facilities toured. The cellular coverage is less than optimal within various areas of these facilities.

EMERGENCY RESPONDER RADIO COVERAGE SYSTEM (ERRCS)

No ERRCS DAS system was observed in any of the facilities toured.

SUMMARY

The recommended upgrade efforts for the technology systems include:

- Upgrade the copper horizontal cable systems to the current ANSI/TIA-568.2-D Standard Category 6 for horizontal cabling plants throughout all facilities, including the installation of ANSI/TIA-569-E compliant cable pathways and spaces as well as cable floor transitions that comply with the life safety requirements of the local Authority Having Jurisdiction.
- Provide Panic Alarm activation buttons within convenient reach of public service windows and City Council Chambers that annunciate specific locations of buttons being activated directly to the Police Dispatch Center.
- Review the need/requirement for an ERRCS for the City Hall and Police Headquarters facilities. This would require a review meeting with the Authority Having Jurisdiction to determine potential requirements.
- Review the need for a Cellular DAS installation for the City Hall and Police Headquarters facilities.
- Implement a centralized UPS system for critical systems located within the City Hall Data Center with monitored power distribution units in each equipment to improve manageability and serviceability of short-term back of power systems.

4.6 FORMER ONDS BUILDING

4.6 FORMER ONDS BUILDING *ARCHITECTURAL ASSESSMENT - ALSC ARCHITECTS*

The house at 112 S. 8th Street currently houses the Office of Neighborhood Development Services. Renovations have been made to convert the home into an office environment which consists of a reception area, several offices, a conference room, and shop space in the back. The residential kitchen and toilet rooms remain.

No construction documents were available for review. However, based upon observations during a site visit, the building appears to be typical house construction and is in fair condition. A concrete ramp has been added to the side of the front porch to create an accessible entrance. Interior finishes appear to be in good condition. The second floor is served by a carpeted stair, but there is no accessible route.

FORMER ONDS BUILDING

PROJECT OVERVIEW

The building consists of a private residence that has been repurposed into an office building and is located at 112 S 8th Street in Yakima, Washington. The structure is approximately 1,100 square feet on the main level and 670 square feet on the second floor. There is also a 780 square foot detached garage that has been converted to a shop and storage facility. The original date of construction or change of use to an office is unknown.

STRUCTURAL SYSTEM

Although the original construction documents aren't available, it is likely that the building is comprised of conventional wood framed construction. At the time of the visit, no attempt was made to uncover the existing structural elements.

The exterior building walls of the office are supported by concrete stem walls and the building has a crawl space below the main floor. The shop is also supported by exterior concrete stem walls and has a concrete slab on grade.

To meet the requirements of the International Building Code (IBC), residential buildings are required to support a vertical load of 40 pounds per square foot (psf) and office space is required to support 50 psf. Although the existing framing is unknown, it is unlikely that the original framing meets the requirements of office loading. Based on the visible framing in the shop, it is also unlikely that the roof framing can support the current 30 psf snow load that is required by the City of Yakima for new construction.

As outlined in the International Existing Building Code (IEBC), any new alterations that cause an increase in the existing load-carrying gravity elements by more than 5 percent, shall be replaced or altered as needed to carry the required loads as required by the current International Building Code (IBC).

LATERAL FORCE RESISTING SYSTEM

The lateral force resisting system appears to be wood sheathing on the exterior walls acting as shearwalls around the perimeter of the building for both the office and the shop. Any new alterations, that increase the design lateral loads or where the alteration decreases the capacity of any existing lateral load carrying element should be avoided.

If the lateral system is altered in a way that increases the forces or decreases the capacity of the lateral load carrying elements by more than 10 percent, the structure must be upgraded to meet the requirements of the IBC.

OVERALL ASSESSMENT

The facility is in fair condition. During the site visit, there were no visible signs of water intrusion or damage to the exterior closure or interior framing elements.

Programing space that can be categorized as essential, such as ambulance, fire or police services that can change the building's structural risk category from II to IV (as described in chapter 16 of the IBC) should be avoided.

Since the facility does not appear to be undergoing a change of occupancy and is currently functioning adequately as office space, DCI does not anticipate any upgrades or modifications to the existing framing systems. Although slight modifications in the form of new openings in the floor and exterior walls are anticipated, no upgrades to the building's gravity or lateral systems are predicted.

The ONDS building was originally constructed in 1940 as a two-story single-family residence. It has been converted into office space with a detached shop behind.

MECHANICAL SYSTEMS

The main building is served by a residential grade air handling unit with a remote outdoor heat pump. The second floor has window mounted air conditioning units as supplemental cooling. The detached shop is served by multiple systems which include wall mounted electric heaters, wall mounted air conditioners, unit heaters and ductless split system. Each system has its own thermostatic control.

PLUMBING SYSTEMS

Domestic hot water for the building is served by a single residential style electric hot water heater. There is no recirculation system. Existing fixtures are in restroom and kitchen. The detached shop has a restroom/janitor's closet.

FIRE SPRINKLER

The building is not sprinkled.

SERVICE AND DISTRIBUTION

The building normal electrical services are derived from PP owned 120/240V, 37.5kVA pole mounted transformer. The service conductors from these transformers are aerial from the pole across to weatherheads on both the shop and the main building. The main service equipment for the main building is a Square D 120/240V, 1PH 3W 60Hz 200A load center. This load center is in fair condition. It is the only electrical panel in the main building. As noted above, a second set of aerial service conductors routes to the shop weatherhead, where there is a service disconnect, and Square D load center to serve the shop loads. This load center is in fair condition. The building electrical distribution is laid out as shown in Appendix Figure 3.

ENGINE/GENERATOR

There is no generator for this facility.

GROUNDING

Equipment grounding conductors were observed in feeders and branch circuits. The GEC was not observed during the walkthrough due to the deadfront cover being in place, but it is assumed to connect to the metal water piping as is common for residential construction.

METERING

There is a utility meter on the exterior wall of the both the main building and the shop.

RENEWABLES

There are not currently any renewable energy systems installed in this building.

LIGHTING AND BRANCH WIRING

Lighting throughout the building was surface mount wraparound fixtures. There looked to be a mixture of fluorescent and LED fixtures in the building.

EGRESS AND EXIT LIGHTING

Due to the size of this facility, there were no exit lights, only placard signs at exits. We were not able to identify egress lighting during our walk through.

EXTERIOR LIGHTING

There is not exterior lighting for this building.

LIGHTING CONTROLS

The majority of the spaces in the building utilized manual on/off wall switches for lighting. The conference room did have a local ceiling occupancy sensor with wall switch manual overrides. No daylighting controls are present.

OTHER ELECTRICAL SYSTEMS - FIRE ALARM

There is not a centralized fire alarm system currently in place. There are individual ceiling mounted smoke detectors.

5.0 FUNDAMENTAL BUILDING PROGRAM AND DEPARTMENTS

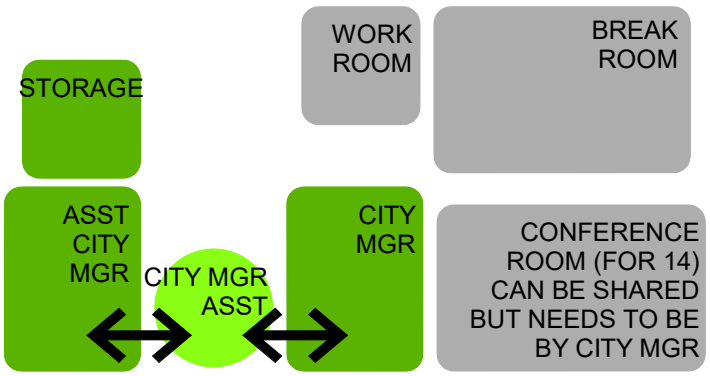
The following pages detail the spatial requirements for all City departments included in the study, including the program (space list) and internal relationship diagram for each. Any required or requested adjacencies to other departments are also shown. Spaces that have been noted as possibly being shared are gray in the relationship diagram.

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
City Manager								**1,549**
	City Manager	1	1		●	180	180	
	Assistant City Manager	1	1		●	180	180	
	Assistant to the City Manager	1	1	●		64	64	
	Conference Room (for 14)	1	1			315	315	
	Storage	1	1			100	100	
	Break Room (for 12)	1	1			300	300	
	Work Room	1	1			100	100	
	CIRCULATION - 25%						309.75	

PROGRAM ADJACENCIES *CITY MANAGER*



DEPARTMENT ADJACENCIES

LEGEND

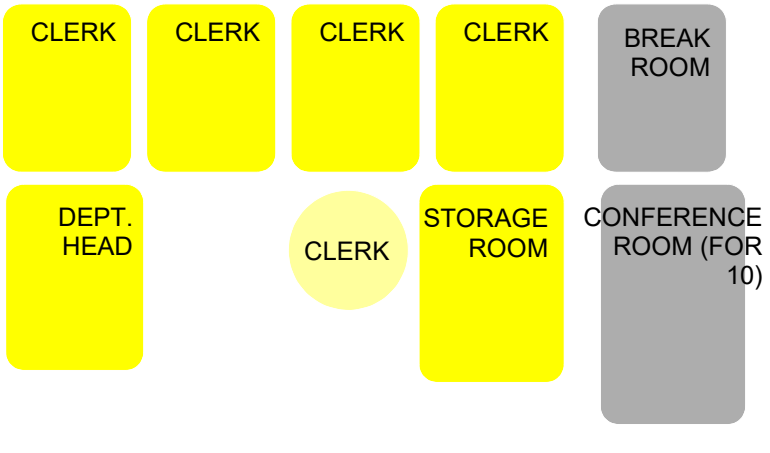
↔ DOOR / OPENING ⇿ GLAZING / VISUAL CONNECTION ● SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
City Clerks								**1,755**
	Manager	1	1		●	180	180	
	Clerks	4	4		●	150	600	
	Clerk (Workstation)	1	1	●		64	64	
	Conference Room (for 10)	1	1		●	240	240	
	Dedicated Storage Room	1	1			200	200	
	CIRCULATION - 25%						321	
	Break Room (for 6)	1	1			150	150	
	Lobby/Waiting Area (Shared)							

PROGRAM ADJACENCIES *CITY CLERKS*



DEPARTMENT ADJACENCIES

LEGEND

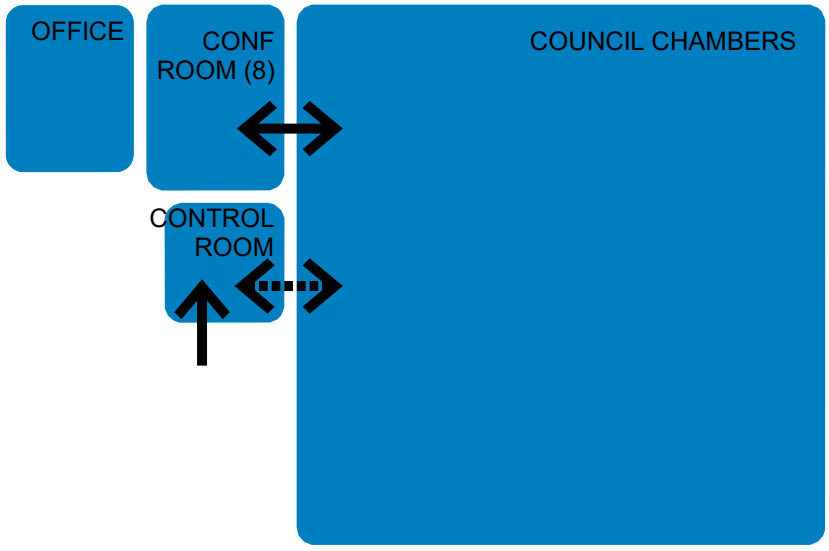
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
City Council								**3,100**
	Council Chamber	1	1			2000	2000	
	Control Room	1	1			100	100	
	Conference Room (for 8, w/ kitchenette)	0	1			250	250	
	Office	1	1		●	150	150	
	CIRCULATION - 25%						600	

PROGRAM ADJACENCIES *CITY COUNCIL*



DEPARTMENT ADJACENCIES

LEGEND

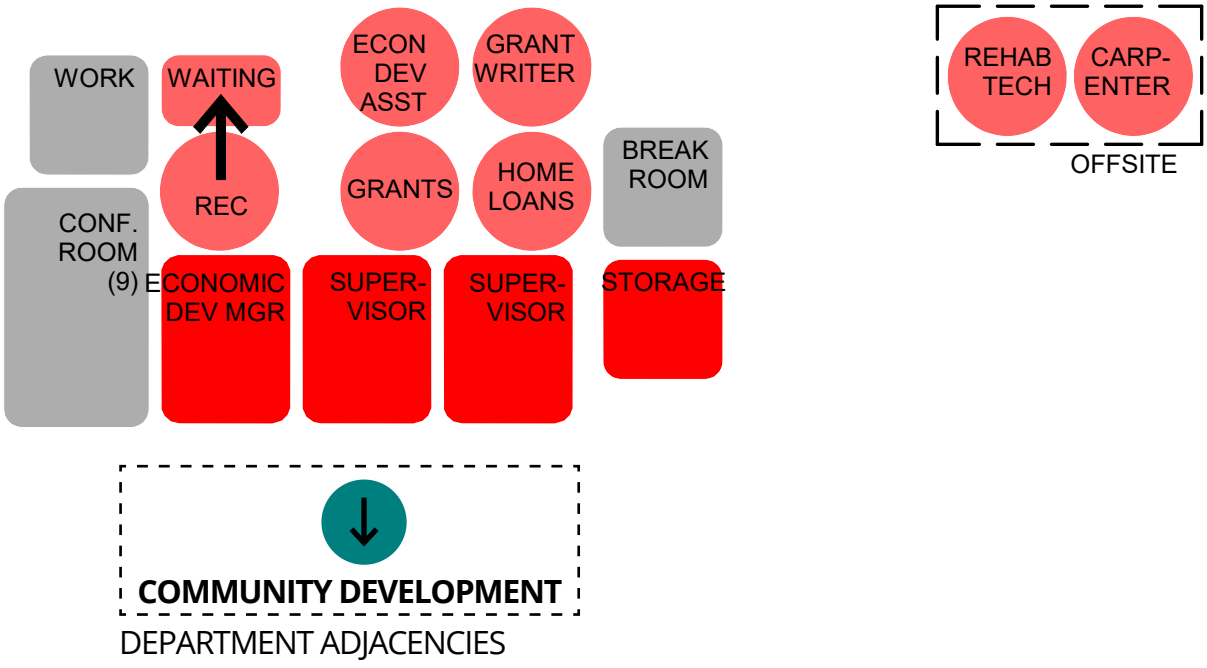
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
ONDS								**1,857**
	Neighborhood Development Svcs Supervisor	1	1		●	150	150	
	Supervisor	1	1		●	150	150	
	Grant Financial Specialist	0	1	●		64	64	
	Home Loan Specialist	0	1	●		64	64	
	Carpenter/Rehab Tech (at Shop location?)	1	2	●		64	128	
	Grant Writer	1	1	●		64	64	
	Economic Development Manager	0	1		●	150	150	
	Economic Development Assistant	0	1	●		64	64	
	Reception	1	1	●		64	64	
	Conference Room (for 9)	1	1			240	240	
	Waiting Area (4)	1	1			60	60	
	Work Room	1	1			100	100	
	Break Room	1	1			100	100	
	Storage	1	1			100	100	
	CIRCULATION - 25%						358.5	
	Shop (will be at another site)	1	1				0	

PROGRAM ADJACENCIES *ONDS*



DEPARTMENT ADJACENCIES

LEGEND

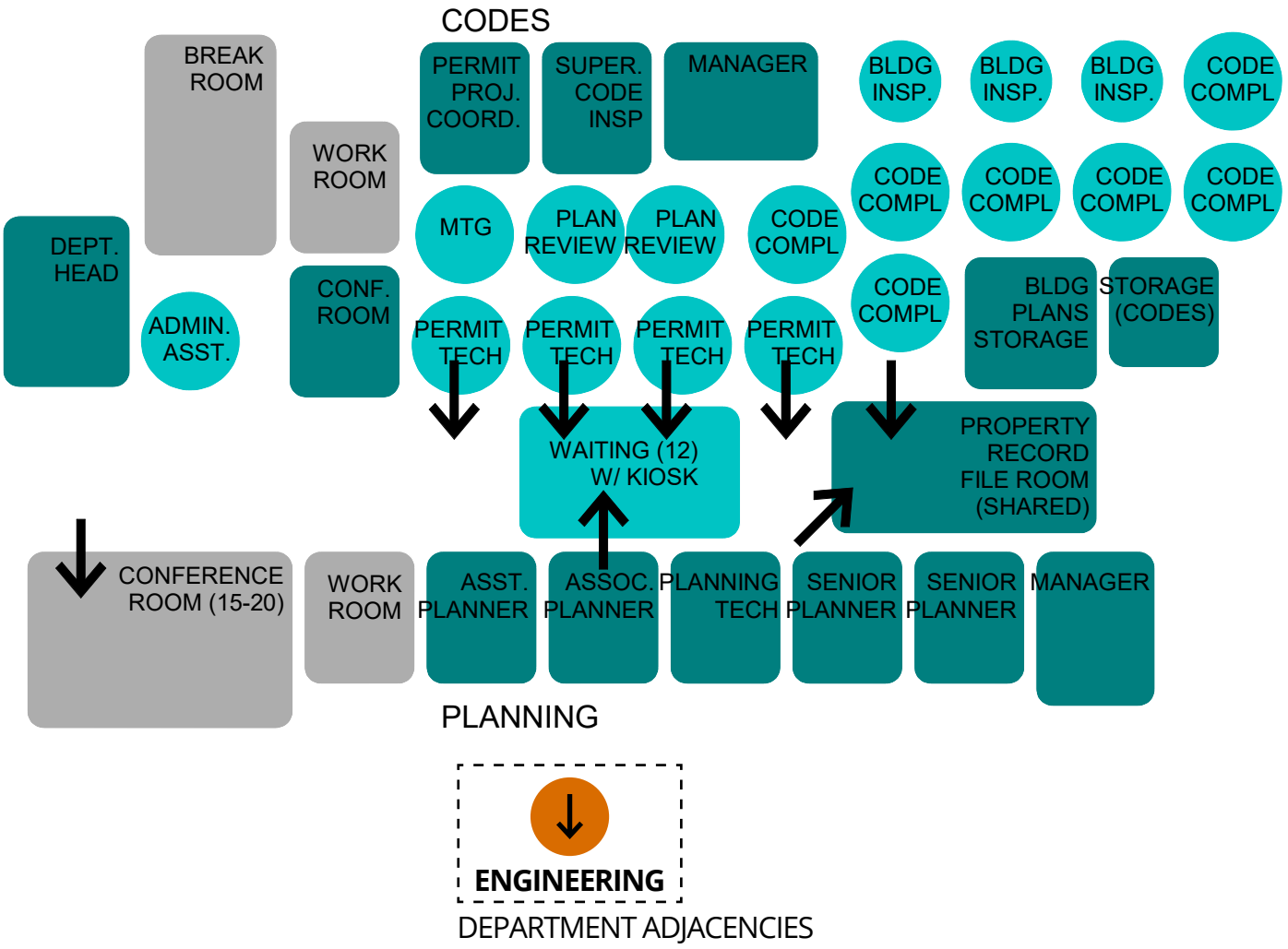
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Community Development								**4,620**
	Department Head	1	1		●	180	180	
	Administrative Assistant	1	1	●		64	64	
Codes	Manager	1	1		●	150	150	
	Permit Project Coordinator	1	1		●	120	120	
	Supervising Code Inspector	1	1		●	120	120	
	Building Inspectors	3	3	●		32	96	
	Code Compliance	5	7	●		64	448	
	Plan Reviewer, including shared layout	2	2	●		72	144	
	Permit Tech	4	4	●		64	256	
	Small Meeting Area	1	1	●		100	100	
	Small Conference Room	1	1			120	120	
	Storage Room	1	1			100	100	
	Building Plans Storage Room	1	1			144	144	
Planning	Manager	1	1		●	150	150	
	Planners/Planning Tech	5	5		●	120	600	
	Property Record File Room	1	1			288	288	
	Waiting area for up to 12 people							
	CIRCULATION - 25%						770	
	Conference Room (for 15-20)	1	1			380	380	
	Work Room	2	2			150	150	
	Break Room (for 20)	1	1			240	240	

PROGRAM ADJACENCIES *COMMUNITY DEVELOPMENT*



DEPARTMENT ADJACENCIES

LEGEND

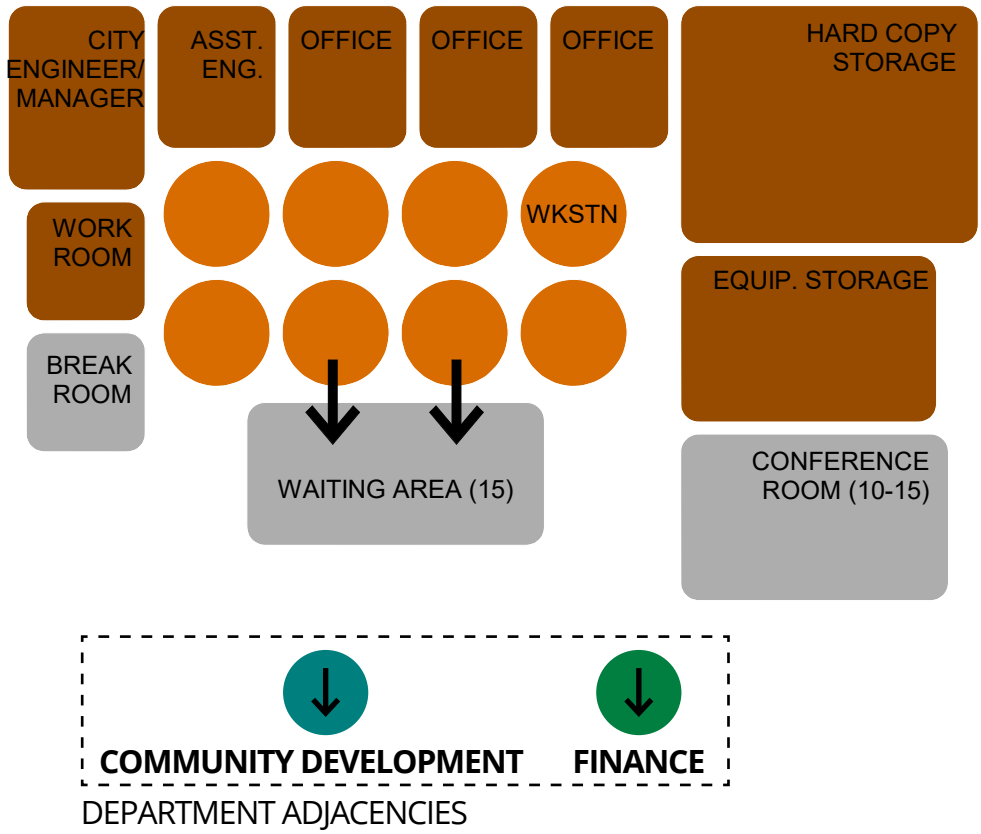
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Public Works								**4,658**
	Department Head (in Public Works Bldg)	1	1		●		0	
Engineering	City Engineer/Manager	1	1		●	150	150	
	Offices	3	4		●	120	480	
	Workstations	6	6	●		64	384	
	Hotel Workstations	2	2	●		64	128	
	Equipment Storage	1	1			300	300	
	Hard copy Storage	1	1			500	500	
	Work Room	1	1			100	100	
	Conference Room (for 10-15)	1	1			312	312	
	Waiting Area (for 15)	1	1			300	300	
	Break Room	1	1			100	100	
	CIRCULATION - 25%						663.5	

PROGRAM ADJACENCIES



DEPARTMENT ADJACENCIES

LEGEND

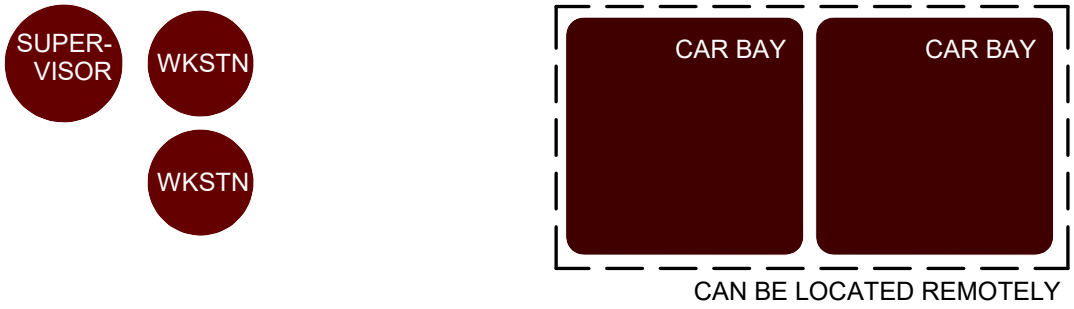
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Public Works								**4,658**
	Department Head (in Public Works Bldg)	1	1		●		0	
Facilities	Offices located in Public Works Building won't move							
	City Hall Building Operations Supervisor	1	1	●		64	64	
	Support staff	2	2	●		64	128	
	Car bay	2	2			400	800	
	CIRCULATION - 25%						248	

PROGRAM ADJACENCIES



LEGEND

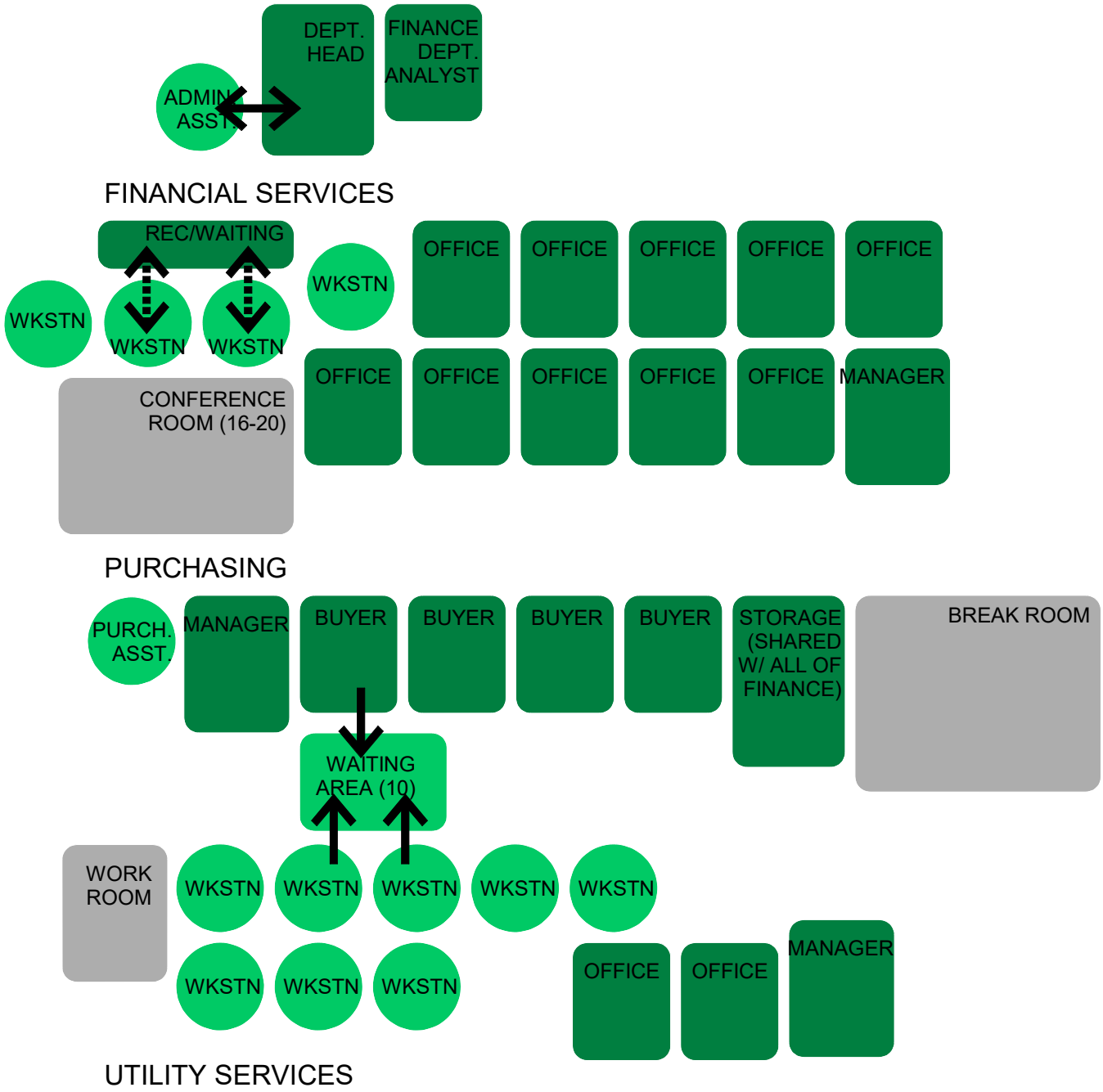
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Finance								**5,203**
	Department Head	1	1		●	180	180	
	Administrative Assistant	1	1	●		48	48	
	Finance Dept Analyst	1	1		●	120	120	
Financial Svcs	Manager	1	1		●	150	150	
	Offices	7	7		●	120	840	
	Workstations	6	6	●		48	288	
	Reception/Waiting Area	1	1			100	100	
	CIRCULATION - 25%						431.5	
Purchasing	Manager	1	1		●	150	150	
	Senior Buyers	2	2		●	120	240	
	Buyers	1	2	●		48	96	
	Purchasing Assistant	1	1	●		48	48	
	Storage	1	1			16	16	
	CIRCULATION - 25%						97.5	
Utility Svcs	Manager	1	1		●	150	150	
	Offices	2	2		●	120	240	
	Workstations	8	8	●		48	384	
	Storage Room	1	1			200	200	
	CIRCULATION - 25%						243.5	
	Conference Room (for 16-20)	1	1			380	380	
	Break Room (for 20)	1	1			500	500	
	Work Room	1	1			150	150	
	Waiting Area (10, shared between Purchasing/Utility Svcs)		1			150	150	

PROGRAM ADJACENCIES



LEGEND

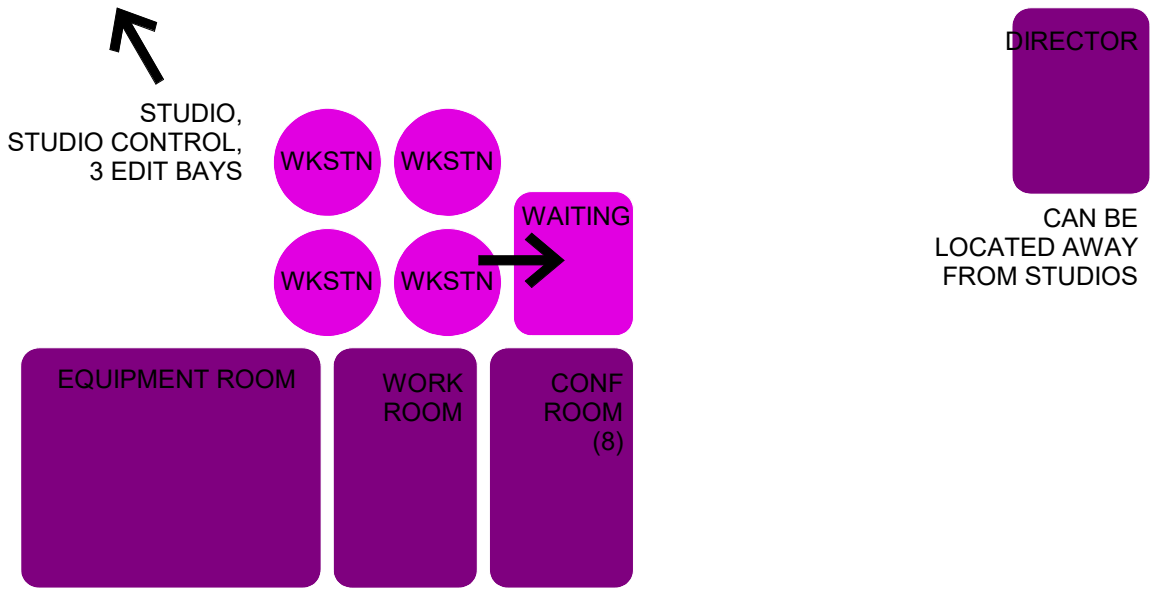
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department	2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Communication and Public Affairs							**4,131**
Director	1	1		●	180	180	
Workstations	4	4	●		64	256	
Edit Bays	5	3		●	100	300	
Studio (large)	1	1			800	800	
Prop Storage	1	1			364	364	
Studio Control Room	1	1			120	120	
Garage (1 van + storage area)	1	1			300	300	
Equipment/Storage Room	1	1			375	375	
Playback Equipment	1	1			120	120	
Work Room/Break Room	1	1			150	150	
Conference Room (for 8, can be shared)	1	1			240	240	
Waiting Area (for 3)	1	1			100	100	
CIRCULATION - 25%						826.25	

PROGRAM ADJACENCIES



LEGEND

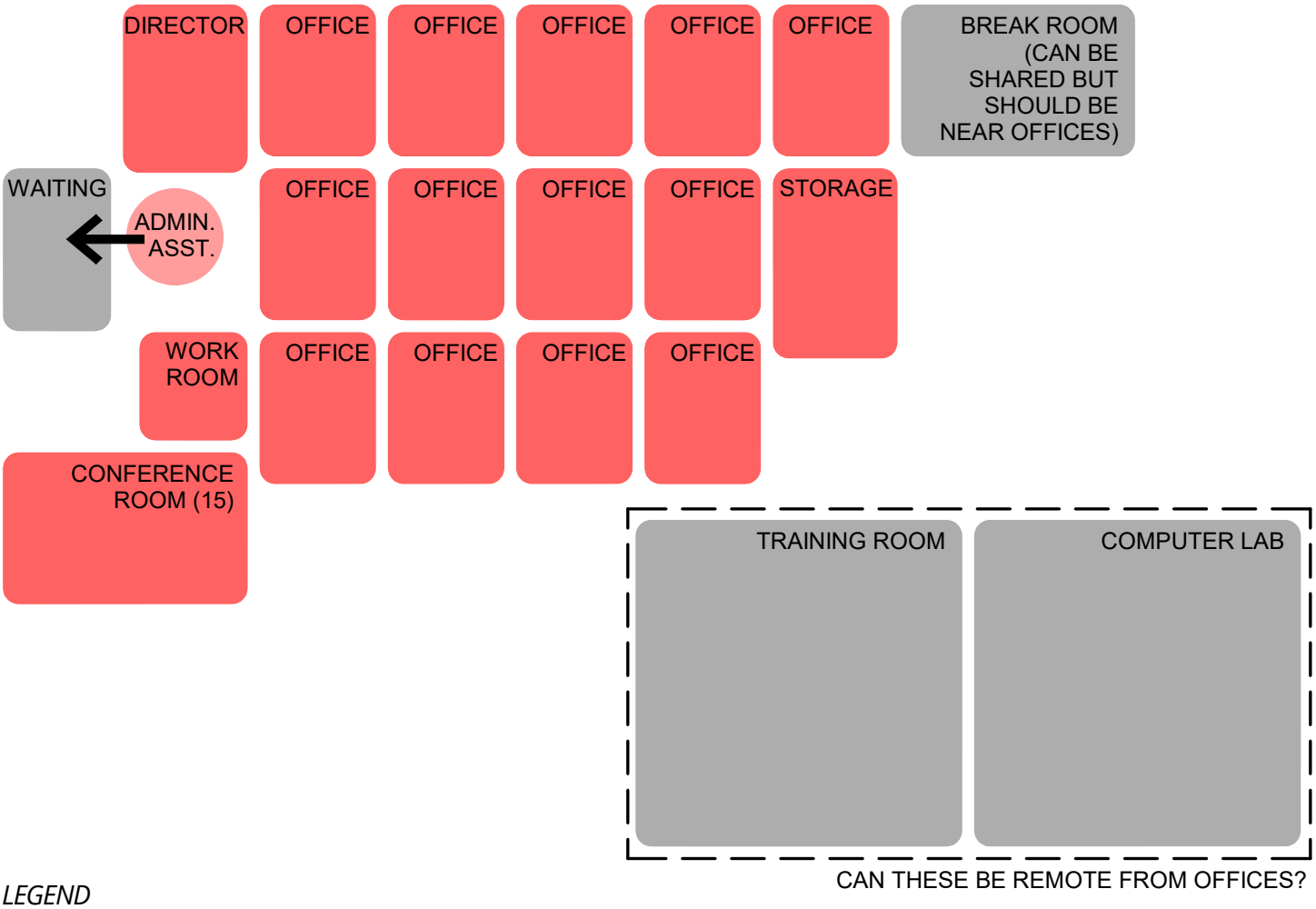
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department	2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Human Resources							**5,870**
Director	1	1		●	180	180	
Offices	10	13		●	150	1950	
Administrative Assistant	0	1	●		64	64	
Storage	1	1			200	200	
Work Room	1	1			100	100	
Conference Room (for at least 15)	1	1			312	312	
Break Room (for 15)	1	1			300	300	
Waiting area (for 5-10)	1	1			150	150	
Training Room (size?)	1	1			900	900	
Computer Lab (size?)	1	1			900	900	
CIRCULATION - 25%						814	

PROGRAM ADJACENCIES



LEGEND

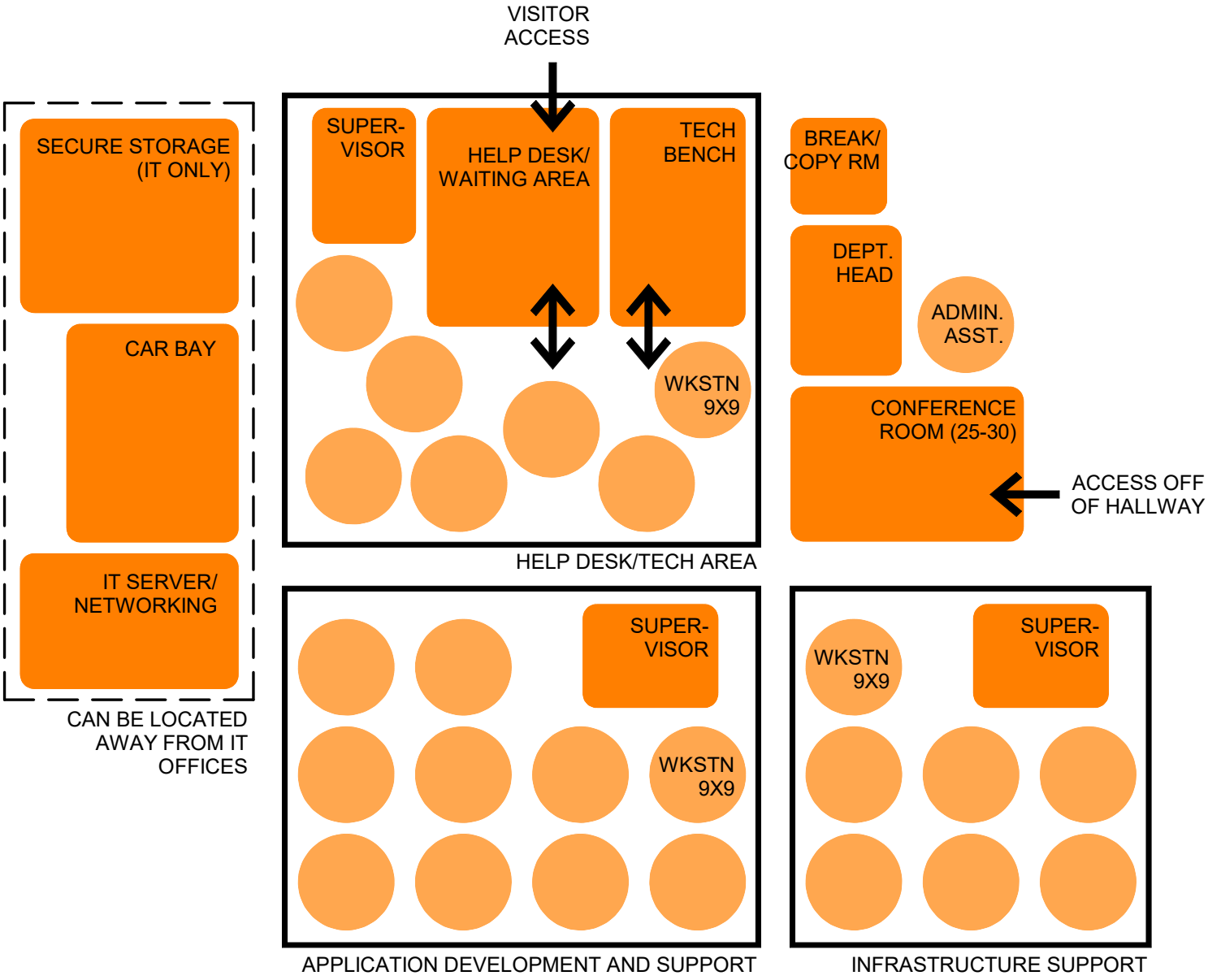
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department	2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Information Technologies (IT)							**6,175**
Department Head	1	1		●	180	180	
Supervisors	3	3		●	150	450	
Administrative Assistant	1	1	●		81	81	
Help Desk/Tech Area	5	7	●		81	567	
Help Desk (including waiting area for 2-4)	1	1			400	400	
Tech Bench	1	1			315	315	
Application Development and Support	8	10	●		81	810	
Infrastructure Support	5	7	●		81	567	
IT Server and Networking Room	1	1			320	320	
Conference Room (for 25-30)	1	1			380	380	
Secure Storage (not shared)	1	1			450	450	
Break/Copy Room	1	1			100	100	
CIRCULATION - 25%						1155	
Car bay	1	1			400	400	

PROGRAM ADJACENCIES



LEGEND

DOOR / OPENING

GLAZING / VISUAL CONNECTION

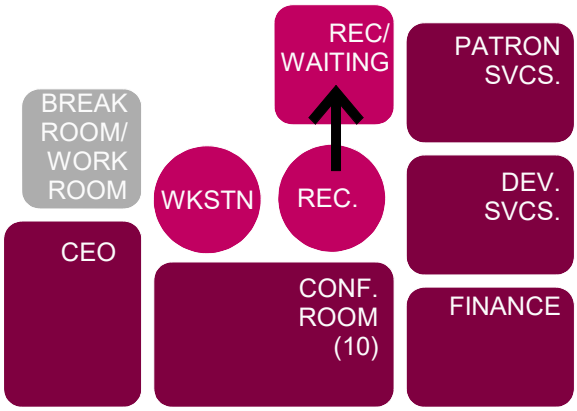
SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Capitol Theater								**1,460**
	Executive Director	1	1		●	180	180	
	Finance	1	1		●	140	140	
	Development Services	1	1		●	140	140	
	Patron Services	1	1		●	140	140	
	Workstations	2	2	●		64	128	
	Conference Room (for 10)	1	1			240	240	
	Reception/Waiting area	1	1			100	100	
	Break Room/Work Room	1	1			100	100	
	CIRCULATION - 25%						292	

PROGRAM ADJACENCIES



LEGEND

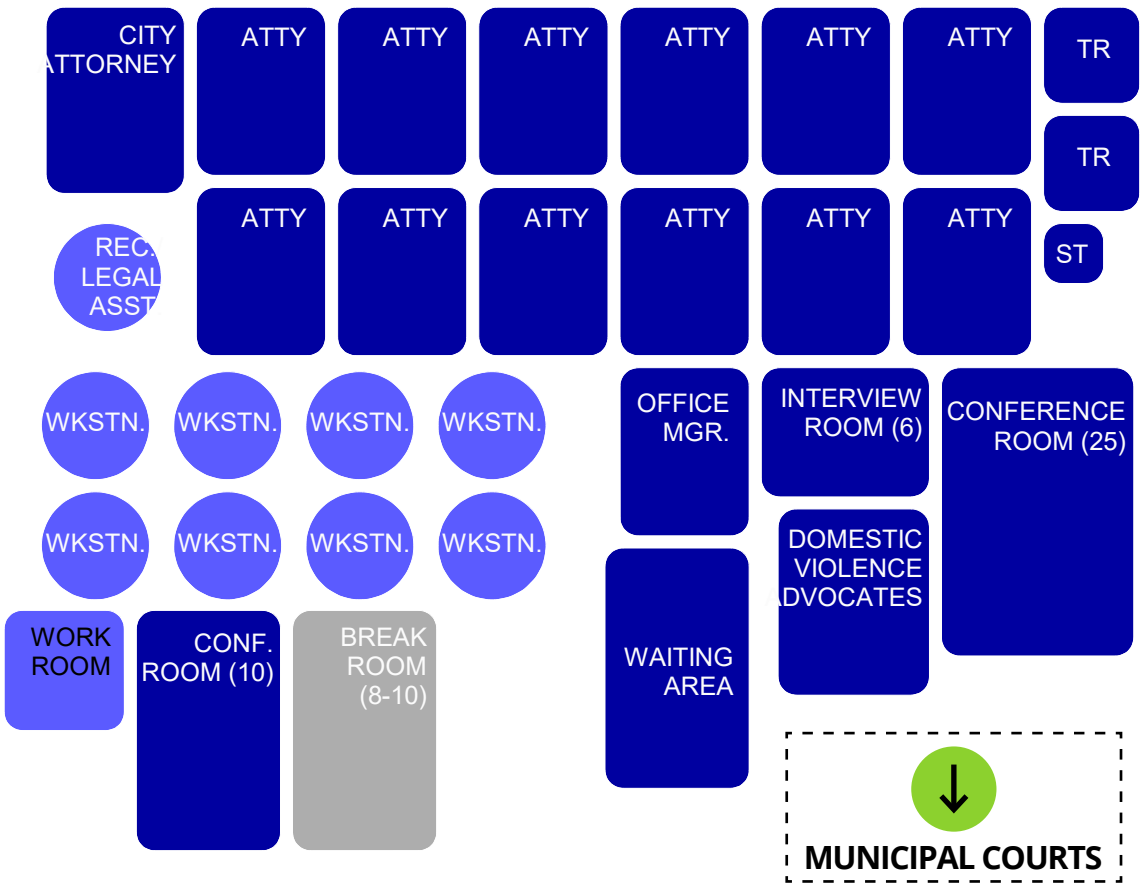
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Legal								**5,499**
	City Attorney	1	1		●	180	180	
	Office Manager	1	1		●	150	150	
	Attorneys	11	12		●	150	1800	
	Domestic Violence Advocates (shared office)	1	1		●	180	180	
	Workstations	7	8	●		64	512	
	Reception/Legal Assistant	1	1	●		100	100	
	Waiting Area (4, not shared)	1	1			240	240	
	Conference Room (for 25)	1	1			380	380	
	Conference Room (10)	1	1			240	240	
	Interview Room (6)	1	1			150	150	
	Storage	1	1			25	25	
	Break Room (8-10)	1	1			240	240	
	Work Room	1	1			100	100	
	Unisex Toilet Room	2	2			64	128	
	CIRCULATION - 25%						1074.25	

PROGRAM ADJACENCIES



LEGEND

DEPARTMENT ADJACENCIES

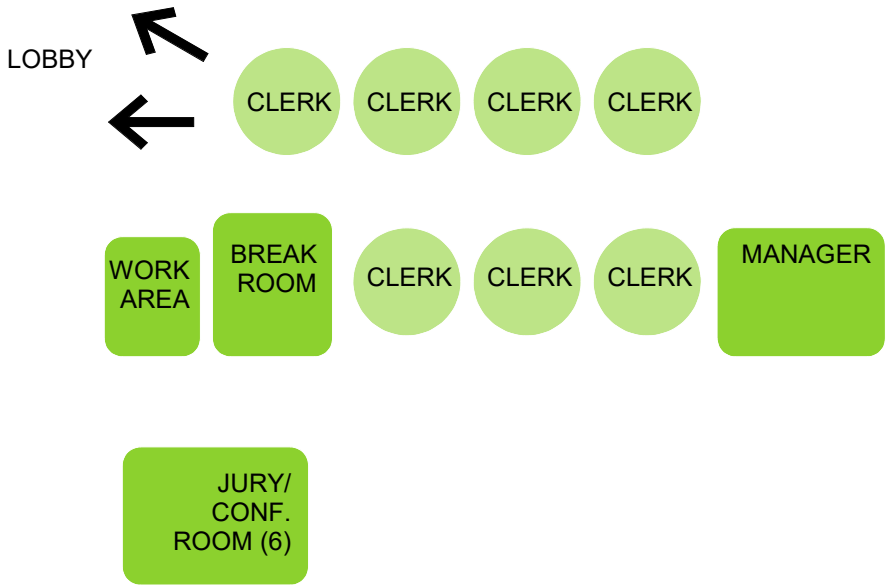
DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Municipal Courts								**1,973**
	Manager	1	1		●	150	150	
	Clerks	7	7	●		64	448	
	Break Room	1	1			120	120	
	Work Room	1	1			80	80	
	Conference Room (for 30+)	1	1			600	600	
	Jury Room (for 6)	1	1			180	180	
	CIRCULATION - 25%						394.5	

PROGRAM ADJACENCIES



LEGEND

DOOR / OPENING GLAZING / VISUAL CONNECTION SHARED BY OTHER DEPARTMENTS

ALSC ARCHITECTS

City of Yakima Space Study

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Police	Departments shown in *Italics* plan to stay in current locations.							**6,536**
Administration	*Chief*	1	1		●			
	Admin Asst to Chief	1	1		●			
	Corrections/Services Commander	1	1		●			
	Administrative Lieutenant	1	1		●			
	Public Information Officer	1	1		●			
	Copy Room	1	1					
	Mail Room	1	1					
	Training Room (for 75)	1	1					
Internal Affairs	Office	2	2			150	300	
Training/ Recruiting	Officer	1	1	●		64	64	
	Recruits	3	3	●		64	192	
Crime Analysts	*Supervisor*	1	1		●	150	150	
	Workstations	3	3	●		64	192	
Volunteers	*Workstations*	3	3	●				
Investigations	*Captain*	1	1		●			
	Lieutenant	1	1		●			
	Forensic Analyst	2	2		●			
	Conference Room (for 15)	1	1					
	Storage (equipment and supplies)	1	1					
	Interview Room	3	3					
Gang Unit	*Sergeant*	1	1		●			
	Workstations	5	5	●				
Major Crimes	*Sergeant*	1	1		●			
	Workstations	4	4	●				
	Sergeant	1	1		●			
Property Crimes	*Computer Forensics Detective*	1	1		●			
	Workstations	4	4	●				
Special Assault Unit (SAU)	Sergeant	1	1		●	150	150	
	Detectives (2 per office)	3	3		●	200	600	
	Waiting Area	1	1			140	140	
	Interview Room	2	2			150	300	
DEA	*No spaces within the building*							
Patrol	*Captain*	1	1		●			
	Lieutenant	4	4		●			
	Sergeant (4 officers per office)	2	2		●			
	Workstations	8	8	●				
	Muster Room (for 20)	1	1					
	Storage (forms and supplies)	1	1					
	K-9 unit storage room	1	1					
	Fleet and Building Maintenance (including storage and 2 workstations)	1	1	●				
	Armory	1	1					

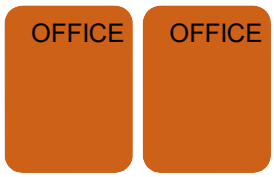
ALSC ARCHITECTS

City of Yakima Space Study

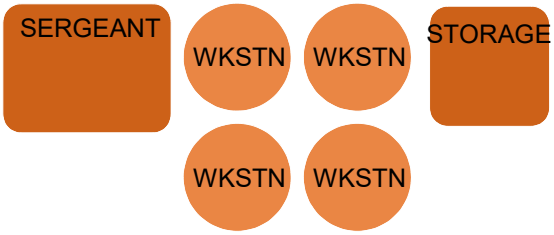
Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
	Holding Cells	4	4					
	Break Room (for 5)	1	1					
Traffic	Sergeant	1	1		●	150	150	
	Workstations	4	7	●		64	448	
	Storage Room	1	1			100	100	
Community	*Sergeant*	1	1		●			
Services	*Workstations*	5	5	●				
Services	*Offices*	3	3		●			
	Workstations	15	15	●				
	Reception Workstations	4	4	●				
	Storage	1	1					
	Break Room (for 5)	1	1					
Jail	*Sergeant*	3	3		●			
	Jail Admin Asst	1	1		●			
	Medical Staff	1	1		●			
	Storage	1	1					
	Training Room	1	1			1400	1400	
	Training Room Storage	1	1			250	250	
	Storage	1	1			2100	2100	
	CIRCULATION - 25%							
YAMA								12,788
	Offices	4	4		●	240	960	
	Workstations	3	3	●		64	192	
	Conference Room (for 15)	1	1			312	312	
	Large Rehearsal Space (for 30-40 students)	2	2			1500	3000	
	Medium Rehearsal Space (for 20-30 students)	1	1			1200	1200	
	Practice Rooms (for 3-4)	10	10			140	1400	
	Practice Rooms (for 13)	2	2			600	1200	
	Waiting Area (for 20)	1	1			400	400	
	Instrument Storage	1	1			600	600	
	Music Storage	1	1			120	120	
	Break Room (15-30)	1	1			750	750	
	Work Room	1	1			120	120	
	CIRCULATION - 25%						2533.5	

PROGRAM ADJACENCIES

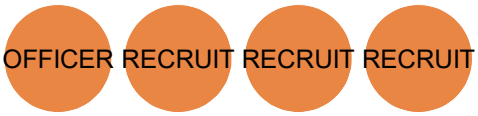
INTERNAL AFFAIRS



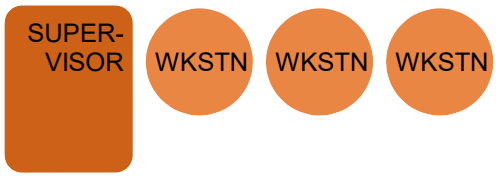
TRAFFIC



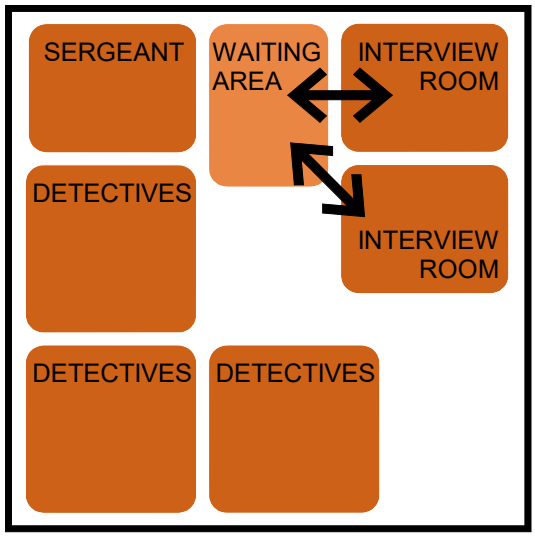
TRAINING/RECRUITING



CRIME ANALYSTS



SPECIAL ASSAULT UNIT (SAU)



LEGEND

DOOR / OPENING

GLAZING / VISUAL CONNECTION

SHARED BY OTHER DEPARTMENTS

6.0 CONCEPTUAL DESIGN

6.1 CITY HALL *FORMERLY BANK OF AMERICA*

The main level of the new City Hall building will house a Council Chamber able to seat 100 audience members, the City Manager office suite, and City Clerks. Capitol Theatre administration offices will be located in the office area east of the new council chambers, with its own entrance from Pendleton Way. The east mezzanine will be occupied by Y-PAC offices, equipment, and editing bays. Existing mechanical and electrical spaces in the basement will remain. Y-PAC studio will move to the southeast corner of the basement, with the control room adjacent and storage across the hall. The police large training room will also be located at the south/east side of the basement, with its own storage room across the hall.

LAYOUT

The main entrance, facing the street, will be moved towards the center of the building along 3nd Street. The existing storefront at the corner entrance will be replaced with slightly smaller openings and planters, creating a level of privacy for what will now be part of the City Manager office suite. A spacious lobby will separate the City Manager office suite to the south from the City Clerk's office suite to the north. This inviting lobby will be designed to be a comfortable and welcoming area for the public, featuring flexible seating areas, interior glass allowing views into the new Council Chambers, and designated wall space for an art gallery.

EXTERIOR WALL SYSTEMS

The exterior concrete panels will be refreshed with the application of new paint, while the stone veneer at the southwest entry will be eliminated. To enhance the new entry on 2nd Street, new wood, or wood composite, accent panels will be introduced to the facade.

ELEVATION FROM N 2ND STREET

ENTRANCE FROM PARKING AREA

INTERIOR WALL SYSTEMS

Interior walls will be constructed of metal studs with GWB and filled with acoustic insulation to minimize sound transmission. Office walls will either extend to the structure above or have acoustic insulation overlaid above the ceiling to limit noise transfer between spaces. The walls surrounding Council Chambers will extend to structure for added sound containment.

ROOF SYSTEMS

The existing roofing system, including insulation, will be replaced with a minimum R-38 rigid insulation and TPO single ply membrane roofing. The existing roof drain locations are expected to be reused, although replacement may be necessary. The City would like to place solar panels on the roof, and if determined feasible by the Structural team, this will be incorporated during the roofing replacement process.

FINISHES

The predominant floor material for the remodeled spaces on the first floor and mezzanine will be carpet in office suites, Council Chambers, and conference rooms. The main lobby area will have luxury vinyl tile (LVT) flooring, and toilet rooms will use ceramic tile flooring and wainscot. Most of the spaces within the basement will have concrete floors, with carpet in the Training Room and Studio Control space.

Ceilings in offices, conference rooms and storage spaces will be 2'x4' lay-in acoustical tile, Council Chambers and main lobby will be a combination of large format acoustical tile and gypsum board soffits.

Interior walls will have a combination of painted surface and areas of vinyl wall covering (VWC) adhered to the gypsum board.

CASEWORK/FIXTURES/EQUIPMENT

Built-in casework will be provided in break rooms, work rooms, and at the kitchenette within the City Council conference room.

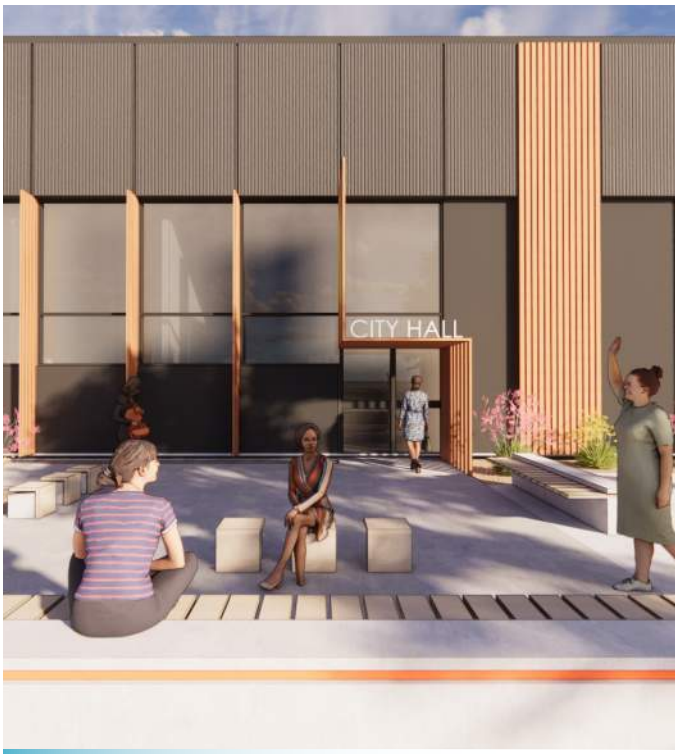
Studio, edit bay, playback, and control room equipment will be brought over from the existing Y-PAC building to their new spaces. The studio and new training room will have storage rooms located across the hall.

CODE ANALYSIS

The building will be brought up to current IBC, ADA, and Washington State Energy Codes to the extents required and practicable.

Basement multi-user toilet rooms will be remodeled to accommodate current ADA requirements. Two single user toilet rooms will be added to the main level, one in the City Clerk's office suite and a second located between the Council Chambers and Capitol Theatre offices. Multi-user toilet rooms will also be added to the main level for public use. A single user toilet room will be added to the east mezzanine, stacked above the new toilet room below.

Where exterior walls have not already been furred, new furring and insulation will be added.



MAIN ENTRANCE

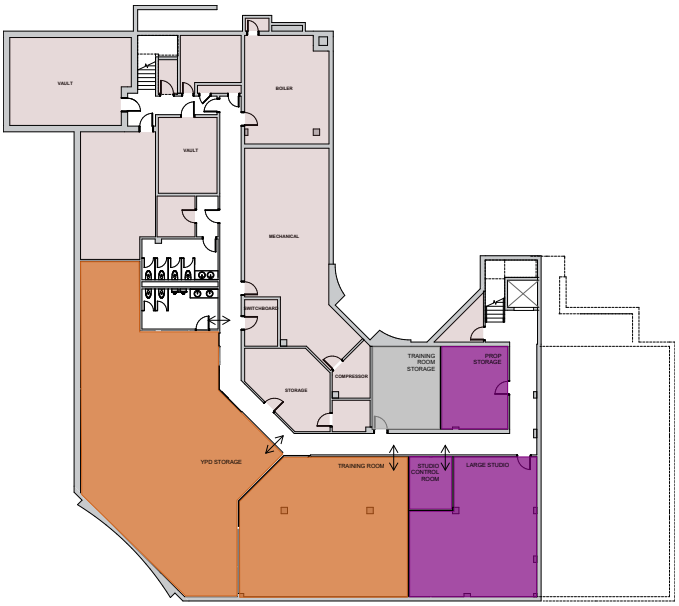
ENTRY CANOPY FROM 2ND STREET SIDEWALK

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)	SF PER SPACE - AS SHOWN
City Manager								**1,549**	
	City Manager	1	1		●	180	180		200
	Assistant City Manager	1	1		●	180	180		180
	Assistant to the City Manager	1	1	●		64	64		64
	Conference Room (for 14)	1	1			315	315		385
	Storage	1	1			100	100		70
	Break Room (for 12)	1	1			300	300		w/ clerks
	Work Room	1	1			100	100		w/ clerks
	CIRCULATION - 25%						309.75		
City Council								**3,100**	
	Council Chamber	1	1			2000	2000		2300
	Control Room	1	1			100	100		105
	Conference Room (for 8, w/ kitchenette)	0	1			250	250		220
	Office	1	1		●	150	150		160
	CIRCULATION - 25%						600		
City Clerks								**1,755**	
	Manager	1	1		●	180	180		180
	Clerks	4	4		●	150	600		150
	Clerk (Workstation)	1	1	●		64	64		64
	Conference Room (for 10)	1	1		●	240	240		240
	Dedicated Storage Room	1	1			200	200		380
	CIRCULATION - 25%						321		
	Break Room (for 6)	1	1			150	150		100
	Lobby/Waiting Area (Shared)								
Communication and Public Affairs								**4,056**	
	Director	1	1		●	180	180		180
	Workstations	4	4	●		64	256		64
	Edit Bays	5	3		●	100	300		112
	Studio (large)	1	1			800	800		842
	Prop Storage	1	1			364	364		300
	Studio Control Room	1	1			120	120		125
	Garage (1 van + storage area)	1	1			300	300		
	Equipment/Storage Room	1	1			375	375		375
	Playback Equipment	1	1			120	120		275
	Work Room/Break Room	1	1			150	150		130
	Conference Room (for 8, can be shared)	1	1			180	180		170
	Waiting Area (for 3)	1	1			100	100		110
	CIRCULATION - 25%						811.25		
Capitol Theater								**1,498**	
	Executive Director	1	1		●	180	180		184
	Finance	1	1		●	150	150		143
	Development Services	1	1		●	150	150		143
	Patron Services	1	1		●	150	150		143
	Workstations	2	2	●		64	128		64
	Conference Room (for 10)	1	1			240	240		237
	Reception/Waiting area	1	1			100	100		100
	Break Room/Work Room	1	1			100	100		130
	CIRCULATION - 25%						299.5		
Police								**3,750**	
	Training Room	1	1			1400	1400		1230
	Training Room Storage	1	1			250	250		300
	Storage	1	1			2100	2100		2230
	CIRCULATION - 25%								

SUPPORT SPACES
COMMUNICATIONS
CITY COUNCIL
MECH / ELEC / UNASSIGNED
CAPITOL THEATRE
CITY CLERKS
WORKSTATION
CITY MANAGER
WORKSTATION
WORKSTATION

PROPOSED DEPARTMENT LAYOUT - LEVEL 01 FLOOR PLAN

YPD COMMUNICATIONS SUPPORT SPACES FACILITIES



PROPOSED DEPARTMENT LAYOUT - BASEMENT FLOOR PLAN

COMMUNICATIONS SUPPORT SPACES FACILITIES

PROPOSED DEPARTMENT LAYOUT - MEZZANINE FLOOR PLAN

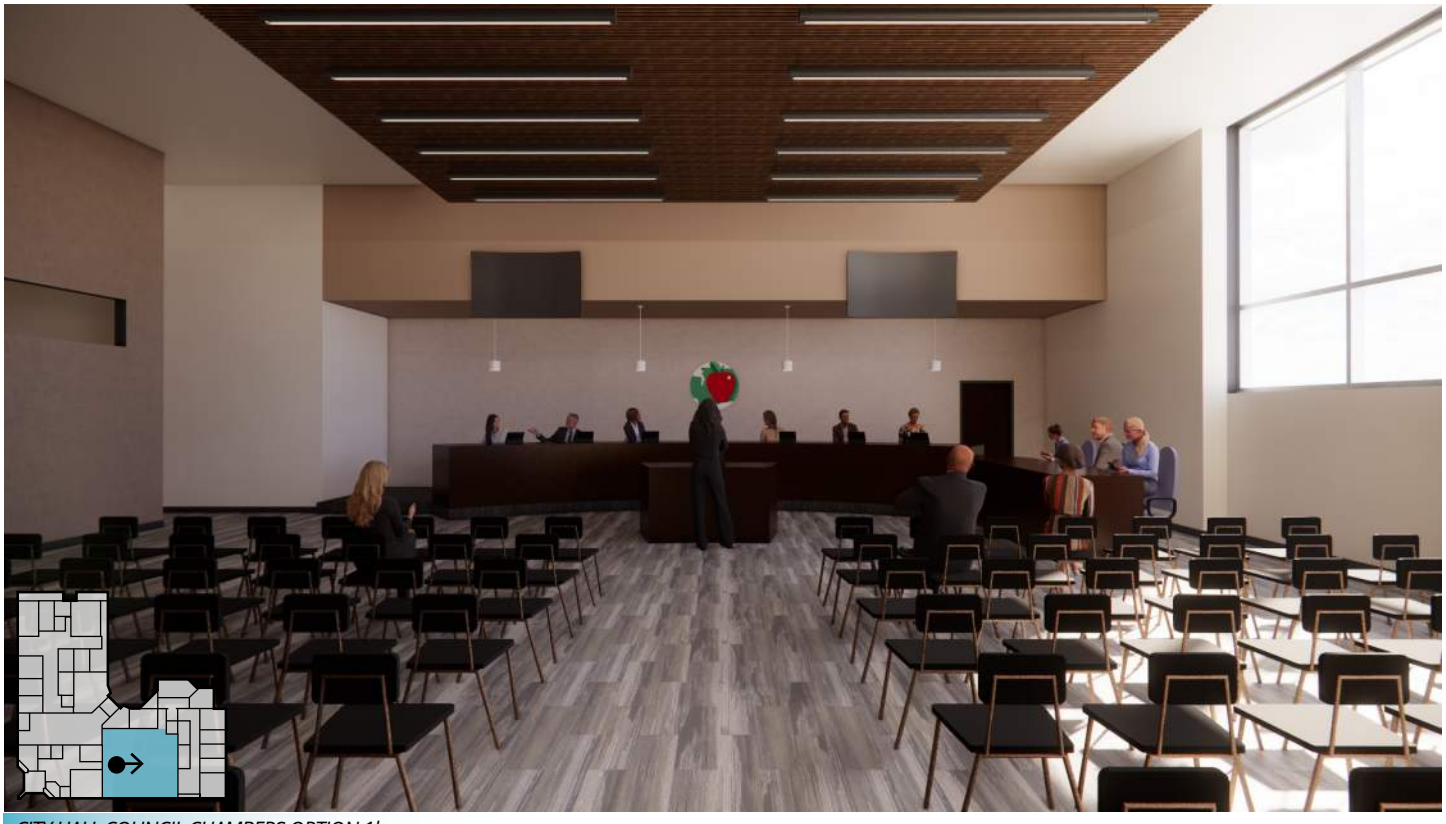
INTERIOR MATERIAL PALETTE

INTERIOR INSPIRATION

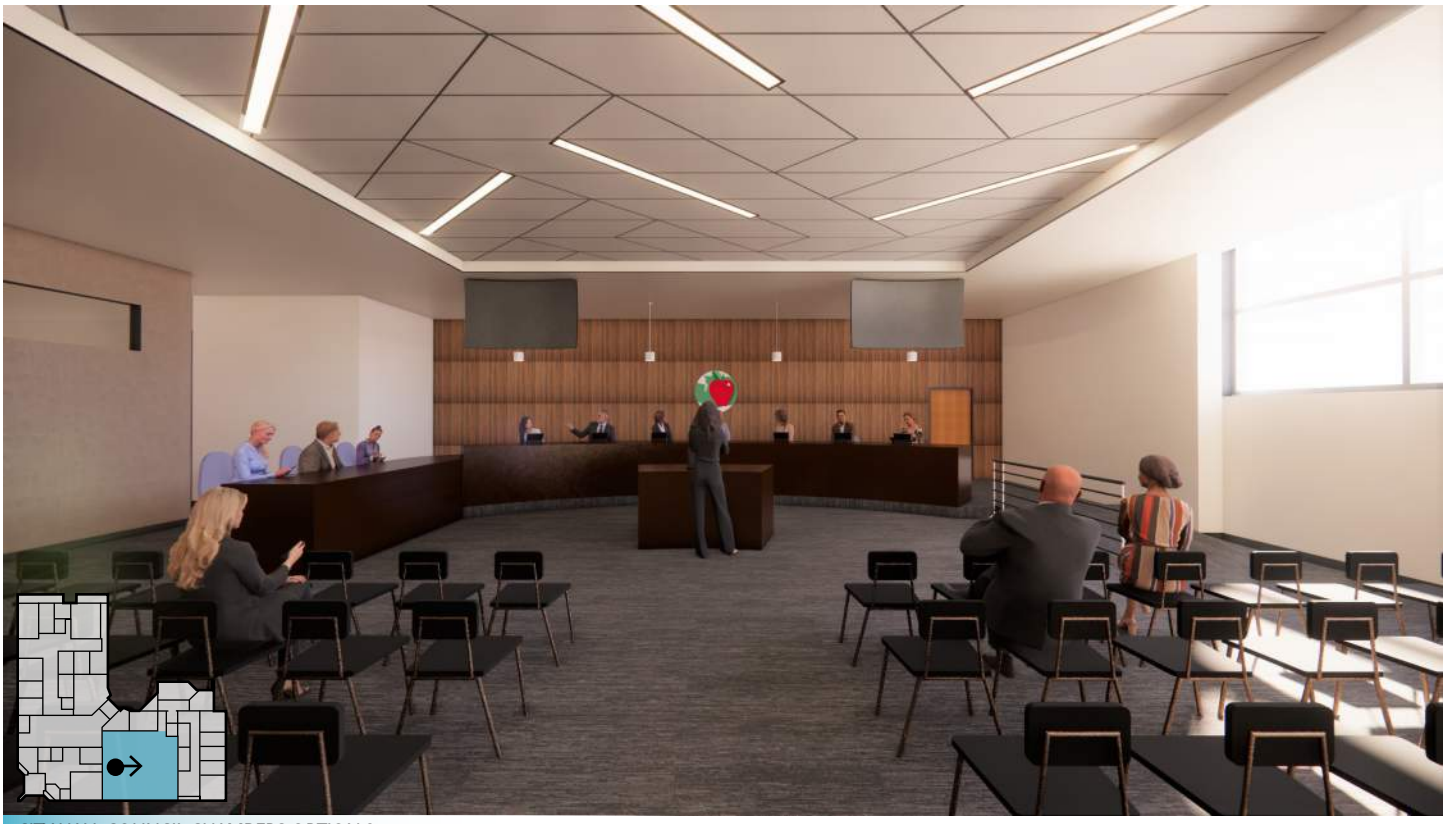
CITY HALL LOBBY

CITY HALL LOBBY

CITY HALL COUNCIL CHAMBERS OPTION 1a



CITY HALL COUNCIL CHAMBERS OPTION 1b



CITY HALL COUNCIL CHAMBERS OPTION 2a

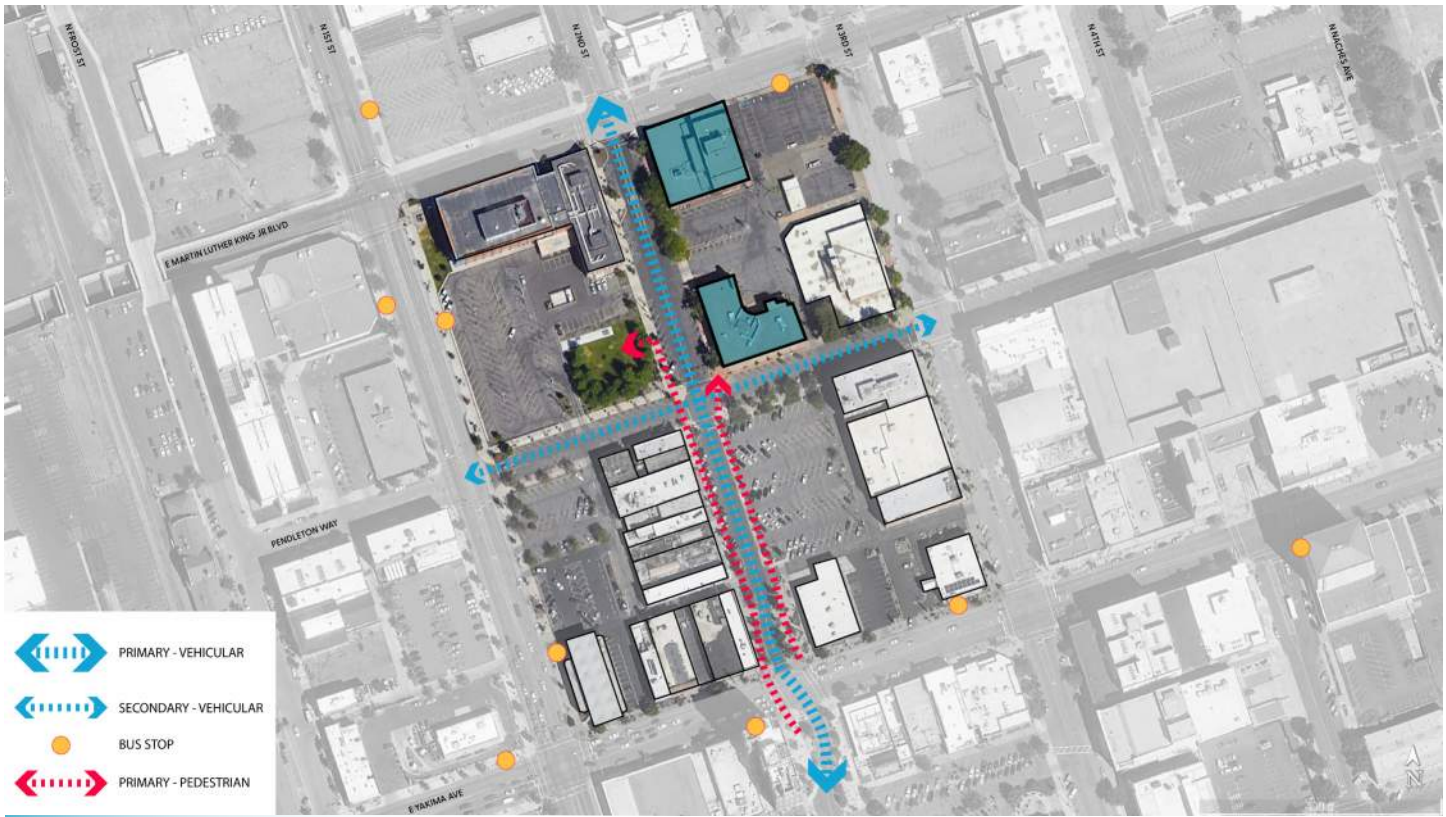
CITY HALL COUNCIL CHAMBERS OPTION 2b

ACCESS CONDITION TO CONSIDER

- Access improvements to consider as part of overall site improvements are the following:
- Access points shall be reviewed to be consolidated on Martin Luther Way King Jr. Blvd to reduce decision points and possibly increase parking.
- Additional Signing for the Pendleton Way Alley Access and the potential to convert the one-way to the opposite direction (enter only) in order to improve pedestrian crossing safety.
- Adding curbs with gutters to the frontage street access points can reduce the amount of seepage into the subbase.
- Combine the Enter Only and Exit Only access points on N 3rd St and N 2nd St to reduce decision points to the public road.
- Replace driveway access panels.
- Additional drainage on 2nd St to reduce ponding/freeze-thaw at access.

SIDEWALK IMPROVEMENTS TO CONSIDER

- Establish an internal walking/access route within the parking areas to the three building sites.
- Replacement of sidewalk panels out of ADA compliance.
- Replacement of sections of sidewalk along 3rd St due to excess gaps/cracks.
- Replacement of Pendleton Way and N 2nd St Curb Ramp per ADA compliance.
- Evaluation of older street trees that are causing heaving and root barriers to be installed.
- Grinding of existing sidewalk panels that have settled to meet ADA tolerances.



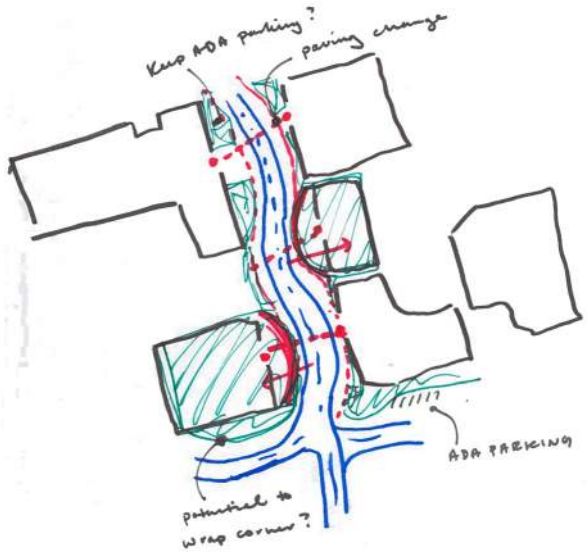
SITE CONDITIONS

LANDSCAPING AND IRRIGATION IMPROVEMENTS TO CONSIDER

- The parking area to meet the City landscaping code requirements as an example to development applicants.
- Trees per the code requirements will better improve shade for vehicles and heat on the asphalt surface.
- Street trees per the approved street tree list and associated root barriers to prevent sidewalk heaving.
- Future landscaping implementation.

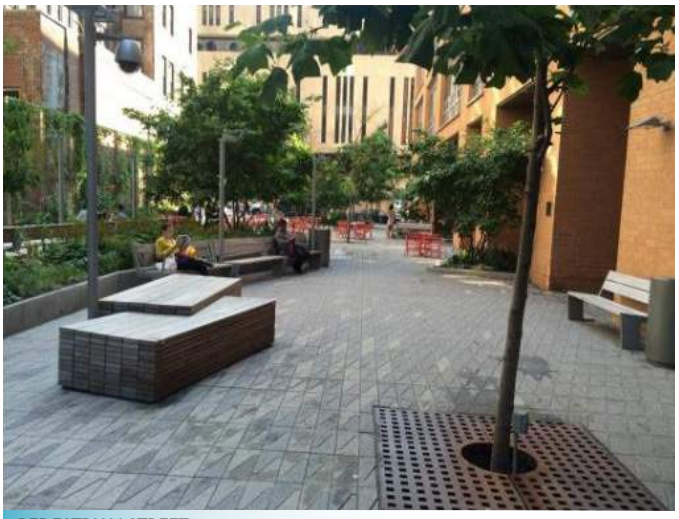
AMENITY IMPROVEMENTS TO CONSIDER

- Re-organization of the parking layout to provide maximum capacity but still create opportunities for additional amenities listed in improvements to consider and the YCC.
    - •City to determine balance and location of "reserved" and "public" spaces.
    - •New layout shall improve pedestrian safety & experience.
- Incorporate a lighting plan for the parking area meeting YCC 15.06.100 that will ultimately improve the safety and security of the public facility.
- Incorporate EV charging stations into the parking lot considering both facilities.
- Have a bus shelter added to the bus stop location.
- Develop a trash enclosure plan that condenses the trash area footprint and makes it more accessible to the waste service pick up.



INITIAL SITE RECONFIGURATION SKETCH

MURAL SCREEN ALONG PARK



PEDESTRIAN STREET

CIVIC ART

PARK SHELTER / SHADE

CURVED STREET ALIGNMENT

The preferred design maximizes the amount of green public open space between buildings by removing parking and access from 2nd St.

The parking area will require a redesign in order to meet current development code. Amendments include planted islands, shade trees, and adequate lighting. Overall it is a reduction in quantity of stalls, however safety, circulation, and aesthetic is improved. The parking areas shall be accessed by one point of entry each at E MLK Blvd, N 3rd St, and Pendleton Way (converted to entry-only). Both buildings' required ADA stalls can be located on 2nd St, with the opportunity to convert one stall of permit parking into accessible parking if needed in the future.

The new curved street alignment will match the design language of 2nd street area further south (E Yakima Ave) and include similar elements such as benches and places for gathering, planters, lighting, art, and decorative paving.

The streetscape will blend into entry plazas to each building. These plazas may have a similar style, but should each have unique features and user experience. The rear entry of the Bank of America Building will also have a plaza that is shaded and ideal for employee amenities.

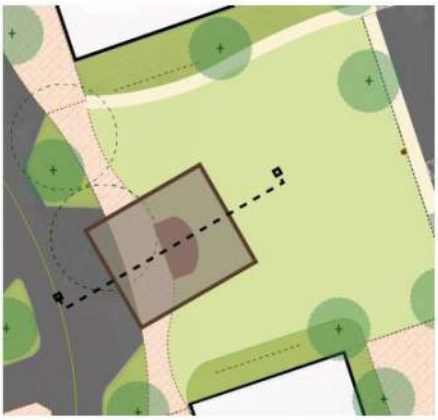
PUBLIC GREEN / OPEN SPACE

The green space between the buildings serves as a central gathering space at the core of the block. A large pavilion provides much-needed shade and can host a variety of events and performances that span the seasons. These activities include holiday decor ceremonies, concerts, movies, markets, exercise classes, meetings, and more.

The structure shall reference materials and colors of the adjacent buildings and could include solar panels, rain chains, and other low-impact design features. Its proximity to the street and an open floor plan make it inviting and visible, but additional lighting could make the space even safer and more versatile for events. As shown below, the parking area along 2nd street could be used for food trucks and other vendors.

LANDSCAPE SITE PLAN

STAGE / SHELTER SECTION



MECHANICAL SYSTEMS – DESIGN CONSIDERATIONS

Due to the age and the requirements of the energy code, the existing mechanical systems will need to be replaced in their entirety. To meet energy code requirements, the new systems shall be variable refrigerant flow (VRF) electric heat pumps with remote fan coils and a dedicated outside air system (DOAS) with heat recovery for building ventilation. The large Council Chambers space shall be served by a dedicated single zone air handling unit with a remote heat pump and full economizer. Spaces with large heating loads, such as electrical rooms with transformers, shall be served by single zone cooling only units.

PLUMBING SYSTEMS – DESIGN CONSIDERATIONS

The energy code requires new domestic hot water systems to use heat pump technology. However, the building's hot water requirements are low enough to utilize an exception that allows for the heater to use electric heating elements instead. A recirculation system shall be installed to meet energy code requirements.

FIRE SPRINKLERS – DESIGN CONSIDERATIONS

The building should be evaluated to determine if a fire sprinkler system is required.

EXISTING ENERGY CODE DEFICIENCIES

- The following Energy Code deficiencies were observed at the time of the walk through and will need to be remedied under the renovation:
- There is no dedicated outside air system (new systems only).
- Densely occupied spaces will need demand control ventilation.
- The furnaces need to have air-side economizer control unless there is a dedicated outside air system with heat recovery serving the same area.
- Domestic hot water does not have a recirculation system.

The building is large enough to be considered a Tier 2 building under the Clean Buildings Act. This requires annual reporting but does not have any energy benchmarks that must be met.

SERVICE AND DISTRIBUTION – DESIGN CONSIDERATIONS

As noted above, the building currently has one service at 480Y/277V. The capacity of this service is adequate for the current branch distribution panelboards and devices, and the renovated mechanical systems that are noted in the mechanical space planning report. However, the main service switchboard is in poor condition and needs to be replaced. The secondary conductors from the service transformer shall remain, but the 480Y/277V 1200A Switchboard shall be replaced with new.

Due to energy code metering requirements, we need to keep the HVAC, receptacle and lighting loads separate on branch panels. There are not dedicated electrical rooms on each floor, so the branch panels will need to be recessed in the walls, which can be work intensive in an existing building. We will replace the existing branch panel distribution to accommodate these stringent requirements.

PANELBOARDS & ENCLOSED BREAKERS

Panelboards and enclosed circuit breakers shall be dead-front circuit breaker type with proper interrupting capacity. Metering located in separate enclosures shall be provided for each panelboard which serves lighting, mechanical and plug loads. Equipment shall be as manufactured by Square D, or approved equal. Surge suppression shall be provided for panelboards serving sensitive electronic loads.

See the mechanical narrative for details on the new equipment that will service this building. The general design shall be several large 480Y/277V electric heat pump units outside or on the roof, as well as distributed 208V fan coil units throughout each floor. To accommodate these additional loads, an additional mechanical 480Y/277V 400A panel will be to be collocated with these loads to serve these large heat pump units, and 208Y/120V branch panels on each level to serve the additional fan coil units.

DISCONNECT SWITCHES

Safety switches shall be heavy duty type with interlocking door and spring loaded contacts. Safety switches used as motor disconnects shall be fused. Outdoor safety switches shall be NEMA 3R. Safety switches downstream of VFD's or Starters shall be provided with auxiliary contacts for control interlock.

LIGHTING AND BRANCH WIRING – DESIGN CONSIDERATIONS

See the architectural narrative for details on the floorplan changes to each floor of the old Bank of America building. With the extensive floor plan modifications, receptacles, data outlets, and lighting fixtures and controls will need to be provided to match the new layouts. To meet current energy codes, lighting controls will need to be updated to include automatic sensors, and daylighting as appropriate. Receptacles with switched control in offices, open office areas, and conference rooms shall be provided. In addition to that, the egress lighting batteries are reaching end of life and shall be replaced. Any floor plan changes will be adjustments to the paths of egress as well.

To meet current energy codes, lighting controls will need to be updated to include automatic sensors, and daylighting as appropriate. Receptacles with switched control in offices, open office areas, and conference rooms shall be provided. In addition to that, the egress lighting batteries are reaching end of life and shall be replaced. Any floor plan changes will be adjustments to the paths of egress as well.

Lighting system design foot candle levels will be in accordance with IES standards. Lighting power densities will be designed to be 90% or less of the allowed overall building values indicated in the Washington State Energy Code. In general, areas within the building and on the site will be illuminated to the following light levels and lighting power densities:

Space Type	Target Average Illuminization (FC)	2021 State Energy Code Allowed LPD (w/sf)	Target LPD (w/sf)
Storage	10-20	0.51	0.46
Hall/Stairs	10-15	0.49	0.44
MEP Utility	10-20	0.43	0.4
Restrooms	10-15	0.63	0.57
Office	30-50	0.74	0.67
Conference Room	30-50	0.97	0.87
Break Room	10-15	0.59	0.53
Overall Building LPD		0.7	0.6

WIRING DEVICES

Switches and receptacles shall be specification grade. Trim plates shall be brushed stainless steel unless direct otherwise by the Architect.

BUILDING WIRE AND CABLE

Conductors shall be copper only. Aluminum will not be permitted. Dedicated neutrals shall be provided for all computer outlets and multi-wire branch circuits. Minimum wire size for branch circuits shall be #12 AWG. Minimum wire size for exterior lighting circuits shall be #10 AWG.

CONDUIT

Galvanized steel metal conduit shall be used inside building. Non-metallic conduit shall be used underground and within masonry/concrete, except at transitions. Metal conduit shall be rigid metal conduit, electrical metallic tubing (EMT), or flexible metal conduit. Non-metallic conduit shall be schedule 40 PVC. Conduit shall be concealed wherever possible. Conduit minimum size shall be 3/4" for power and 1" for communications.

BOXES

Outlet boxes shall be pressed steel type with device rings. Power outlet boxes shall be minimum 4" square by 2-1/8" in depth. Communications outlet boxes shall be minimum 4-11/16" square by 2-1/8" in depth Pull boxes shall be screw cover type.

OTHER ELECTRICAL SYSTEMS – DESIGN CONSIDERATIONS - FIRE ALARM

The fire alarm system was not observed during the walk through but will need to be replaced. This building has not been occupied for some time, and any existing fire alarm system may have difficulty interfacing with the technology requirements of new devices. Branch fire alarm devices shall be updated to match any floor plan changes. New head end and end point devices shall be provided as required by NFPA.

EXISTING CODE DEFICIENCIES

The following Code deficiencies were observed at the time of the walk through and will need to be remedied during renovation:

- Storage within dedicated electrical working space – any materials and equipment not related to electrical distribution system shall be removed from electrical spaces.

GENERAL INTRODUCTION

This Audiovisual Programming Report describes audiovisual systems capabilities for the Yakima City Hall project.

This report is not a technical specification and does not provide details such as manufacturer or model number. The information supplied herein is at the conceptual design level of analysis in order to facilitate decisions about eventual audiovisual capabilities.

INFORMATION GATHERING

The recommendations presented on the pages that follow are based on information and requirements provided by site visits, Owner provided documentation and emails.

INFRASTRUCTURE VS. EQUIPMENT

The project team should be clear about the difference between providing infrastructure and purchasing equipment. If proper infrastructure provisions have been made from the start, equipment may easily be added or upgraded later as additional funding becomes available without jeopardizing the integrity of the overall audiovisual systems design.

"Infrastructure" refers to the necessary base building provisions such as power outlets, conduit, junction boxes, floor boxes, projection screens, etc., needed to use with audiovisual equipment.

"Equipment" refers to particular audiovisual devices that have specific costs and capabilities associated with them.

Infrastructure must be planned and provided for initial occupancy, whether the audiovisual equipment is purchased or not. Equipment can be thought of similar to furniture - various choices can be made about its quality and quantity. Some equipment can be purchased for initial occupancy, while other equipment purchases can be deferred.

EQUIPMENT INSTALLATION DESIGNATIONS

Video/Projection, Audio, Control, and Miscellaneous system features are each described separately, with an overview of the significant pieces of equipment in each system. The information supplied is a summation to be combined with the budget material in order to make financial project and audiovisual capabilities decisions.

BASEMENT LEVEL

- *Training Room* - This area will facilitate law enforcement training activities. Audiovisual (AV) systems will include a large display on mobile cart. Local vocal reinforcement will be provided by wireless microphones and wall mounted loudspeakers. Bluetooth and line inputs will be available as audio sources. Video teleconferencing (VTC) will be facilitated by an all-in-one camera/ speakerbar mounted to the cart. Users will connect their devices to the VTC system via USB cables.
- *Large Studio & Control Room* - Existing audiovisual and broadcast capabilities of the Yakima Public Access Channel (YPAC) will be relocated to this area. Final design TBD.
- *Small Studio* - Existing audiovisual and broadcast capabilities of the YPAC will be relocated to this area. Final design TBD.

FIRST FLOOR

- *Council Chambers* - Audiovisual systems to be similar to existing council chambers, sized for the new location.
  - *Video Systems*
    - Four wall-mounted NDI connected PTZ cameras.
    - Three large displays for viewing content.
    - Two video over USB-C inputs w/ charging at council table. One input will also be available at the lectern.
  - *Audio Systems*
    - Distributed overhead loudspeakers for vocal and program reinforcement. Zoned for council and audience areas.
    - Wired lectern microphone, one wired push-to-talk (PTT) gooseneck

microphone per council seat, one wired PTT gooseneck microphone at the clerk's desk and one wireless microphone were found.
• Recording capabilities, similar to existing.
• Control Systems – AV controls to be located in adjacent Control Booth.

• *Miscellaneous Systems*
• A large portable clock/timer was at the clerk's desk.

- *Control Booth*
  • Controls for the Council Chambers will be located in an adjacent room. Audiovisual equipment racks will house the equipment.
  • Control surfaces will allow for single or multiple operators to work together as needed.
  • As design develops, sufficient HVAC will need to be provided for operator comfort and equipment longevity.
- *Conference Rooms*
  • Wall mounted display sized for the room configuration. Inputs will be available at the table for users to connect to the display and VTC system. A CATV connection will be provided.
  • An all-in-one camera/speakerbar will be used in conjunction with user devices for VTC calls.
  • When room size requires, table microphones and overhead loudspeakers will be used for program and VTC audio.
- *Select Offices*
  • As program requires, some offices will have wall mounted displays with CATV connections.

MEZZANINE LEVEL

- *Conference Room*
  • Wall mounted display sized for the room configuration. Inputs will be available at the table for users to connect to the display and VTC system. A CATV connection will be provided.
  • An all-in-one camera/speakerbar will be used in conjunction with user devices for VTC calls.
  • When room size requires, table microphones and overhead loudspeakers will be used for program and VTC audio.
- *Edit Bays* - Existing audiovisual and edit capabilities of the YPAC will be relocated to this area. Final design TBD.

INTRODUCTION

This report addresses architectural acoustics and mechanical system noise and vibration control considerations for the Yakima City Hall Project. Also included are observations related to the acoustic separation and interior acoustics of the existing spaces.

ARCHITECTURAL ACOUSTICS

The following sections document considerations related to architectural acoustics. Architectural acoustics consists of interior acoustics and acoustical separation. Interior acoustics involves the creation of desired acoustic environments within spaces. Acoustical separation involves controlling the audibility of intruding sound with the architectural elements separating two adjacent spaces.

ACOUSTICAL SEPARATION

Audibility of intruding sound depends on the amount of acoustic separation produced by the architecture separating two adjacent spaces. It also is directly related to the amount of background sound present in the room receiving the intruding sound. People in rooms with higher background sound levels, typically produced by the HVAC system, are less able to hear intruding sounds. Conversely, people in rooms that are quieter can hear intruding sounds more easily.

WALL CONSTRUCTION

In describing how the wall will perform with respect to acoustical separation, we use a single number rating, Sound Transmission Class (STC), which is calculated from the TL data. The STC rating represents the reduction through the wall in the human speech frequency range. A higher STC value means that less sound is transmitted through the wall.

FLOOR/CEILING CONSTRUCTION

Similar to wall construction, the vertical separation between spaces needs to be maintained. As the design progresses, we will evaluate planned slab construction and floor and ceiling finishes to determine if the vertical separation between these spaces is consistent with room function.

BACKGROUND NOISE LEVELS

Typically given in terms of NC rating, the background levels present in the receiving space help to mask intruding sounds. We typically consider levels produced by the mechanical system, as the background noise and not other intermittent sources. Background noise levels will be discussed in detail in the Mechanical Systems Noise and Vibration section to follow.

RECOMMENDED WALL TYPES

The following table presents recommended wall types and STC ratings for adjoining spaces to reduce intruding sounds to levels compatible with room function.

Table 1: Recommended Wall Types

Source Room	Receiving Room	STC	Wall Type
Training Room	Training Room	50	Type 4
Break Room (if cabinets on common wall)	Training Room	60	Type 6
Council Chambers	Conference Rooms	55	Type 5
Council Chambers	Offices	50	Type 4
Conference	Conference (Normal Privacy[1])	50	Type 4
Conference	Conference (High Privacy[2])	55	Type 5
Conference	Office	50	Type 4
Conference	Corridor (no door)	45	Type 3
Conference	Corridor (door)	40	Type 2
Office	Office (Normal Privacy[1])	45	Type 3
Office	Office (Full Privacy[2])	50	Type 4
Office	Open Office (with door)	35-40	Type 1 or 2
Studio	Corridor (with door)	50	Type 4
Small Studio	Compressor/Equipment	60	Type 6
Large Studio	Control Room	60	Type 6
Large Studio/Control Room	Training Room	60	Type 6

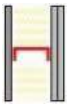
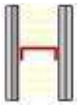
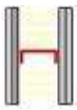
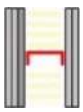
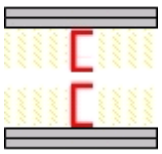
WALL ASSEMBLY CONSTRUCTION

The acoustic performance of walls depends on the metal gauge of the studs. Lighter gauge studs perform better than heavy gauge because they act like little springs. If the gauge of the walls is reduced from 20-gauge to 25-gauge, one layer of GWB can be removed from the assembly and the STC values will remain the same. Table 2 provides the recommended wall assembly construction using either 25- or 20-gauge studs to achieve the various STC ratings recommended in Table 1.

ACOUSTICAL SEPARATION IN OFFICE AREAS

The preceding Recommended Wall Types table identifies acoustical separation for various office types depending on the desired privacy within. This topic of acoustical separation between private offices warrants further discussion. As noted above, acoustical separation is a function of wall construction and background sound levels. People in rooms with higher background sound levels, typically produced by the HVAC system, are less able to hear intruding sounds. Conversely, people in rooms that are quieter can hear intruding sounds more readily.

TABLE 2: WALL TYPES

	Rating	25-gauge Stud Construction	20- or 16-gauge Construction	Notes
Type 1	STC-35	 • 1 layer 5/8" GWB • 3 5/8" metal stud • R-11 insulation • 1 layer 5/8" GWB		• This wall stops 6" above the ceiling. • Mineral board acoustical tile ceiling should be used on both sides of the wall. • The tile should be rated at min NRC-0.55and min CAC-35.
Type 2	STC-40	 • 1 layer 5/8" GWB • 3 5/8" metal stud • R-11 insulation • 1 layer 5/8" GWB		**Option 1:** This wall stops 6" above the ceiling. Mineral board acoustical tile should be used on both sides of the wall. The tile should be rated at min NRC-0.55 and min **CAC-40.** **Option 2:** Extend 1 layer of GWB to underside of structure and use Mineral board acoustical tile ceiling on both sides of the wall. The tile should be rated at min NRC-0.55 and min CAC-35
Type 3	STC-45	 • 1 layer 5/8" GWB • 3 5/8" metal stud • R-11 insulation • 1 layer 5/8" GWB	 • 2 layer 5/8" GWB • 3 5/8" metal stud • R-11 insulation • 1 layer 5/8" GWB *OR* • 1 layer 5/8" GWB • 6" metal stud • R-11 insulation • 1 layer 5/8" GWB	• One layer of GWB should extend to underside of structure. • The other layer can stop at 6" above the ceiling. • R-11 batts to extend as high as the shortest of the two layers
Type 4	STC-50	 • 2 layers 5/8" GWB • 3 5/8" metal stud • R-11 insulation • 1 layer 5/8" GWB	 • 2 layer 5/8" GWB • 3 5/8" or 6" metal stud • R-11 insulation • 2 layer 5/8" GWB	• One layer of GWB should extend to underside of structure. • The other layer can stop at 6" above the ceiling. • R-11 batts to extend as high as the shortest of the two layers
Type 5	STC-55	 • 2 layers 5/8" GWB • 3 5/8" metal stud • R-11 insulation • 2 layer 5/8" GWB	 • 2 layer 5/8" GWB • 3 5/8" or 6" metal stud • R-11 insulation • 3 layer 5/8" GWB	• Two inner layers of GWB should extend to underside of structure. • R-11 batts to extend full height
Type 6	STC-60+	 • 2 layers 5/8" GWB • 3 5/8" metal studs • R-11 insulation in cavity • minimum 1" air space • R-11 insulation in cavity • 4" metal studs • 2 layers 5/8" GWB.		• All four layers of GWB should extend to underside of structure. • R-11 batts to extend full height • STC rating degrades significantly when blocking is added in a wall bridging the two sides of the double-studs. Such blocking is added to support plumbing or other objects and should not be allowed to bridge the two sides of the wall.

For typical Type 2 office to office wall construction (1+1 GWB layer wall with insulation batts – STC 40 separation), normal speech privacy is expected, meaning someone in an adjoining space would be able to tell someone is talking and might occasionally pick out a word or two, but would not be able to follow the conversation. In offices where background levels are quiet however, there would be little to no speech privacy: one would be able to easily hear and understand conversations in adjoining space. Although we design mechanical system background noise to meet a certain noise criteria (NC 35 for example in offices), it is hard to guarantee that this level is met in every room.

Setting the background sound at a certain level in each room is required to guarantee outcome when acoustical separation becomes critical for privacy. For this reason, an electronic sound masking system is often use on projects to guarantee background levels meet a certain threshold.

In cases where a high degree of speech privacy is a functional requirement, this can be achieved by using traditional Type 3 office to office wall construction along with electronic sound masking. Without sound masking, using higher performance wall construction such as a Type 4 or Type 5 wall (STC 50 and STC 55 respectively) is necessary to ensure privacy is achieved.

As the design progresses and specific privacy requirements in offices and other areas are better defined, we can help the design team explore the use of sound masking in some areas as an alternative to high STC performing walls.

DOORS

Doors with full seals consist of adding seals to a typical door. To completely seal a single door, a top seal, jamb and hinge seal, bottom seal, and threshold will be required. To completely seal a double door, an astragal is needed in addition to the components for the single door.

The cost for each full seal assembly is approximately $150 ($300 for a pair of doors). A minimal seal assembly consisting of perimeter seals only (no threshold). The cost for a minimal seal assembly is approximately $75 per door. Table 3 indicates the doors on the project that should have seals installed to create the desired acoustic separation between adjacent spaces.

Acoustical doors are ordered as a complete assembly from the manufacturer. Included in the package are the door, frame, perimeter sound seals, and door bottom. The doors should be acoustically rated to STC 52 or greater. Single acoustical doors cost approximately $4,000; pairs of acoustical doors cost approximately $8,000 apiece. The following table shows doors on the project that should be acoustical door assemblies.

Table 3: Recommended Door Seals

Location	Type
Training Rooms	Full Seals
Council Chambers	Full Seals
Offices with High Privacy criteria	Full Seals
Conference Rooms	Full Seals
Interview Rooms	Full Seals
Electrical (w/ transformers), Server, Data Rooms	Full Seals
Offices with Normal Privacy criteria	Partial Seals
Studios & Control Room	Acoustically Rated

INTERIOR ACOUSTICS

The following table summarizes our interior acoustic recommendations for this project. We will continue to develop the design for the small studio, large studio, and control room as the project progresses and more information regarding the expected uses becomes available.

MECHANICAL SYSTEM NOISE & VIBRATION CONTROL

The following sections document considerations related to the mechanical system design. We will refine these recommendations as more information becomes available.

CRITERIA

The acoustical design goal for HVAC systems is the achievement of a level of background noise that is unobtrusive in quality (frequency content) and low enough in level (amplitude) that it does not interfere with the function of the space being served. To be unobtrusive the background noise

Table 4: Interior Acoustic Recommendations

Location	Ceiling	Walls	Floor
Private Offices	Acoustical tile ceiling with minimum NRC[1] 0.60 and CAC[2] 35	--	Carpet
Open Office Areas	Acoustical tile ceiling or similar absorptive ceiling material covering a minimum of 80% of the ceiling area. The product should provide a minimum NRC 0.60.	--	Carpet
Conference	Acoustical tile ceiling or similar absorptive ceiling material covering a minimum of 80% of the ceiling area. The product should provide a minimum NRC 0.60.	1″ thick absorptive wall panels from 3' AFF to 7' AFF on two perpendicular walls. Panels should provide minimum NRC 0.75.	Carpet
Training Rooms	Acoustical tile ceiling or similar absorptive ceiling material covering a minimum of 80% of the ceiling area. The product should provide a minimum NRC 0.60.	--	Carpet
Council Chambers	Absorptive ceiling with minimum NRC 0.70 and covering a minimum of 80% of the ceiling area. An angled sheetrock ceiling over the council table can act as a sounding board and direct speech towards the seating area.	1″ thick absorptive wall panels starting at 3' AFF and extending to the underside of the ceiling and located on the wall opposite the council table and on the wall opposite the exterior glazing. Panels should provide minimum NRC 0.75.	Carpet
Studios	Absorptive ceiling with minimum NRC 0.80 rating.	2″ thick absorptive wall panels from 3' AFF to 7' AFF on two perpendicular walls. Panels should provide minimum NRC 0.90. 4″ thick absorptive wall panels from 3' AFF to 7' AFF on the other two perpendicular walls. Panels should provide minimum NRC 1.0.	Carpeted
Circulation Corridors	Acoustical tile ceiling or similar absorptive ceiling material over circulation areas	--	Carpeted or Uncarpeted

should exhibit the following characteristics:

A balanced distribution of sound energy over a broad frequency range to create a sound that is bland in character. No audible tonal characteristics such as a whine, hum, or rumble. No noticeable time-varying levels from system induced aerodynamic instability or air turbulence.

The HVAC noise criteria shown in Table 5 are intended to provide the necessary sense of quiet quality, while still providing the needed masking noise in rooms with adjacent noise sources.

Table 5: Suggested HVAC Noise Criteria

Area	Noise Criteria
Studios & Control Room	NC-20 to NC-25
Council Chambers	NC-25 to 30
Training Rooms	NC-30
Large Conference Rooms	NC-30
Small/Medium Conference Rooms	NC-35
Private Offices	NC-30 to 35
Open Office Areas	NC-35 to 40
Lobby/Circulation/Corridors	NC-40

HVAC NOISE TYPES

HVAC system noise received in occupied spaces is a combination of fan generated noise and airflow generated noise. Fan noise is generated by the fan itself and is transmitted to occupied spaces via three mechanisms or paths:

- Ductborne noise, which is created by fans and which transmits down attached ductwork, and which radiates out of the ductwork walls or grilles, into occupied areas.
- Airborne noise, which is created by the equipment and which travels through the air surrounding the equipment, through surrounding walls or floors, and into occupied areas.
- Structure-borne noise, which is created by the vibration of equipment, and which travels as vibration into the walls, ceilings or floors surrounding occupied areas, and which then radiates as noise from those surfaces.

Although the major source of noise in the air handling systems is the fan, it is not the only source of noise. Aerodynamic noise is generated at duct elements, such as elbows, transitions, branches, sound silencers, dampers, grilles, etc. The level and character of aerodynamic noise generated at duct elements depends on the airflow velocity and the geometry of the element. The higher the airflow velocity the more noise is generated. Care should be taken in sizing, selecting, and locating duct elements so that aerodynamics noise is minimized.

HVAC NOISE MITIGATION

We will evaluate the need for sound mitigation either by the use of in-duct silencers or internal fiberglass ductliner as more information regarding the equipment becomes available as the design progresses. The following should be assumed as early mitigation measures.

- Include 3' long silencers on both the supply and return ducts serving the studios.
- All supply and return ductwork serving the studios and control room should be internally lined with 1" thick ductliner.
- Line the first 5' of discharge ductwork downstream of equipment serving conference rooms or training rooms. The first branch takeoff should not occur within the first 3' form the equipment.
- Line the first 3' of discharge ductwork downstream of equipment serving offices or open offices.
- Supply diffusers and return grilles should be selected to be 5 points below the NC rating of the space that it serves.
- The exception to this is for the NC-20 spaces, where the rating of diffusers and grilles should be equal to the NC rating.
- Round ductwork is desirable for medium or high-pressure ductwork. Round sheet metal ducts resist low frequency breakout noise that can be a problem near mechanical equipment rooms.
- Flat oval ductwork with aspect ratios of not more than 2.5:1 is a compromise between rectangular and round ductwork.
- Rectangular ductwork should be avoided on high and medium pressure ducts.
- Allow 1 to 2 feet of straight ductwork

between volume dampers and any duct element (such as junction, elbow, etc.).
- The flexible duct leading to the diffusers/ grilles should be at least 5 feet in length and be straight and free of kinks.
- Mechanical equipment vibration isolation will be developed as the project progresses, but it should be assumed that any hung equipment utilize neoprene hangers and all fans be isolated using springs.

6.2 CITY HALL ANNEX *FORMERLY CITY HALL*

LAYOUT

The main level of the former City Hall will become the main area for public interaction in the building with Utilities in its current location and Codes/Engineering moving into the space currently occupied by the City Manager, City Clerks, and Human Resources. Finance, including Purchasing, will also be located on the first floor. The existing Council Chamber will be retained as a large conference room, capable of being subdivided into two separate spaces with the use of an operable partition.

Human Resources, IT, Facilities, and ONDS will occupy the second floor. HR and ONDS/ Economic Development have their own lobby space and are located directly above the main lobby below. Though slightly reduced in size, the second floor mechanical space will be reused to house new mechanical equipment.

The basement will house the server in its current location, storage rooms for multiple departments, two new training rooms, and the main break room. Existing mechanical rooms will remain.

The third and fourth floors will remain unoccupied, as the portion of the third floor current used for police storage will be relocated to City Hall.

EXTERIOR WALL SYSTEMS

Existing exterior brick veneer will be cleaned and repointed as necessary but with no major changes in appearance. Storefront windows and entrances on the first and second floors will be replaced.

INTERIOR WALL SYSTEMS

Wherever feasible, the existing interior walls will be retained in the new layout. New walls will be constructed using metal studs, GWB and acoustic insulation, extending to the structure above to diminish the transfer of noise between spaces.

ROOF SYSTEMS

The existing roofing system will be replaced with a minimum R-38 rigid insulation and TPO single ply membrane roofing. The existing roof drain locations are expected to be reused, although replacement may be necessary. The City would like to place solar panels on the roof, and if determined feasible by the Structural team, this will be incorporated during the roofing replacement process.

FINISHES

The predominant floor material for the first and second floors will be carpet. Public circulation spaces will have luxury vinyl tile (LVT) and toilet rooms will consist of porcelain tile. The basement main circulation space and break room will be LVT, training rooms will have carpet, and storage rooms exposed concrete.

Ceilings in offices and conference rooms will be 2’x4’ lay-in acoustical tile, the public lobby will be a combination of large format acoustical tile and gypsum board soffits.

Interior walls will have a combination of painted surface and areas of vinyl wall covering (VWC) adhered to the gypsum board. Toilet room walls will have porcelain tile wainscot.

CASEWORK/FIXTURES/EQUIPMENT

Built-in casework will be provided in break rooms and work rooms. Shelving in storage rooms will be furniture, to maximize flexibility.

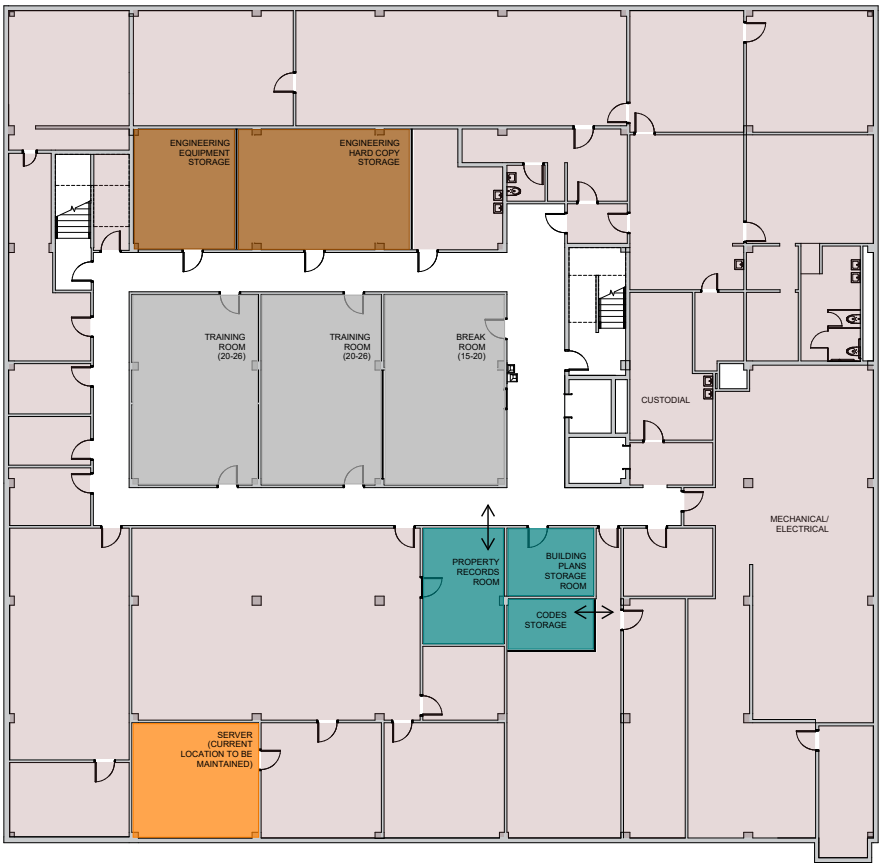
CODE

The building will be brought up to current IBC, ADA, and Washington State Energy Codes to the extents required and practicable.

Any new single user toilet rooms will meet ADA clearance requirements.

Though a timeline has not yet been established, when the 3rd and 4th floors are occupied a second egress stair will be added.

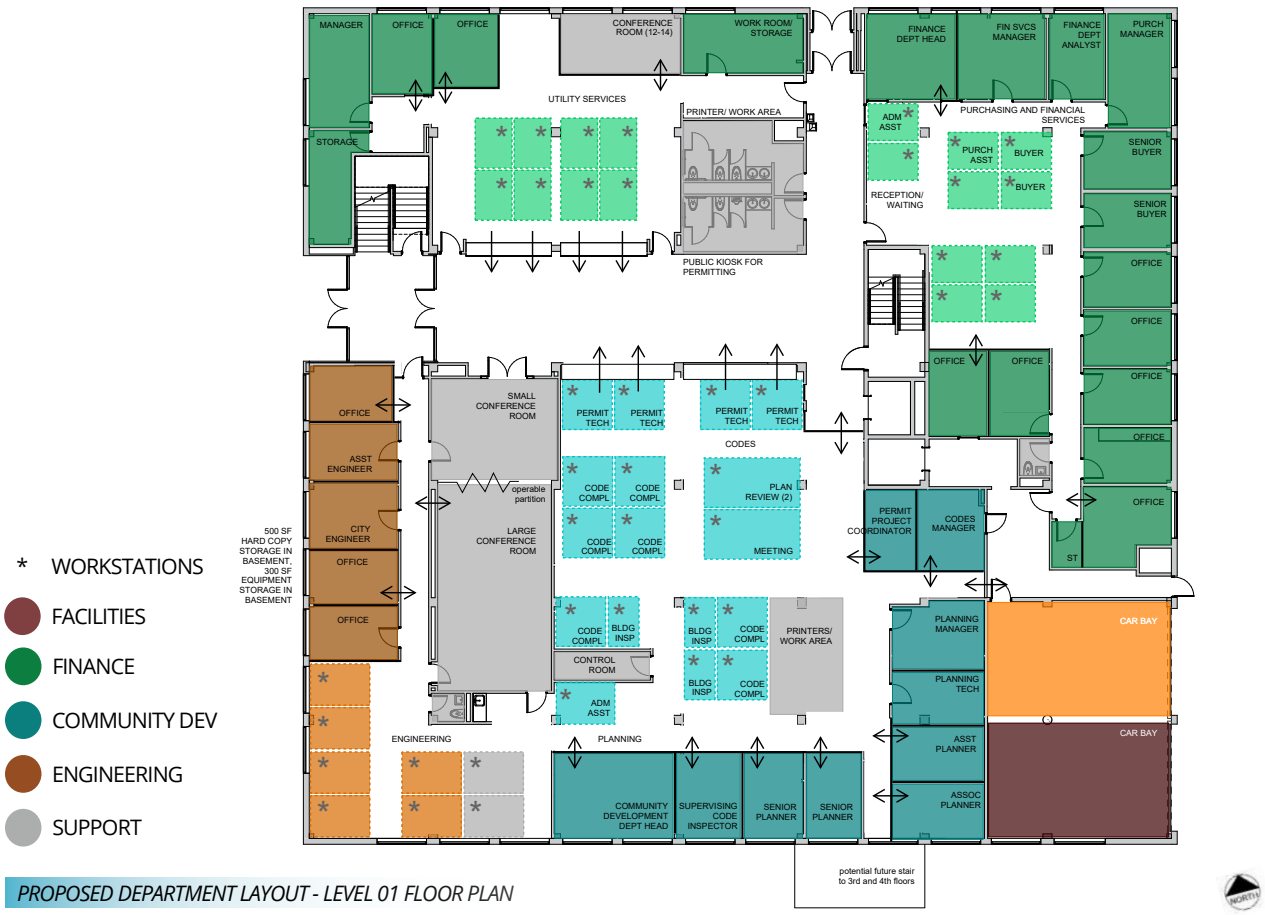
Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)	SF PER SPACE - AS SHOWN
Information Technologies (IT)								**6,175**	
	Department Head	1	1		●	180	180		180
	Supervisors	3	3		●	150	450		160
	Administrative Assistant	1	1	●		81	81		81
	Help Desk/Tech Area	5	7	●		81	567		81
	Help Desk (including waiting area for 2-4)	1	1			400	400		353
	Tech Bench	1	1			315	315		328
	Application Development and Support	8	10	●		81	810		81
	Infrastructure Support	5	7	●		81	567		81
	IT Server and Networking Room	1	1			320	320		320
	Conference Room (for 25-30)	1	1			380	380		308
	Secure Storage (not shared)	1	1			450	450		432
	Break/Copy Room	1	1			100	100		245 (shared)
	CIRCULATION - 25%						1155		
	Car bay	1	1			400	400		500
ONDS								**1,857**	
	Neighborhood Development Svcs Supervisor	1	1		●	150	150		150
	Supervisor	1	1		●	150	150		150
	Grant Financial Specialist	0	1	●		64	64		64
	Home Loan Specialist	0	1	●		64	64		64
	Carpenter/Rehab Tech (at Shop location)	1	2	●		64	128		
	Grant Writer	1	1	●		64	64		64
	Economic Development Manager	0	1		●	150	150		150
	Economic Development Assistant	0	1	●		64	64		64
	Reception	1	1	●		64	64		64
	Conference Room (for 9)	1	1			240	240		300 (shared)
	Waiting Area (4)	1	1			60	60		60
	Work Room	1	1			100	100		167
	Break Room	1	1			100	100		shared
	Storage	1	1			100	100		125



MECH/ELEC/ UNASSIGNED
CODES
ENGINEERING
IT
SUPPORT

PROPOSED DEPARTMENT LAYOUT - BASEMENT FLOOR PLAN

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)	SF PER SPACE - AS SHOWN
	CIRCULATION - 25%						358.5		
	Shop (will be at another site)	1	1				0		
Community Development								**4,620**	
	Department Head	1	1		●	180	180		200
	Administrative Assistant	1	1	●		64	64		64
Codes	Manager	1	1		●	150	150		135
	Permit Project Coordinator	1	1		●	120	120		102
	Supervising Code Inspector	1	1		●	120	120		130
	Building Inspectors	3	3	●		32	96		32
	Code Compliance	5	7	●		64	448		64
	Plan Reviewer, including shared layout	2	2	●		72	144		125
	Permit Tech	4	4	●		64	256		64
	Small Meeting Area	1	1	●		100	100		125
	Small Conference Room	1	1			120	120		313 (shared)
	Storage Room	1	1			100	100		111
	Building Plans Storage Room	1	1			144	144		142
Planning	Manager	1	1		●	150	150		145
	Planners/Planning Tech	5	5		●	120	600		120
	Property Record File Room	1	1			288	288		228
	Waiting area for up to 12 people								
	CIRCULATION - 25%						770		
	Conference Room (for 15-20)	1	1			380	380		589 (shared)
	Work Room	2	2			150	150		200 (shared)
	Break Room (for 20)	1	1			240	240		550 (shared)



PROPOSED DEPARTMENT LAYOUT - LEVEL 01 FLOOR PLAN

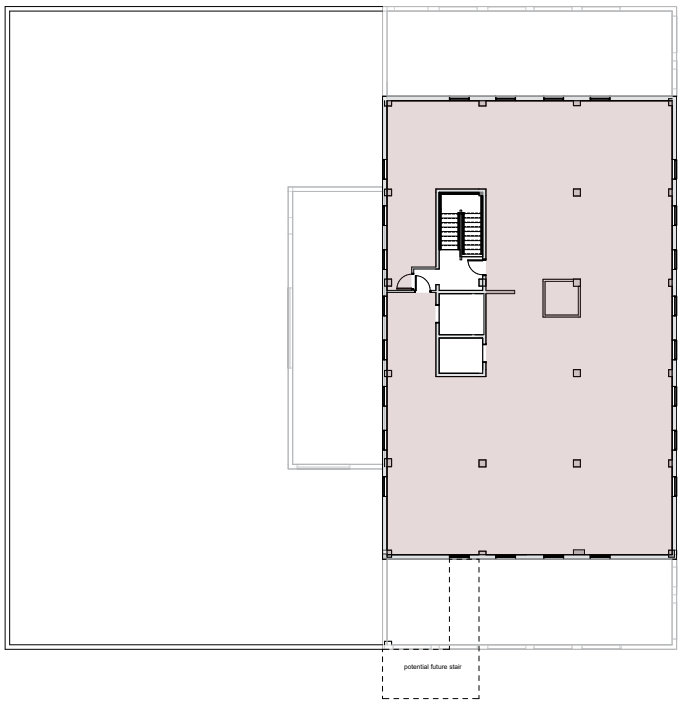
Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)	SF PER SPACE - AS SHOWN
Finance								**5,203**	
	Department Head	1	1		●	180	180		184
	Administrative Assistant	1	1	●		48	48		48
	Finance Dept Analyst	1	1		●	120	120		116
Financial Svcs	Manager	1	1		●	150	150		178
	Offices	7	7		●	120	840		120
	Workstations	6	6	●		48	288		48
	Reception/Waiting Area	1	1			100	100		100
	CIRCULATION - 25%						431.5		
Purchasing	Manager	1	1		●	150	150		175
	Senior Buyers	2	2		●	120	240		121
	Buyers	1	2	●		48	96		48
	Purchasing Assistant	1	1	●		48	48		48
	Storage	1	1			16	16		32
	CIRCULATION - 25%						97.5		
Utility Svcs	Manager	1	1		●	150	150		167
	Offices	2	2		●	120	240		118
	Workstations	8	8	●		48	384		48
	Storage Room	1	1			200	200		125
	CIRCULATION - 25%						243.5		
	Conference Room (for 16-20)	1	1			380	380		172 (12-14)*
	Break Room (for 20)	1	1			500	500		shared
	Work Room	1	1			150	150		175
	Waiting Area (10, shared)	1	1			150	150		shared
							*larger shared conference room available		

* WORKSTATIONS
MECH/ELEC/ UNASSIGNED
HR
FACILITIES
ONDS
IT
SUPPORT

PROPOSED DEPARTMENT LAYOUT - LEVEL 02 FLOOR PLAN

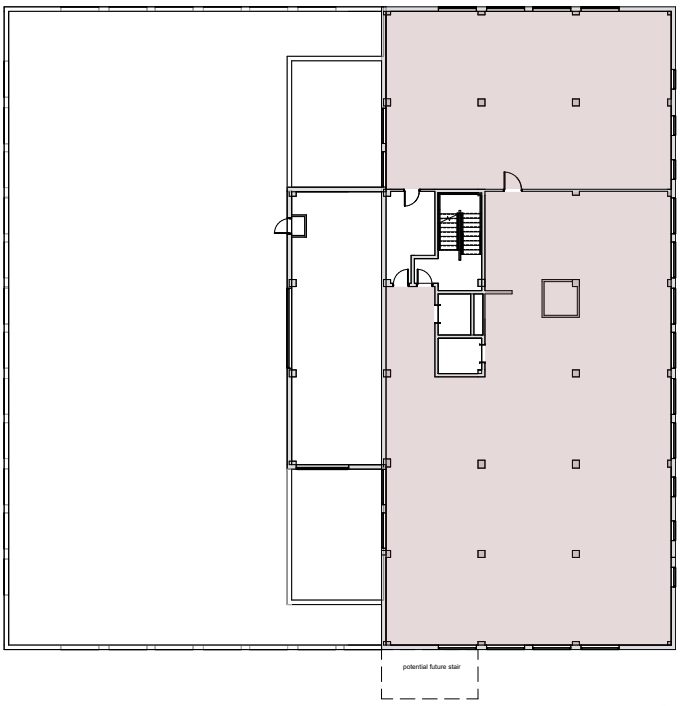
Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)	SF PER SPACE - AS SHOWN
Human Resources								**5,270**	
	Director	1	1		●	180	180		200
	Offices	10	13		●	150	1950		165
	Administrative Assistant	0	1	●		64	64		64
	Storage	1	1			200	200		263
	Work Room	1	1			100	100		90
	Conference Room (for at least 15)	1	1			312	312		256
	Break Room (for 15)	1	1			300	300		shared
	Waiting area (for 5-10)	1	1			150	150		shared
	Training Room (20-26)	1	1			600	600		550*
	Computer Lab (20-26)	1	1			600	600		585*
							*large training room located in City Hall, shared with PD		
	CIRCULATION - 25%						814		
Public Works								**4,908**	
	Department Head (in Public Works Bldg)	1	1		●		0		
Engineering	City Engineer/Manager	1	1		●	150	150		141
	Offices	3	4		●	120	480		117
	Workstations	6	6	●		64	384		64
	Hotel Workstations	2	2	●		64	128		64
	Equipment Storage	1	1			300	300		300
	Hard copy Storage	1	1			500	500		500
	Work Room	1	1			100	100		200 (shared)
	Conference Room (for 10-15)	1	1			312	312		shared
	Waiting Area (for 15)	1	1			300	300		shared
	Break Room	1	1			100	100		shared
	CIRCULATION - 25%						663.5		
Facilities	Offices located in Public Works Building won't move								
	City Hall Building Operations Supervisor	1	1	●		64	64		64
	Support staff	2	2	●		64	128		64
	Car bay	2	2			500	1000		500 (1 + 3)
	CIRCULATION - 25%						298		

● MECH/ELEC/ UNASSIGNED



PROPOSED DEPARTMENT LAYOUT - LEVEL 03 FLOOR PLAN

● MECH/ELEC/ UNASSIGNED



PROPOSED DEPARTMENT LAYOUT - LEVEL 04 FLOOR PLAN

MECHANICAL SYSTEMS - DESIGN CONSIDERATIONS

Due to the age and the requirements of the energy code, the existing mechanical systems will need to be replaced in their entirety. To meet energy code requirements, the new systems shall be variable refrigerant flow (VRF) electric heat pumps with remote fan coils and a dedicated outside air system (DOAS) with heat recovery for building ventilation. Spaces with large heating loads, such as the server room or electrical rooms with transformers, shall be served by single zone cooling only units.

Consideration should be given to any future build-out of the 3rd and 4th floors. The DOAS can be sized such that it can handle the ventilation for the entire building. This would increase the initial construction costs but potentially save money on any future installations serving the vacant floors. In addition, replacing the existing gas/electric design with an all-electric design could result in requiring an upgraded electrical service. This is unlikely to be an issue during the initial phase, but building out the upper floors could require additional electrical capacity.

The mechanical systems shall also be evaluated to ensure that the building can meet the requirements of the Clean Buildings Act.

PLUMBING SYSTEMS – DESIGN CONSIDERATIONS

The energy code requires new domestic hot water systems to use heat pump technology. However, the building's hot water requirements may be low enough to utilize an exception that allows for the heater to use electric heating elements instead. Whether this exception can be used will be determined during the detailed design. A recirculation system shall be installed to meet energy code requirements.

FIRE SPRINKLERS – DESIGN CONSIDERATIONS

New fire sprinklers for the 1st and 2nd floors shall be added. The existing riser will be evaluated to determine if any changes are required.

EXISTING ENERGY CODE DEFICIENCIES

The following Energy Code deficiencies were observed at the time of the walk through and will need to be remedied under the renovation:

- The air handling unit is not a variable air volume system.
- The boilers do not appear to have any turndown capability.
- There is no dedicated outside air system (new systems only).
- Densely occupied spaces will need demand control ventilation.
- System controls in general.
- The air handling unit needs to have air-side economizer control unless there is a dedicated outside air system with heat recovery serving the same area.
- The air handling unit does not meet requirements for multiple zone systems.
- Duct and pipe insulation likely do not meet code requirements.
- Domestic hot water does not have a recirculation system.
- Ventilation rates likely do not meet code requirements.

In addition, the building is large enough to require it to meet the Clean Buildings Act. It is unlikely that it currently meets the requirements of the bill.

SERVICE AND DISTRIBUTION – DESIGN CONSIDERATIONS

As noted above, the building currently has two services, one at 480Y/277V and one at 208Y/120V. The capacity on both of these services is adequate for the current branch distribution panelboards and devices, and the renovated mechanical systems that are noted in the mechanical space planning report. The 2000A switchboard and 800A panelboard, while 25 years old, are in good condition and can be re-used as a value engineering item. Neither of the main service equipment boards are mounted on housekeeping pads, however, which shall be remedied to mitigate any risk of water damage from flooding in the basement.

Due to energy code metering requirements, we need to keep the HVAC, receptacle and lighting loads separate on branch panels. There are not dedicated electrical rooms on each floor, so the branch panels will need to be recessed in the walls, which can be work intensive in an existing building. We will replace the existing branch panel distribution to accommodate these stringent requirements.

PANELBOARDS & ENCLOSED BREAKERS

Panelboards and enclosed circuit breakers shall be dead-front circuit breaker type with proper interrupting capacity. Metering located in separate enclosures shall be provided for each panelboard which serves lighting, mechanical and plug loads. Equipment shall be as manufactured by Square D, or approved equal. Surge suppression shall be provided for panelboards serving sensitive electronic loads.

See the mechanical narrative for details on the new equipment that will service this building. The general design shall be several large 480Y/277V electric heat pump units on the 3rd floor roof, as well as distributed 208V fan coil units throughout each floor. To accommodate these additional loads, an additional mechanical 480Y/277V 800A panel shall be provided at the 3rd floor level to serve these large heat pump units, and 208Y/120V branch panels on each level to serve the additional fan coil units.

DISCONNECT SWITCHES

Safety switches shall be heavy duty type with interlocking door and spring loaded contacts. Safety switches used as motor disconnects shall be fused. Outdoor safety switches shall be NEMA 3R. Safety switches downstream of VFD's or Starters shall be provided with auxiliary contacts for control interlock.

LIGHTING AND BRANCH WIRING – DESIGN CONSIDERATIONS

See the architectural narrative for details on the floorplan changes to each floor of city hall. With all of the floor plan modifications, receptacles, data outlets, and lighting fixtures and controls will need to be provided to match the new layouts. There are currently existing offices in the Basement, 1st and 2nd floors. These are being reconfigured, walls are coming down in some areas and added in others. Open office areas are being added in each of the departments. The 3rd and 4th floors are empty and will remain that way under the current architectural codes.

To meet current energy codes, lighting controls will need to be updated to include automatic sensors, and daylighting as appropriate. Receptacles with switched control in offices, open office areas, and conference rooms shall be provided. In addition to that, the egress lighting batteries are reaching end of life and shall be replaced. Any floor plan changes will be adjustments to the paths of egress as well.

Lighting system design foot candle levels will be in accordance with IES standards. Lighting power densities will be designed to be 90% or less of the allowed overall building values indicated in the Washington State Energy Code. In general, areas within the building and on the site will be illuminated to the following light levels and lighting power densities:

Space Type	Target Average Illuminization (FC)	2021 State Energy Code Allowed LPD (w/sf)	Target LPD (w/sf)
Storage	10-20	0.51	0.46
Hall/Stairs	10-15	0.49	0.44
MEP Utility	10-20	0.43	0.4
Restrooms	10-15	0.63	0.57
Office	30-50	0.74	0.67
Conference Room	30-50	0.97	0.87
Break Room	10-15	0.59	0.53
Overall Building LPD		0.7	0.6

WIRING DEVICES

Switches and receptacles shall be specification grade. Trim plates shall be brushed stainless steel unless direct otherwise by the Architect.

BUILDING WIRE AND CABLE

Conductors shall be copper only. Aluminum will not be permitted. Dedicated neutrals shall be provided for all computer outlets and multi-wire branch circuits. Minimum wire size for branch circuits shall be #12 AWG. Minimum wire size for exterior lighting circuits shall be #10 AWG.

CONDUIT

Galvanized steel metal conduit shall be used inside building. Non-metallic conduit shall be used underground and within masonry/concrete, except at transitions. Metal conduit shall be rigid metal conduit, electrical metallic tubing (EMT), or flexible metal conduit. Non-metallic conduit shall be schedule 40 PVC. Conduit shall be concealed wherever possible. Conduit minimum size shall be 3/4" for power and 1" for communications.

BOXES

Outlet boxes shall be pressed steel type with device rings. Power outlet boxes shall be minimum 4" square by 2-1/8" in depth. Communications outlet boxes shall be minimum 4-11/16" square by 2-1/8" in depth Pull boxes shall be screw cover type.

OTHER ELECTRICAL SYSTEMS – DESIGN CONSIDERATIONS - FIRE ALARM

The existing fire alarm main panel shall remain in place as it was just replaced in 2014. The fire alarm system devices shall be updated to match any floor plan changes. New end point devices shall be provided as required by NFPA.

EXISTING CODE DEFICIENCIES

The following Code deficiencies were observed at the time of the walk through and will need to be remedied under the renovation:

- Existing foreign systems (mech systems) were observed as routing through the dedicated space above electrical equipment. This is an electrical code violation and will need to be remedied during the renovation.
- Storage within dedicated electrical working space – any materials and equipment not related to electrical distribution system shall be removed from electrical spaces.

6.2 CITY HALL ANNEX *AUDIOVISUAL AND TECHNOLOGY AND SECURITY - STANTEC*

Refer to section 6.1 for more information.

6.3 RICHARD A. ZAIS, JR. CENTER FOR LAW AND JUSTICE

Discussions regarding updates to this building focused on the expansion of the law center on the second floor. It was found through interview discussions that the only requested change to the first floor was to modify the counter at the court clerks area to meet ADA standards.

LAYOUT

On the north side of the second floor, the alterations will be somewhat minor. The offices within the law center will remain in their current configuration. The central area will be reconfigured to create a space for a break room and a separate work room. Additionally, the law library will be converted into a small conference room. The second, existing, small conference room may also be used as a second jury room room when needed. A section of storefront with an access-controlled door will be added opposite the current entry to increase privacy and expand the waiting area.

At the south side of the second floor, the backup dispatch center will be moved to a new location to make space for a new Domestic Violence Advocates space. This space will include its own waiting room, interview room, and offices to accommodate two attorneys. The large conference room for the legal suite will also be adjacent to this area. The existing servers will remain in their current location.

EXTERIOR WALL SYSTEMS

No modifications to exterior walls are anticipated.

INTERIOR WALL SYSTEMS

New interior walls will be constructed of metal studs with GWB. They will be filled with acoustic insulation and will extend to the structure above in order to limit noise transfer between spaces. Existing walls will be tested for sound transfer and insulation added above the ceilings as needed.

ROOF SYSTEMS

No modifications to existing roof systems are anticipated.

FINISHES

The predominant floor material will be carpet, with luxury vinyl tile in high traffic areas. Tile in existing toilet rooms will remain.

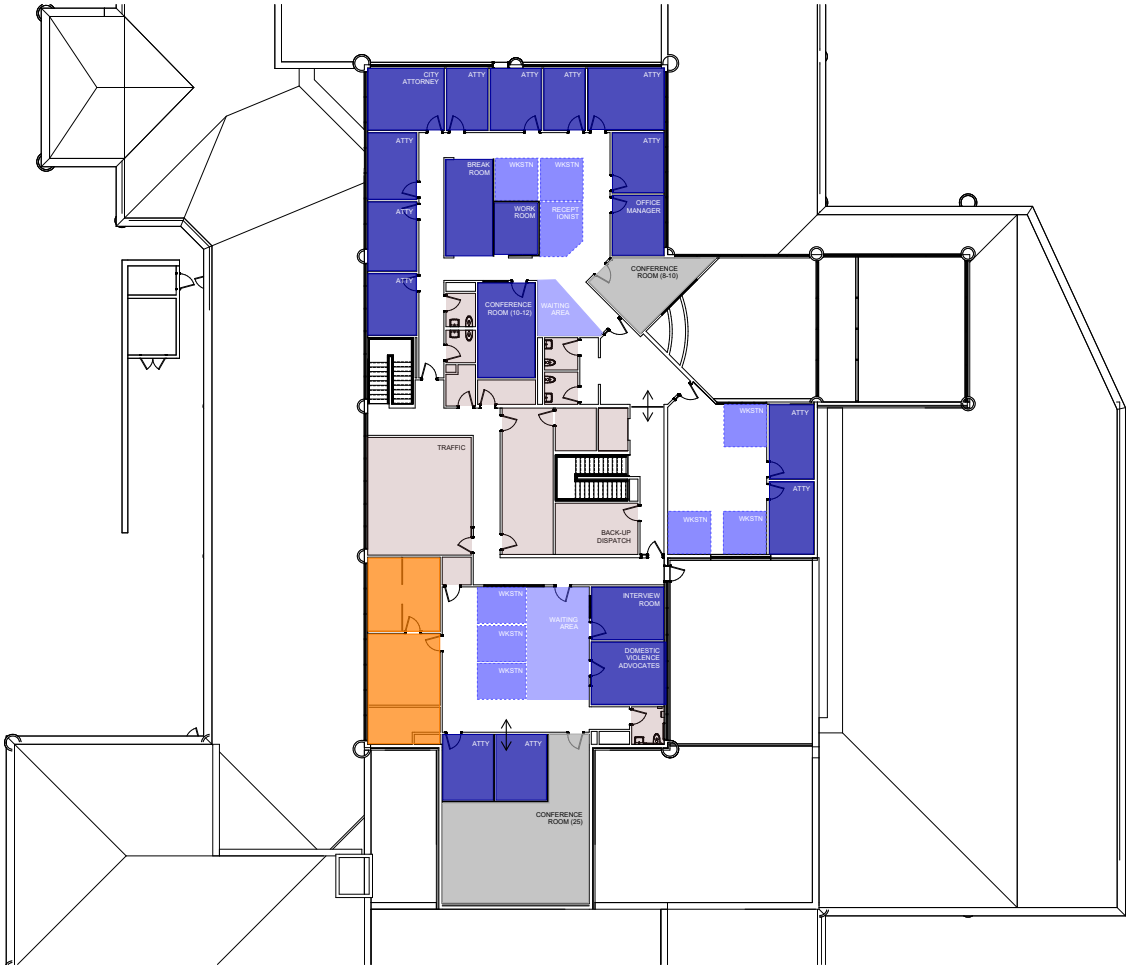
Ceilings will be 2’x4’ lay-in acoustical tile, with the exception of the waiting area that is open to the floor below, which will remain as it is.

CODE

Any changes made will meet all current codes.

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)	SF PER SPACE - AS SHOWN
Legal								**5,499**	
	City Attorney	1	1		●	180	180		191
	Office Manager	1	1		●	150	150		126
	Attorneys	11	12		●	150	1800		120 (avg)
	Domestic Violence Advocates (shared office)	1	1		●	180	180		180
	Workstations	7	8	●		64	512		64
	Reception/Legal Assistant	1	1	●		100	100		95
	Waiting Area (4, not shared)	1	1			240	240		240
	Conference Room (for 25)	1	1			380	380		700
	Conference Room (10)	1	1			240	240		220
	Interview Room (6)	1	1			150	150		150
	Storage	1	1			25	25		170
	Break Room (8-10)	1	1			240	240		180
	Work Room	1	1			100	100		90
	Unisex Toilet Room	2	2			64	128		64
	CIRCULATION - 25%						1074.25		

IT LEGAL MECH/ELEC/ UNASSIGNED SUPPORT



PROPOSED DEPARTMENT LAYOUT - FLOOR PLAN

SIDEWALK IMPROVEMENTS TO CONSIDER

- Replacement of sidewalk to be within accessibility requirements.
- Grinding of existing panel separation in excess of accessibility requirements.
- Modifying existing utility lids that do not meet slip resistant requirements.

ACCESSIBILITY IMPROVEMENTS TO CONSIDER

Revising the accessible parking closer to the front door and having a direct curb ramp to the sidewalk that accesses the main entrance. An alternative approach would be to install a curb ramp and new sidewalk at the head of the existing Accessible Stalls.

AMENITY IMPROVEMENTS TO CONSIDER

- Revising the accessible parking closer to the front door and having a direct curb ramp to the sidewalk that accesses the main entrance. An alternative approach would be to install a curb ramp and new sidewalk at the head of the existing Accessible Stalls.
- Identify parking stalls and set up EV charging stations for guests and potential law enforcement use.
- Review parking lot lighting for uniform lighting requirements.
- Identify a bus stop and shelter facility for public transportation.
- Evaluate an option to prevent dumpsters from having to be left in the roadway.

MECHANICAL SYSTEMS - DESIGN CONSIDERATIONS

The architectural work is very minimal and limited to the second floor of this building. As a result, the only modifications to the mechanical systems will be rearranging diffusers, possibly adding a few terminal units and updates and improvements to meet life safety codes. Energy code violations will also be noted for owner awareness.

The new space at the south of the 2nd floor may be able to be served by the existing air handling unit. Alternatively, a new packaged rooftop unit on the new roof can serve this new area. A new unit would require additional electrical work. It may also require a roof cowl to be relocated as it may interfere with the new walls.

ENERGY CODE DEFICIENCIES

The following Energy Code deficiencies were observed at the time of the walk through and will need to be remedied under the renovation:

- Densely occupied spaces will need demand control ventilation.

In addition, the building is large enough to require it to meet the Clean Buildings Act. An analysis of the building's utility bills would be required to determine what, if any, changes would be needed to meet the bill's requirements.

ELECTRICAL SYSTEMS GENERAL – DESIGN CONSIDERATIONS

The architectural work is very minimal and limited to the second floor of this building. As a result, the only modifications to the electrical systems will be minor branch circuit updates and improvements to meet life safety codes. This includes power, lighting, egress lighting and fire alarm. Energy code violations will also be noted for owner awareness.

LIGHTING AND BRANCH WIRING – DESIGN CONSIDERATIONS

See the mechanical narrative for details on the new equipment that will service this building. Much of the existing mechanical is existing to remain, any additional equipment will be minor branch devices required.

New lighting in the handful of offices will be required, along with energy code required lighting controls. Lighting system design foot candle levels will be in accordance with IES standards. Lighting power densities will be designed to be 90% or less of the allowed overall building values indicated in the Washington State Energy Code. In general, new rooms added within the building and on the site will be illuminated to the following light levels and lighting power densities:

The egress lighting batteries are reaching end of life and shall be replaced. We did not observe egress lighting emergency operation during the walk through, but it is likely that new battery back up needs to be provided for any egress lighting, and exit sign batteries need to be replaced.

Space Type	Target Average Illuminization (FC)	2021 State Energy Code Allowed LPD (w/sf)	Target LPD (w/sf)
Office	30-50	0.74	0.67
Conference Room	30-50	0.97	0.87
Overall Building LPD		0.7	0.6

WIRING DEVICES

Switches and receptacles shall be specification grade. Trim plates shall be brushed stainless steel unless direct otherwise by the Architect.

BUILDING WIRE AND CABLE

Conductors shall be copper only. Aluminum will not be permitted. Dedicated neutrals shall be provided for all computer outlets and multi-wire branch circuits. Minimum wire size for branch circuits shall be #12 AWG. Minimum wire size for exterior lighting circuits shall be #10 AWG.

CONDUIT

Galvanized steel metal conduit shall be used inside building. Non-metallic conduit shall be used underground and within masonry/concrete, except at transitions. Metal conduit shall be rigid metal conduit, electrical metallic tubing (EMT), or flexible metal conduit. Non-metallic conduit shall be schedule 40 PVC. Conduit shall be concealed wherever possible. Conduit minimum size shall be 3/4" for power and 1" for communications.

BOXES

Outlet boxes shall be pressed steel type with device rings. Power outlet boxes shall be minimum 4" square by 2-1/8" in depth. Communications outlet boxes shall be minimum 4-11/16" square by 2-1/8" in depth Pull boxes shall be screw cover type.

OTHER ELECTRICAL SYSTEMS – DESIGN CONSIDERATIONS - FIRE ALARM

The existing fire alarm main panel shall remain in place as it was just replaced in 2014. The fire alarm system devices shall be updated to match any floor plan changes. New end point devices shall be provided as required by NFPA.

6.3 RICHARD A. ZAIS, JR. CENTER FOR LAW AND JUSTICE *AUDIOVISUAL ASSESSMENT - STANTEC*

Refer to section 6.1 for more information.

6.4 SPECIAL ASSAULT UNIT (SAU) *(FORMERLY Y-PAC BUILDING)*

LAYOUT

The former Y-PAC building will be remodeled to house the Special Assault Unit (SAU), Internal Affairs, Training/Recruiting, and Traffic Unit. SAU offices and conference rooms will be located near the main entry at the east end of the building, with Traffic at the west end, near the garage which will house the motorcycles.

EXTERIOR WALL SYSTEMS

No major changes to exterior walls are expected, though furring on the inside of the wall will be required in areas where the masonry is still exposed. The overhead garage door off the covered parking area will need to be removed and the opening infilled. The awning at the front of the building will need to be either replaced or removed altogether.

INTERIOR WALL SYSTEMS

New interior walls will be constructed of metal studs with GWB and filled with acoustic insulation. Walls will extend to the structure above in order to limit noise transfer between spaces.

ROOF SYSTEMS

It is expected that the existing roofing does not need to be replaced and will remain.

FINISHES

The predominant floor material will be carpet. Existing tiled bathrooms will remain.

Ceilings will be 2'x4' lay-in acoustical tile.

Interior wall finishes will mostly be paint over gypsum wallboard walls. Special care will be taken with the interior design of the SAU offices and conference rooms to make them comfortable and calming for any visitors.

CASEWORK/FIXTURES/EQUIPMENT

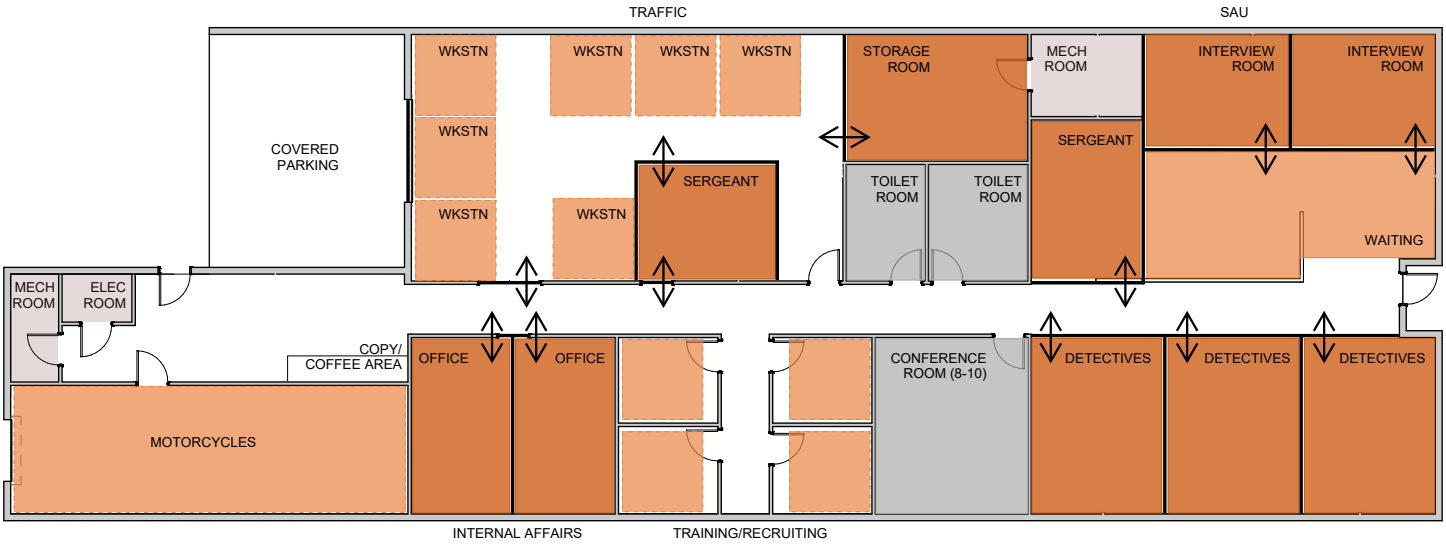
Casework will be added to the wide hallway at the west end to create space for a coffee/break area. A copier will also be located there.

CODE

The building appears to meet current code, any remodeling done will also meet current code.

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)	SF PER SPACE - AS SHOWN
Police								**2,444**	
Internal Affairs	Office	2	2			150	300		163
Training/ Recruiting	Officer	1	1	●		64	64		79
	Recruits	3	3	●		64	192		79
Special Assault Unit (SAU)	Sergeant	1	1		●	150	150		150
	Detectives (2 per office)	3	3		●	200	600		218
	Waiting Area	1	1			140	140		320
	Interview Room	2	2			150	300		150
Traffic	Sergeant	1	1		●	150	150		150
	Workstations	4	7	●		64	448		64
	Storage Room	1	1			100	100		220
	CIRCULATION - 25%								

POLICE SUPPORT MECH/ELEC



PROPOSED DEPARTMENT LAYOUT - FLOOR PLAN

MECHANICAL SYSTEMS – DESIGN CONSIDERATIONS

Due to the age and the requirements of the energy code, the existing mechanical systems will need to be replaced except for the newly installed condensing unit. The associated furnace can be replaced in kind. The second furnace/condensing unit set shall be replaced by a heat pump with indoor air handler. To meet energy code requirements a dedicated outside air system (DOAS) with heat recovery will be required for building ventilation. Any spaces with large heating loads, such as electrical rooms with transformers, shall be served by single zone cooling only units.

PLUMBING SYSTEMS – DESIGN CONSIDERATIONS

The energy code requires new domestic hot water systems to use heat pump technology. However, the building's hot water requirements are low enough to utilize an exception that allows for the heater to use electric heating elements instead. A recirculation system shall be installed to meet energy code requirements.

FIRE SPRINKLERS – DESIGN CONSIDERATIONS

The building should be evaluated to determine if a fire sprinkler system is required.

EXISTING ENERGY CODE DEFICIENCIES

The following Energy Code deficiencies were observed at the time of the walk through and will need to be remedied under the renovation:

- There is no dedicated outside air system (new systems only).
- Densely occupied spaces will need demand control ventilation.
- The furnaces need to have air-side economizer control unless there is a dedicated outside air system with heat recovery serving the same area.
- Domestic hot water does not have a recirculation system.

SERVICE AND DISTRIBUTION – DESIGN CONSIDERATIONS

As noted above, the building currently has a service at 240/120V. The capacity of this service is adequate for the current branch distribution panelboards and devices, and the renovated mechanical systems that are noted in the mechanical space planning report. However, the main service panelboard and service disconnect switches are in poor condition and need to be replaced.

PANELBOARDS & ENCLOSED BREAKERS

Panelboards and enclosed circuit breakers shall be dead-front circuit breaker type with proper interrupting capacity. Equipment shall be as manufactured by Square D, or approved equal. Surge suppression shall be provided for panelboards serving sensitive electronic loads.

See the mechanical narrative for details on the new equipment that will service this building. The general design shall be 240/120V electric heat pump units outside or on the roof, as well as distributed 120V fan coil units throughout each floor.

DISCONNECT SWITCHES

Safety switches shall be heavy duty type with interlocking door and spring loaded contacts. Safety switches used as motor disconnects shall be fused. Outdoor safety switches shall be NEMA 3R. Safety switches downstream of VFD's or Starters shall be provided with auxiliary contacts for control interlock.

LIGHTING AND BRANCH WIRING – DESIGN CONSIDERATIONS

See the architectural narrative for details on the floorplan changes to the Y-PAC building. With the extensive floor plan modifications, receptacles, data outlets, and lighting fixtures and controls will need to be provided to match the new layouts. To meet current energy codes, lighting controls will need to be updated to include automatic sensors, and daylighting as appropriate. Receptacles with switched control in offices, open office areas, and conference rooms shall be provided. In addition to that, the egress lighting batteries are reaching end of life and shall be replaced. Any floor plan changes will be adjustments to the paths of egress as well.

To meet current energy codes, lighting controls will need to be updated to include automatic sensors, and daylighting as appropriate. Receptacles with switched control in offices, open office areas, and conference rooms shall be provided. In addition to that, the egress lighting batteries are reaching end of life and shall be replaced. Any floor plan changes will be adjustments to the paths of egress as well.

Lighting system design foot candle levels will be in accordance with IES standards. Lighting power densities will be designed to be 90% or less of the allowed overall building values indicated in the Washington State Energy Code. In general, areas within the building and on the site will be illuminated to the following light levels and lighting power densities:

Space Type	Target Average Illuminization (FC)	2021 State Energy Code Allowed LPD (w/sf)	Target LPD (w/sf)
Storage	10-20	0.51	0.46
Hall/Stairs	10-15	0.49	0.44
MEP Utility	10-20	0.43	0.4
Restrooms	10-15	0.63	0.57
Office	30-50	0.74	0.67
Conference Room	30-50	0.97	0.87
Break Room	10-15	0.59	0.53
Overall Building LPD		0.7	0.6

WIRING DEVICES

Switches and receptacles shall be specification grade. Trim plates shall be brushed stainless steel unless direct otherwise by the Architect.

BUILDING WIRE AND CABLE

Conductors shall be copper only. Aluminum will not be permitted. Dedicated neutrals shall be provided for all computer outlets and multi-wire branch circuits. Minimum wire size for branch circuits shall be #12 AWG. Minimum wire size for exterior lighting circuits shall be #10 AWG.

CONDUIT

Galvanized steel metal conduit shall be used inside building. Non-metallic conduit shall be used underground and within masonry/concrete, except at transitions. Metal conduit shall be rigid metal conduit, electrical metallic tubing (EMT), or flexible metal conduit. Non-metallic conduit shall be schedule 40 PVC. Conduit shall be concealed wherever possible. Conduit minimum size shall be 3/4" for power and 1" for communications.

BOXES

Outlet boxes shall be pressed steel type with device rings. Power outlet boxes shall be minimum 4" square by 2-1/8" in depth. Communications outlet boxes shall be minimum 4-11/16" square by 2-1/8" in depth Pull boxes shall be screw cover type.

OTHER ELECTRICAL SYSTEMS DESIGN CONSIDERATIONS - FIRE ALARM

The existing fire alarm main panel shall remain in place as it is in good condition. The fire alarm system devices shall be updated to match any floor plan changes. New end point devices shall be provided as required by NFPA.

EXISTING CODE DEFICIENCIES

The following Code deficiencies were observed at the time of the walk through and will need to be remedied during renovation:

- Storage within dedicated electrical working space – any materials and equipment not related to electrical distribution system shall be removed from electrical spaces.

7.0 PROJECTED COSTS

7.0 PROJECTED COSTS

The following cost estimates are based on "ideal" layouts as shown in the diagrams in the Conceptual Design section and include all new finishes in occupied spaces unless noted otherwise in the detailed estimate.

CITY HALL (FORMER BANK OF AMERICA)
$6,949,161

CITY HALL ANNEX (FORMER CITY HALL)
$12,456,338

CITY HALL/CITY HALL ANNEX
SITE WORK $3,735,200

SAU (FORMER Y-PAC)
$1,215,500

LAW AND JUSTICE CENTER
SECOND FLOOR FULL REMODEL $957,683
SECOND FLOOR PARTIAL REMODEL $431,335

POLICE DEPARTMENT STORAGE ANNEX
$1,027,256

Detailed cost estimates can be found in the appendix, including the list of assumptions made for each building.

8.0 PROJECT SCHEDULE

8.0 PROJECT SCHEDULE

Recommended phasing of building renovations is as follows:

PHASE 1

- Remodel City Hall (former Bank of America building). This renovation will allow the City Manager offices, City Clerks offices, and City Council office and chambers to move out of the City Hall Annex. In addition, Capitol Theatre will vacate its current office space, the Police Training room will be moved, and YPAC will vacate its current building.
- Remodel Legal Center. This project could be done at any time as it does not impact any other departments. However, in order to begin, the back-up dispatch center must move.

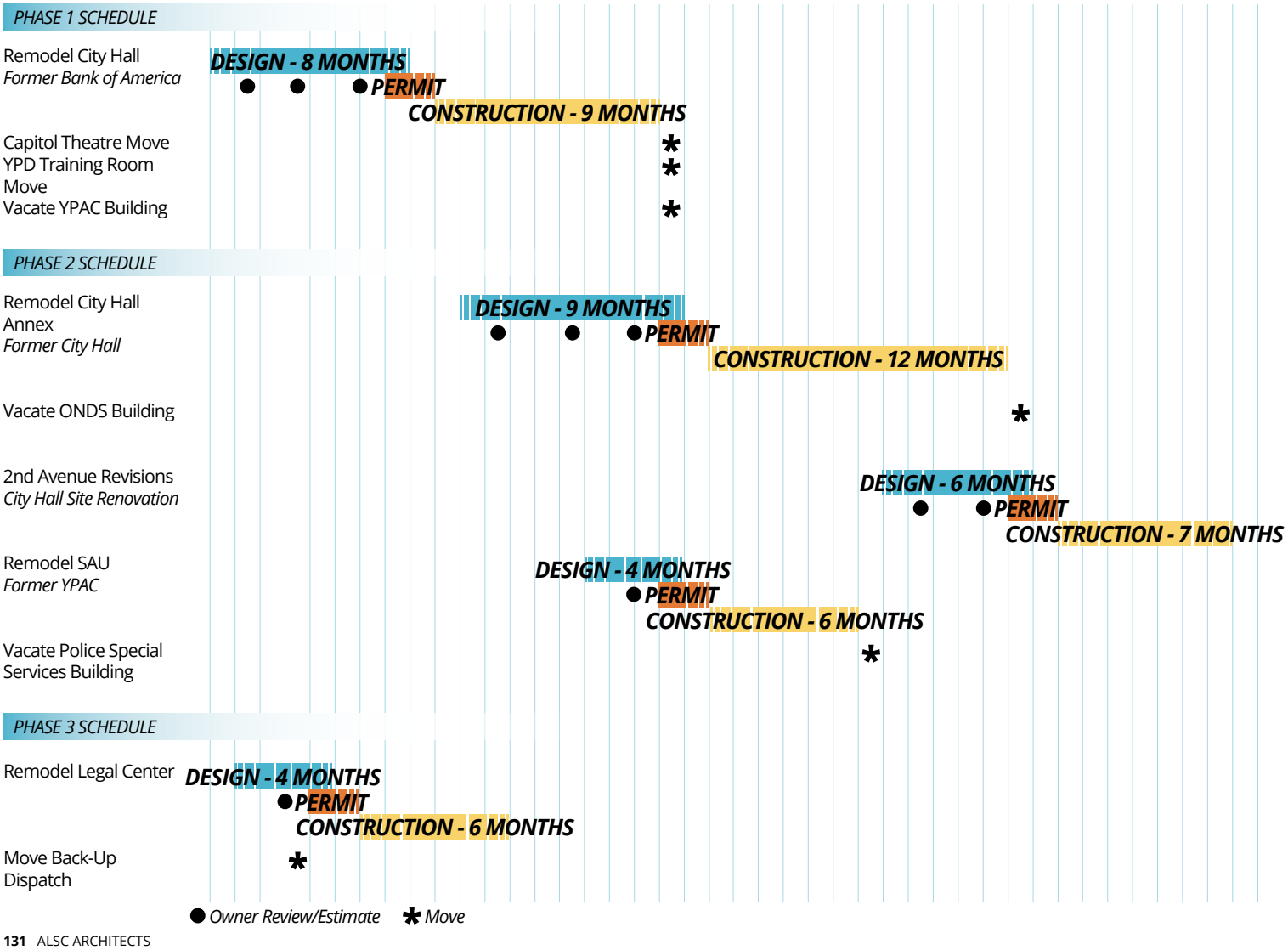
PHASE 2

- Remodel City Hall Annex (former City Hall. Since the building will remain occupied during construction, this renovation will have to occur in phases. It can begin once the City Manager, City Clerks, and City Council have moved out.
- Remodel SAU (former YPAC building). As soon as YPAC has moved to their new location, renovation of the building can begin. Once the police units have moved in, the Police Department Training Facility/Special Services will be vacant.

PHASE 3

- Site work at City Hall/City Hall Annex. It is recommended that this work wait to begin until the work at the City Hall Annex is nearing completion, as the land around the building will be valuable lay down/storage area for construction.

All construction durations shown on the schedule are estimates, and may need to grow depending on material and equipment lead times.



9.0 APPENDIX

9.1 ROOM DATA SHEETS

9.2 SURVEY RESPONSES

9.3 LIST OF RECENT MAINTENANCE/ REPAIRS

9.4 ALTERNATE EXPLORATIONS

9.5 MEETING NOTES

9.6 DETAILED COST ESTIMATES

9.1 ROOM DATA SHEETS

GENERAL, FOR ALL DEPARTMENTS
- Office, 120 sf
- Office, 150 sf
- Office, 180 sf
- Workstation
- Conference Room
- Storage
- Waiting Area/ Lobby
- Work Room
- Break Room

CITY COUNCIL
- Council Chambers
- Council Chambers Control Room
- Executive Conference Room
- City Council Office

IT
- Help Desk/ Waiting Area
- Tech Bench
- IT Server and Networking Room
- Large Conference Room

CITY CLERKS
- Storage

COMMUNICATION AND PUBLIC AFFAIRS
- Studio Control Room
- Edit Bays
- Garage

COMMUNITY DEVELOPMENT
- Workstation, Building Inspector
- Workstation, Plan Reviewers
- Storage

FACILITIES
- Garage

CAPITOL THEATRE
- Reception Desk

LEGAL
- Interview Room
- Domestic Violence Advocates Office

POLICE DEPARTMENT
- SAU Waiting Area
- SAU Interview Room
- Storage
- Training Room
- Training Room/ Studio Storage

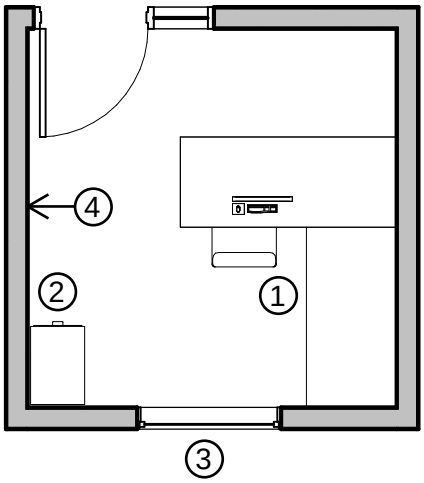
OFFICE

Small private office, no guest chairs

AREA / OCCUPANCY	Area	120 sf.
	Ceiling Height	9'-0"
	Occupancy	1 - 2
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		One wall with VWC
SIGNAGE		Typical panel room sign
FURNITURE		Desk with office chair
LIGHTING & FENESTRATION	Windows	Yes
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	Owner-provided as needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	Separation from surrounding areas

NOTES:



① Desk with chair
② File cabinet
③ Exterior window
④ Vinyl wall covering

Office - 120

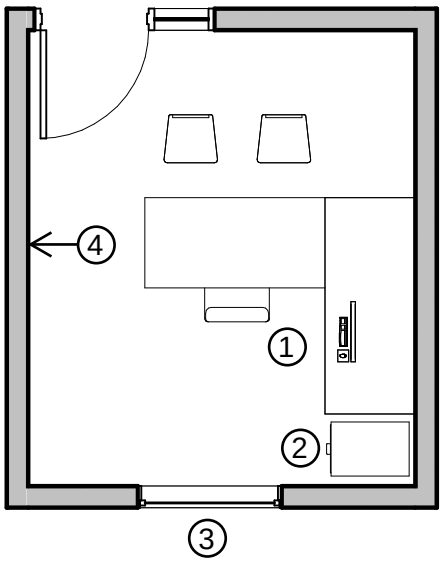
OFFICE

Small private office with guest chairs

AREA / OCCUPANCY	Area	150 sf.
	Ceiling Height	9'-0"
	Occupancy	2-4
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		One wall with VWC
SIGNAGE		Typical panel room sign
FURNITURE		Desk with office chair and two guest chairs
LIGHTING & FENESTRATION	Windows	Yes
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	Owner-provided as needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	Separation from surrounding areas

NOTES:



1. Desk with chair
2. File cabinet
3. Exterior window
4. Vinyl wall covering

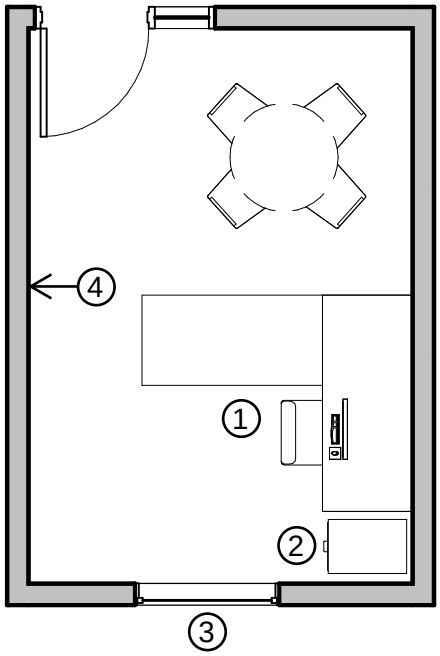
OFFICE

Large private office, small table

AREA / OCCUPANCY	Area	180 sf.
	Ceiling Height	9'-0"
	Occupancy	4 - 5
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		One wall with VWC
SIGNAGE		Typical panel room sign
FURNITURE		Desk with office chair, table for 4 with chairs, credenza
LIGHTING & FENESTRATION	Windows	Yes
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	Owner-provided as needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	Separation from surrounding areas

NOTES: City Manager, Assistant City Manager, and City Clerk's offices to have power/data for a wall mounted television.



① Desk with chair
② File cabinet
③ Exterior window
④ Vinyl wall covering

WORKSTATION

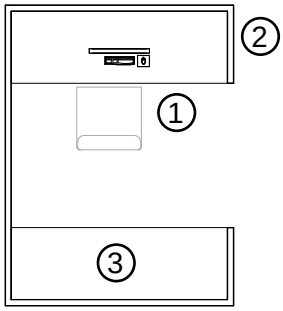
See Program for sizes per department

AREA / OCCUPANCY	Area	48, 64, 81 sf.
	Ceiling Height	9'-0" min.
	Occupancy	1
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Resilient flooring/carpet
	Walls	Cubicle partitions
	Wall Base	
	Doors	
	Ceiling	Acoustic ceiling
CASEWORK / DISPLAY		
SIGNAGE		
FURNITURE		Desks with chairs, layout/work area in larger cubicles. Layout to include locking file drawers
LIGHTING & FENESTRATION	Windows	NA
	Window Treatments	NA
	Room Lighting	LED
	Task Lighting	As needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	
	Access Control	No

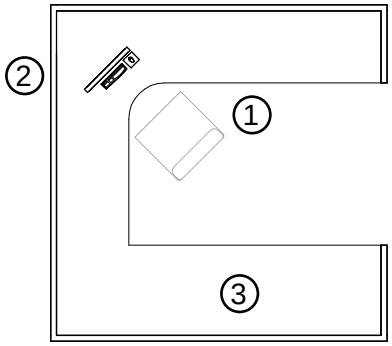
FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No requirements
	Acoustics	Cubicle partitions to be at least 4'-0"

NOTES:

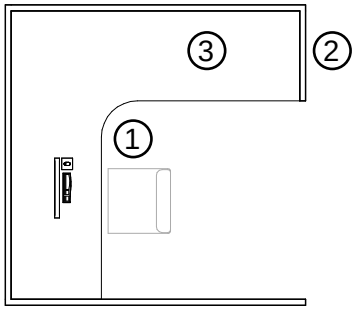
① Desk with chair
② Partition wall
③ Layout/work area



48 sf



81 sf



64 sf

Potential cubicle layouts

CONFERENCE ROOM

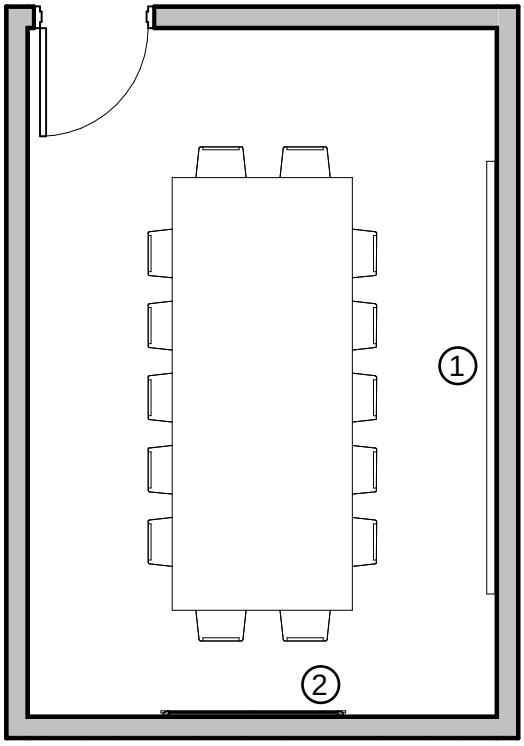
The following guidelines pertain to conference rooms of all sizes.

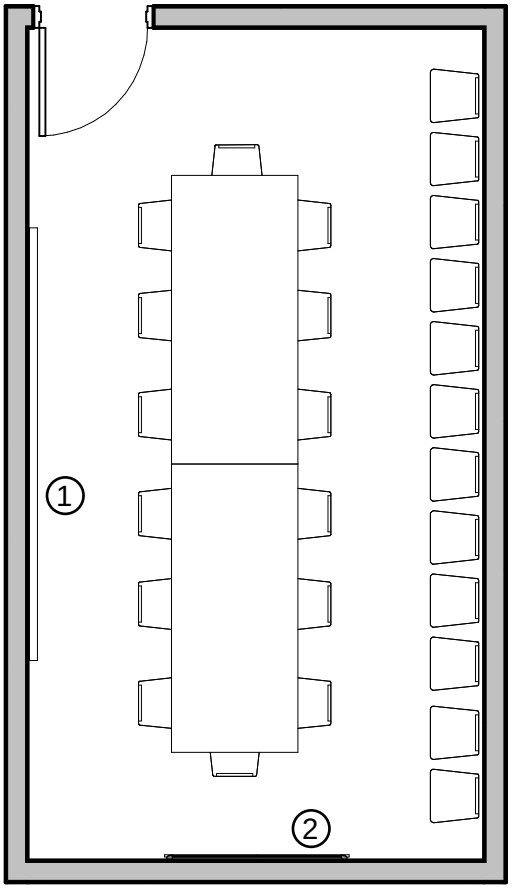
AREA / OCCUPANCY	Area	Varies, see Program
	Ceiling Height	9'-0" minimum, 10'-0" preferred
	Occupancy	Varies, see Program
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Table with chairs
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	No
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	TV, wall mounted Audio for virtual meetings
	Acoustics	Separation from surrounding areas

NOTES:

Example room layouts:





① Markerboard

② Wall-mounted television

Conference Room

STORAGE

Areas vary per department, see Program

AREA / OCCUPANCY	Area	Varies
	Ceiling Height	9’-0” min.
	Occupancy	
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Resilient flooring/concrete
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling or open to structure, depending on final location
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Shelves as required
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	NA
	Room Lighting	LED
	Task Lighting	No
ELECTRICAL	Telephone	No
	Data	No
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	Below 65 degrees
	Humidity	30%-50% RH
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	No requirements

NOTES:

WAITING AREA/LOBBY

AREA / OCCUPANCY	Area	Approximately 800 sf, including circulation
	Ceiling Height	10'-0"
	Occupancy	10-20
SPATIAL RELATIONSHIPS	Direct Access	Utility Services, Codes/Engineering
	Secondary Adjacency	Purchasing
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted Gyp
	Wall Base	Rubber
	Doors	
	Ceiling	ACT
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Chairs, small tables
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	
	Data	Yes
	Security	Yes
	Access Control	

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	Wall mounted television
	Acoustics	

NOTES:

WORK ROOM

Room for printers and paper

AREA / OCCUPANCY	Area	100 sf.
	Ceiling Height	9’-0” min.
	Occupancy	
SPATIAL RELATIONSHIPS	Direct Access	Offices
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Resilient flooring/carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic ceiling
CASEWORK / DISPLAY		Base and upper cabinets for storage
SIGNAGE		Typical panel room sign
FURNITURE		
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	
	Room Lighting	LED
	Task Lighting	Under cabinet lights
ELECTRICAL	Telephone	No
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES:

BREAK ROOM

See Program for areas

AREA / OCCUPANCY	Area	Varies
	Ceiling Height	9’-0” minimum
	Occupancy	Varies
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	Welcoming, calming
	Floor	Resilient Flooring
	Walls	Painted Gypsum Board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		Base and upper cabinets
SIGNAGE		Typical panel room sign
FURNITURE		Table(s) with chairs, Refrigerator
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING		Kitchen sink, dishwasher
SPECIALTY ITEMS	Audio / Visual / Intercom	TV, Wall Mounted
	Acoustics	Separation from surrounding areas

NOTES:

CITY COUNCIL CHAMBERS

AREA / OCCUPANCY	Area	2000 sf.
	Ceiling Height	12'-0" minimum
	Occupancy	100-120
SPATIAL RELATIONSHIPS	Direct Access	Conference Room, Control Room
	Secondary Adjacency	City Manager Suite
FINISHES	Aesthetics	Welcoming, formal
	Floor	Carpet
	Walls	Painted Gyp
	Wall Base	Rubber
	Doors	Storefront entry
	Ceiling	Large format acoustic tile
CASEWORK / DISPLAY		Dais
SIGNAGE		
FURNITURE		Speaking Podium, Council and audience chairs
LIGHTING & FENESTRATION	Windows	Yes
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	Yes
ELECTRICAL	Telephone	
	Data	Yes
	Security	Yes
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	Television monitors for display, microphones for Council and at speaker podium, ability to broadcast on television or stream.
	Acoustics	Separate from lobby space

NOTES: Room needs to include a space for news crews/cameras, also consider adjacent spaces for interpreter.

CONTROL ROOM

IT and AV services for Council Chambers

AREA / OCCUPANCY	Area	100 sf.
	Ceiling Height	10’-0” minimum
	Occupancy	1-2
SPATIAL RELATIONSHIPS	Direct Access	Council Chambers
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted Gypsum Board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		
SIGNAGE		
FURNITURE		As needed
LIGHTING & FENESTRATION	Windows	No exterior window Interior window into Council Chambers
	Window Treatments	
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	
	Data	Yes
	Security	Yes
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES:

EXECUTIVE CONFERENCE ROOM

Small meeting room for City Council

AREA / OCCUPANCY	Area	240 sf.
	Ceiling Height	9'-0"
	Occupancy	10 - 12
SPATIAL RELATIONSHIPS	Direct Access	Council Chambers
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		Small kitchenette including sink
SIGNAGE		Typical panel room sign
FURNITURE		Table with chairs, small refrigerator
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	No
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING		Small kitchen sink
SPECIALTY ITEMS	Audio / Visual / Intercom	TV, wall mounted
	Acoustics	Separation from surrounding areas

NOTES:

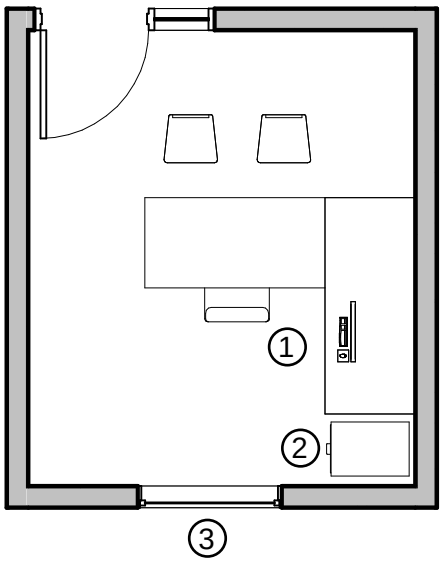
OFFICE

Shared small private office for City Council members, with guest chairs

AREA / OCCUPANCY	Area	150 sf.
	Ceiling Height	9'-0"
	Occupancy	2-4
SPATIAL RELATIONSHIPS	Direct Access	Council Chambers
	Secondary Adjacency	City Manager Offices
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		One wall with VWC
SIGNAGE		Typical panel room sign
FURNITURE		Desk with office chair and two guest chairs
LIGHTING & FENESTRATION	Windows	Yes
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	Owner-provided as needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	Separation from surrounding areas

NOTES:



1. Desk with chair
2. File cabinet
3. Exterior window

HELP DESK

IT services, including waiting area

AREA / OCCUPANCY	Area	400 sf.
	Ceiling Height	9'-0" minimum
	Occupancy	2-4
SPATIAL RELATIONSHIPS	Direct Access	Tech bench
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted Gyp
	Wall Base	Rubber
	Doors	Wood with HM frame
	Ceiling	ACT
CASEWORK / DISPLAY		Counter separating waiting area from Help Desk
SIGNAGE		Typical panel room sign
FURNITURE		Chairs
LIGHTING & FENESTRATION	Windows	
	Window Treatments	
	Room Lighting	LED
	Task Lighting	Yes, particularly to support taking photos for access badges
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Yes
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES:

TECH BENCH

For IT and AV services

AREA / OCCUPANCY	Area	315 sf.
	Ceiling Height	9'-0" minimum
	Occupancy	1-3
SPATIAL RELATIONSHIPS	Direct Access	Help Desk
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted Gypsum Board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic ceiling tile
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Work benches
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	Yes, as needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Yes
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES:

IT SERVER AND NETWORKING ROOM

Main server room for the City

AREA / OCCUPANCY	Area	320 sf.
	Ceiling Height	
	Occupancy	
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Access flooring
	Walls	Painted Gypsum Board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Open to structure
CASEWORK / DISPLAY		
SIGNAGE		
FURNITURE		N/A
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Special Requirements	Dedicated sub panel
	Data	Yes
	Security	Yes
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	No
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	Dedicated cooling system, and back up cooling system
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES: Ideally this room would not be located in the basement due to flooding concerns. However, it was agreed that it would be cost prohibitive to move.

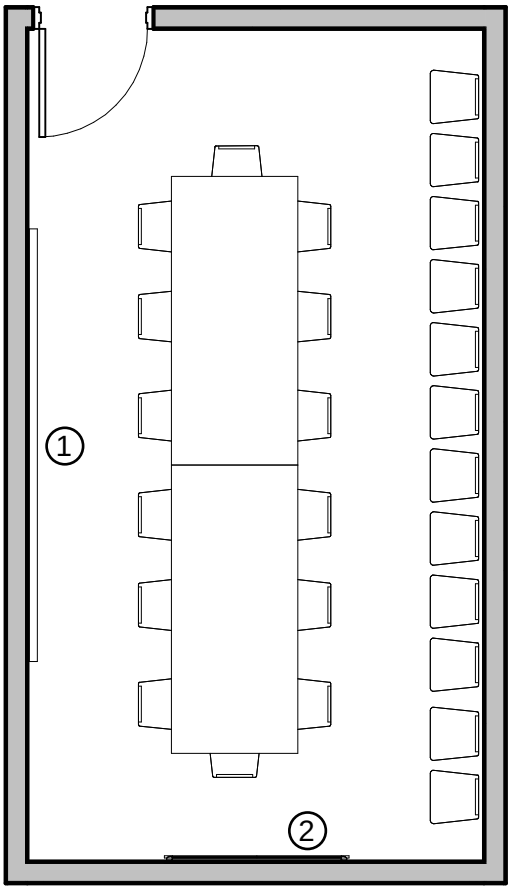
CONFERENCE ROOM - LARGE

Large meeting room

AREA / OCCUPANCY	Area	380 sf.
	Ceiling Height	9'-0"
	Occupancy	25-30
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Table with chairs
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	No
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	TV, wall mounted Audio for virtual meetings
	Acoustics	Separation from surrounding areas

NOTES:



① Markerboard
② Wall-mounted television

Conference Room

STORAGE – CITY CLERKS

Temperature and humidity controlled storage of city records

AREA / OCCUPANCY	Area	200 sf.
	Ceiling Height	9'-0" min.
	Occupancy	0
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	City Clerks office suite
FINISHES	Aesthetics	
	Floor	Resilient flooring/concrete
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		High capacity compact shelving system
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	NA
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	No
	Data	No
	Security	Locked door
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	Below 65 degrees
	Humidity	30%-50% RH
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	No requirements

NOTES: Room must be impervious to leaks and floods; should not be in a basement.

CONTROL ROOM

IT and AV services for Y-PAC/YCTV

AREA / OCCUPANCY	Area	120 sf.
	Ceiling Height	
	Occupancy	1-2
SPATIAL RELATIONSHIPS	Direct Access	Y-PAC Studio
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted Gypsum Board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		
SIGNAGE		
FURNITURE		As needed
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	
	Data	Yes
	Security	Yes
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES:

EDIT BAYS – COMMUNICATION AND PUBLIC AFFAIRS

Room with acoustic, data, and power for editing and recording

AREA / OCCUPANCY	Area	300 sf.
	Ceiling Height	9'-0" min.
	Occupancy	1-2
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board, acoustic tiles as needed
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic ceiling
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Desk and chair
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	NA
	Room Lighting	LED
	Task Lighting	As needed
ELECTRICAL	Telephone	No
	Data	yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	Separate from adjacent spaces. May also have special requirements depending on use

NOTES:.

GARAGE

Including storage and work area for vehicles

AREA / OCCUPANCY	Area	800 sf.
	Ceiling Height	
	Occupancy	2-3
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Concrete
	Walls	Painted Gypsum Board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame, Garage Door
	Ceiling	Open to structure
CASEWORK / DISPLAY		
SIGNAGE		
FURNITURE		N/A
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	N/A
	Room Lighting	LED
	Task Lighting	No
ELECTRICAL	Telephone	
	Data	
	Security	Yes
	Access Control	

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

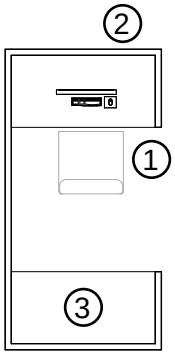
NOTES:

WORK STATION – BUILDING INSPECTORS

AREA / OCCUPANCY	Area	32
	Ceiling Height	9'-0" min.
	Occupancy	1
SPATIAL RELATIONSHIPS	Direct Access	Codes
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Resilient flooring/carpet
	Walls	Cubicle partitions
	Wall Base	
	Doors	
	Ceiling	Acoustic ceiling
CASEWORK / DISPLAY		
SIGNAGE		
FURNITURE		Desk and chair
LIGHTING & FENESTRATION	Windows	
	Window Treatments	
	Room Lighting	LED
	Task Lighting	As needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES:



① Desk with chair
② Partition wall
③ Layout/storage area

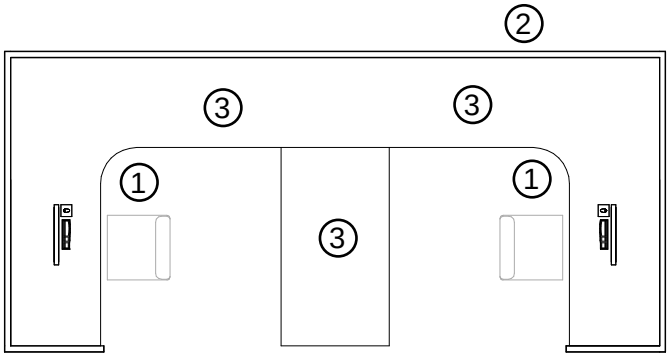
WORKSTATION – PLAN REVIEWERS

Shared space between two reviewers

AREA / OCCUPANCY	Area	144 sf.
	Ceiling Height	9'-0" min.
	Occupancy	
SPATIAL RELATIONSHIPS	Direct Access	Open to Codes open office area
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Resilient flooring/carpet
	Walls	Cubicle partitions
	Wall Base	
	Doors	
	Ceiling	Acoustic ceiling
CASEWORK / DISPLAY		
SIGNAGE		
FURNITURE		Desks with chairs, layout table
LIGHTING & FENESTRATION	Windows	
	Window Treatments	
	Room Lighting	LED
	Task Lighting	As needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No requirements
	Acoustics	

NOTES: Two Plan Reviewers will share the space, including layout area.



1. Desk with chair
2. Partition wall
3. Layout/work area

STORAGE – PROPERTY RECORD FILE ROOM

AREA / OCCUPANCY	Area	144 sf.
	Ceiling Height	9’-0” min.
	Occupancy	
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Resilient flooring/concrete
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Table for layout
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	NA
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	No
	Data	No
	Security	Locked door
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	Below 65 degrees
	Humidity	30%-50% RH
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	No requirements

NOTES:

GARAGE – CAR BAY

AREA / OCCUPANCY	Area	800 sf.
	Ceiling Height	10’-0” minimum
	Occupancy	
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Concrete
	Walls	Painted
	Wall Base	Rubber
	Doors	Wood with hollow metal frame, Garage Door
	Ceiling	Open to structure
CASEWORK / DISPLAY		
SIGNAGE		
FURNITURE		N/A
LIGHTING & FENESTRATION	Windows	Yes
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	As needed
ELECTRICAL	Telephone	
	Data	
	Security	Yes
	Access Control	

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES:

RECEPTION/WAITING AREA – CAPITOL THEATER

AREA / OCCUPANCY	Area	100 sf.
	Ceiling Height	9'-0" minimum
	Occupancy	2-4
SPATIAL RELATIONSHIPS	Direct Access	Main entry
	Secondary Adjacency	
FINISHES	Aesthetics	Welcoming, lively, warm colors
	Floor	Carpet
	Walls	Painted Gyp
	Wall Base	Rubber
	Doors	
	Ceiling	ACT
CASEWORK / DISPLAY		Display area for theater posters/events, if possible
SIGNAGE		Typical panel room sign
FURNITURE		Comfortable guest chairs
LIGHTING & FENESTRATION	Windows	Yes
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Yes
	Access Control	

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	

NOTES:

INTERVIEW ROOMS

AREA / OCCUPANCY	Area	150 sf.
	Ceiling Height	9'-0" minimum
	Occupancy	4-6
SPATIAL RELATIONSHIPS	Direct Access	Waiting area
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted Gyp
	Wall Base	Rubber
	Doors	Wood with HM frame
	Ceiling	ACT
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Small table and chairs
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	Yes, for interior windows as well as exterior
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	
	Data	Yes
	Security	Yes
	Access Control	

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	Separate from adjacent spaces

NOTES:

DOMESTIC VIOLENCE ADVOCATES

Shared office

AREA / OCCUPANCY	Area	180 sf.
	Ceiling Height	9'-0" minimum
	Occupancy	2
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	DVA waiting area
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted Gyp
	Wall Base	Rubber
	Doors	Wood with HM frame
	Ceiling	ACT
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Desks with chairs
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	As needed
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Yes
	Access Control	

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	Separate from adjacent spaces

NOTES:

SAU WAITING AREA

AREA / OCCUPANCY	Area	140 sf.
	Ceiling Height	
	Occupancy	2-4
SPATIAL RELATIONSHIPS	Direct Access	Interview Rooms
	Secondary Adjacency	Offices
FINISHES	Aesthetics	Comfortable, welcoming
	Floor	Carpet
	Walls	Painted Gyp
	Wall Base	Rubber
	Doors	
	Ceiling	ACT
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Comfortable chairs, some child sized. Play area for children.
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	Yes
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	
	Data	
	Security	Yes
	Access Control	

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	Space should be relatively quiet

NOTES:

INTERVIEW ROOMS

AREA / OCCUPANCY	Area	300 sf.
	Ceiling Height	9'-0" minimum
	Occupancy	3-4
SPATIAL RELATIONSHIPS	Direct Access	SAU waiting area
	Secondary Adjacency	
FINISHES	Aesthetics	Comfortable, calming
	Floor	Carpet
	Walls	Painted Gyp
	Wall Base	Rubber
	Doors	Wood with HM frame
	Ceiling	ACT
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Small table with chairs
LIGHTING & FENESTRATION	Windows	Yes, if possible
	Window Treatments	
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	
	Data	Yes
	Security	Yes
	Access Control	

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	
	Acoustics	Separate from adjacent spaces

NOTES: Aesthetics/decoration for one of the two rooms should be geared toward making children comfortable.

POLICE DEPARTMENT STORAGE

Temperature and humidity controlled storage

AREA / OCCUPANCY	Area	2100 sf.
	Ceiling Height	9'-0" min.
	Occupancy	0
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Resilient flooring/concrete
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		High capacity compact shelving system
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	NA
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	No
	Data	No
	Security	Locked door
	Access Control	Yes

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	Below 65 degrees
	Humidity	30%-50% RH
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	No requirements

NOTES: Room must be impervious to leaks and floods to the extent possible.

TRAINING ROOM

Large room for police training, can be shared with other departments

AREA / OCCUPANCY	Area	1,400 sf.
	Ceiling Height	10’-0” min.
	Occupancy	20-40
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Carpet
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	Acoustic panel ceiling
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Tables with chairs
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	NA
	Room Lighting	LED
	Task Lighting	No
ELECTRICAL	Telephone	Yes
	Data	Yes
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	Wall mounted television
	Acoustics	Additional treatment may be needed

NOTES: This room will function both as a “classroom” type training space and physical training space. A storage room should be located nearby to house either tables or mats, depending on use.

STORAGE – TRAINING ROOM/STUDIO

AREA / OCCUPANCY	Area	250 sf.
	Ceiling Height	9'-0" min.
	Occupancy	0
SPATIAL RELATIONSHIPS	Direct Access	
	Secondary Adjacency	
FINISHES	Aesthetics	
	Floor	Resilient flooring/concrete
	Walls	Painted gypsum board
	Wall Base	Rubber
	Doors	Wood with hollow metal frame
	Ceiling	
CASEWORK / DISPLAY		
SIGNAGE		Typical panel room sign
FURNITURE		Shelving as needed
LIGHTING & FENESTRATION	Windows	No
	Window Treatments	NA
	Room Lighting	LED
	Task Lighting	
ELECTRICAL	Telephone	No
	Data	No
	Security	Locked door
	Access Control	No

FIRE PROTECTION	Fire Alarm	
	Fire Sprinklers	
HEATING, VENTILATION, & AIR CONDITIONING	Temperature	
	Humidity	
PLUMBING	N/A	
SPECIALTY ITEMS	Audio / Visual / Intercom	No
	Acoustics	No requirements

NOTES:

9.2 SURVEY RESPONSES

CITY MANAGER

CITY COUNCIL

INFORMATION TECHNOLOGIES

CITY CLERKS

ONDS

COMMUNICATION AND PUBLIC AFFAIRS

COMMUNITY DEVELOPMENT

CODES

PLANNING

FINANCE

FINANCIAL SERVICES

PURCHASING

UTILITY SERVICES

HUMAN RESOURCES

ENGINEERING

FACILITIES

CAPITOL THEATRE

LEGAL

COURTS

POLICE DEPARTMENT

YAMA

ALSC ARCHITECTS

YAKIMA CITY HALL
STAKEHOLDER QUESTIONNAIRE

Dear Stakeholder,

The ALSC Team is looking for feedback that will provide guidance for the design of the Yakima City Hall project. We are underway with the Pre-Design phase of work and seeking input from all project stakeholders. The input received will be processed and used to inform the Project Program, a document that will establish the project scope, quality level and budget. With approval of the program, the team will use that information to complete the Conceptual Design phase, expected to be complete by mid-2023.

As part of the planning process, a set of Guiding Principles will be developed. These principles will be used as a framework to guide the team throughout the project and ultimately be used as a method of measuring whether the finished project is a success. A draft version of the Guiding Principles is listed below, the finished design should embody these objectives.

Service First	Efficient, friendly, interpersonal treatment
Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

Name of Stakeholder: Cally Price **Date:** 2/22/2023

Representing: City Manager's office

ALSC ARCHITECTS

QUESTION 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?

4. We will have 2 more people in our department (fill grant writer and Economic Development manager)

QUESTION 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?

Five or six plus a space/office for Council members

QUESTION 3: Considering your current space and looking towards the future, what works well now? what would you change? Close proximity to the city manager and assistant city manager works well. Being close to the Council office also works well.

QUESTION 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments? conference room and storage room for records. A work room can be shared w/ the clerks office.

Conference Room: To seat how many people? What type of display? 14 people with zoom set up

Storage Area: What will be stored? How much? boxes of old files

Work Room: What should be included? Copier? Layout space? copier, counter space

Staff Break Area: For how many people? 12 people (not all at the same time)

Other?

ALSC ARCHITECTS

QUESTION 5: Please list required adjacencies to other departments/areas:
Clerks office & Economic Development

QUESTION 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?

QUESTION 7: Please list any special utility requirements:

- Heating/Cooling yes - standard offices
- Ventilation/Exhaust (any equipment requiring separate vent, exhaust) standard
- Plumbing (sink, drinking fountain, etc) sink in break room
- Electrical Service (floor outlets, dimming lights, etc) standard offices
- Special Lighting NA
- Audio/Visual (projectors, television) televisions in 3 offices and conference room
- Communications (intercom, internet) standard
- Special Acoustics (privacy issues) NA
- Wall Display (markerboard, tackboard, etc) NA
- How many printers do you anticipate? 5 or 6

QUESTION 8: Please list required room finishes:

- Floor (carpet/linoleum/concrete, etc.) carpet
- Ceiling (lay-in acoustical panels, gyp soffits, etc.)
- Walls (vinyl wallcovering, washable paint, etc.) paint

QUESTION 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs) locked doors

QUESTION 10: Please share any other comments regarding your space _____

Thank you!

Sr No: 10

Response No : 10
1. Name of Stakeholder:
Patricia Byers
2. Representing:
Yakima City. Council member
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
7 members. Consistently
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
Currently have 1 office/conference room. Need two: Conference & office separate. Computer in both.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
Works fine now if only 3 Council members present and only 1 needs computer. Need an addition space for other tag 3 Council members. Also if one council member is in private meeting, no one else can enter or use. And only one Council person can use computer. Would be far more functional with separate conference room & office, and a computer in each.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
Conference room, 2 computers, no real use for other staff - locker or secure storage for personal valuables would be nice.
7. Conference Room: To seat how many people? What type of display?
Probably up to six people w/ wi-do connectivity available for zoom meetings or presentations.
8. Storage Area: What will be stored? How much?
Personal valuables, coats, etc
9. Work Room: What should be included? Copier? Layout space?
Copier & computer.
10. Staff Break Area: For how many people?
N/a
11. Other?
12. Question 5: Please list required adjacencies to other departments/areas:
Adjacent/ near to City Manager, Executive Assistant, Council chambers
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Council Chambers - larger than what we have now!
14. Heating/Cooling
Room temperature control.
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)

16. Plumbing (sink, drinking fountain, etc)
17. Electrical Service (floor outlets, dimming lights, etc)
18. Special Lighting
LED. Daylight brilliance
19. Audio/Visual (projectors, television)
Television in conference room.
20. Communications (intercom, internet)
Both
21. Special Acoustics (privacy issues)
22. Wall Display (markerboard, tackboard, etc)
Internet capable screen
23. How many printers do you anticipate?
1
24. Floor (carpet/linoleum/concrete, etc.)
Carpet
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
26. Walls (vinyl wallcovering, washable paint, etc.)
Walk covering or washable paint
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
Locked cabinets
28. Question 10: Please share any other comments regarding your space

IT Services

1. **How many staff are currently in your department?** 23 FTEs in IT services
    a. **How much growth do you anticipate in the next five years?** 2-3 FTEs and/or 2-3 Temporary Employees
    b. **What positions will be added?** Employees in 3 areas: Technician, Infrastructure and Application Support

2. **How many enclosed offices are required by your department?**
        i. IT Services will need 5 enclosed offices. 1 for the department head, 3 for supervisors and 1 for the administrative assistant.
    b. **Are any of them shared?** No
    c. **How many open work stations are needed?** IT services will need 20 work stations in 3 different areas. These 3 sections will need to collaborate within their sections, but will need to have some sort of separation from the other sections.
        i. Area 1 – Help Desk and Tech Area – 5 FTEs, up to 2 additional employees (FTE or Temp Employees.) This area needs a shared tech bench area and a front desk counter for supporting walkup customers. Additionally, this work group is often moving technical equipment to other city facilities. They utilize the back elevator for these moves, so this area will need a convenient path to this back elevator
        ii. Area 2 – Application Development and Support – 8 FTEs and up to 2 additional employees (FTE or Temp Employees)
        iii. Area 3 – Infrastructure Support – 5 FTEs and up to 2 additional employees (FTE or Temp Employees)
        iv. Area 4 – IT Server and Networking room – moving this room would be very complex. It houses all of our servers and requires specific power needs and a separate cooling system.
    d. **If growth is anticipated in the next five years, will the new positions need offices or open work stations?** Open work stations separated by cubicle walls

3. **Considering your current space and looking towards the future, what works well now?**
        i. We do currently have the 4 distinct areas outlined in question 2.
        ii. We have a front counter area located off of the main hall, in front of the elevator and stairs. This is very convenient for customers that need this area

iii. We are located in the basement, so we do not have a lot of non-IT individuals traveling around our offices. For the most part, this allows us to adhere to our physical security requirements.

b. **What would you change?**

i. Our IT Server room is also located in the basement. Due to the concerns related to flooding, we would prefer that this room is located on the main or second floor

ii. Our physical offices are spread out in the basement. This is less than ideal for the collaboration that needs to take place between these employees.

iii. Our conference room is located in a way that requires individuals utilizing it to travel through existing IT office areas. This is not truly secure and can be distracting.

iv. The basement is very much like a dungeon. Cement and cinderblock walls, asbestos tiles. We would prefer to have traditional offices… with windows to the outside if possible.

v. We have one bathroom in the basement for 20+ male employees. We would love to have more bathrooms for our male employees

vi. We work on technical equipment in over 100 city vehicles. Ideally, we would have a garage bay located close to our offices so that we can efficiently work on these vehicles.

4. What support facilities are required for your space?

i. Conference room large enough to hold 25-30
   1. Large Zoom display
   2. Can be shared/reserved by other departments

ii. IT Server and Networking room. Area 4 mentioned in 2C.
   1. Not shared with other departments
   2. Current room is 16’ by 20’
   3. Requires own cooling system
   4. Requires separate power sub panel
   5. This is the main networking location. This requires quite a bit of low voltage networking wiring
   6. Special floor or ceiling for electrical and communication cabling

iii. IT Tech bench mentioned in Area 1 mentioned in 2C
   1. Not shared with other departments
   2. Needs to be at least 26’ by 12’

iv. Front desk counter mentioned in Area 1 mentioned in 2C
   1. 2-4 people
   2. We take ID access badges in this area, so lighting must be conducive to this task

v. Secure storage room for technical equipment inventory. N
    1. Needs to be at least 450 sq ft (40' by 12')
    2. Not shared with other departments
vi. We currently have an area for our IT Services specific amenities. Water cooler, refrigerator. This new area could also house our large department-wide copier.
    1. Needs to be at least 100 sq ft 10' by 10'
    2. Not shared with other departments
vii. There is a large break room for all departments located in the basement. This room has a refrigerator, freestanding oven/stove range, sink and 2 microwaves. We do not need this on the same floor as IT Services, but it is nice to have it available. This room can hold 8-10
viii. We have a telecom closet in the basement that we would recommend moving
ix. We have network equipment throughout the city's facilities that should be located within secure closets.

5. **Please list required adjacencies to other departments/areas:**
    a. None

6. **Does your department require public interface? Waiting Area? If so, how many people should it accommodate? Also, can it be shared with other departments?**
    a. No

7. **Please list any specific utility requirements:**
    a. Heating/Cooling – As noted above, the server room (Area 4) listed above has special cooling requirements
    b. Power – As noted above, the server room (Area 4) listed above has special power requirements. They must be on their own circuits
    c. Communications – As noted above, the server room (Area 4) listed above, this area requires quite a bit of low voltage networking wiring

8. **Please list required room finishes:**
    a. Carpet for offices, shared areas and halls
    b. Area 4 - Server Room requires special flooring or ceiling for electrical and communication cabling

9. **Please describe any specific security requirements for your space:**
    a. All work areas, storage room and server room will all need to be in secure areas

b. The conference room and front desk area should be accessible from a hall. Non-IT persons should not be traveling through IT office areas to access the conference room and front counter area

10. **Please share any other comments regarding your space**:

Sr No: 12

Response No : 12
1. Name of Stakeholder:
Sonya Claar Tee
2. Representing:
City Clerk's
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
Five now, adding a sixth in a couple of months, no other growth anticipated in the next five years.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
Five offices require enclosed spaces -- none of those are shared. One open work station that is sometimes shared. No changes anticipated in the next five years.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
Our offices are not all in the same area. Would be nice to have them all in the same area. Our current space does work, with the exception of our new addition will need an enclosed office, which we don't currently have so will need to build one out.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
We have a conference room nearby that is shared with H/R--we can easily continue to share a conference room. We have a storage vault in the basement as well as rolling files in our main clerk area.
7. Conference Room: To seat how many people? What type of display?
10 people
8. Storage Area: What will be stored? How much?
Lots of paper records kept forever.
9. Work Room: What should be included? Copier? Layout space?
We have multiple work room areas, 1 has a refrigerator and shared copier 1 has shredder/fax.
10. Staff Break Area: For how many people?
6 -- we have a counter with a microwave and coffee maker
11. Other?
12. Question 5: Please list required adjacencies to other departments/areas:
We must be near City Manager and Mayor/Council offices, as well as the Council Chambers.
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Yes. We use the lobby as a waiting area and have one in our main clerk area with two chairs. The lobby area is shared with all city offices.
14. Heating/Cooling
A central records room must be temperature controlled, humidity controlled, impervious to leaks or floods (can't be in a basement).
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
We have a large copy machine shared with other offices that should be vented.

16. Plumbing (sink, drinking fountain, etc)
Because of our work with the Council and in the Council Chambers, we need access to a sink area, which we currently have behind the Council Chambers.
17. Electrical Service (floor outlets, dimming lights, etc)
In our main Clerk area there are approx. 23 outlets being utilized, includes Rodney's desk area, shredder / fax area, coffee pot/microwave area and area where new office will be. Copy room area with refrigerator has 3 utilized outlets; 4 other offices utilize approximately 13-15 outlets.
18. Special Lighting
19. Audio/Visual (projectors, television)
Several offices have TV's in order to take minutes of meetings held in the Council Chambers. The shared conference room is a zoom room and has a whiteboard, with multiple outlets. We also have multiple phone lines.
20. Communications (intercom, internet)
Yes, internet, multiple phone lines. No intercom -- we had one in the building previously but someone took it out without checking if needed. May be something we need building wide if we have a lockdown or an emergency.
21. Special Acoustics (privacy issues)
5 of 6 offices need privacy for HIPPA compliance and reviewing confidential materials, coban videos, 911 calls etc.
22. Wall Display (markerboard, tackboard, etc)
Whiteboard in the conference room.
23. How many printers do you anticipate?
We have 3 offices with individual, smaller printers that are still needed, along with the large shared copy machine mentioned previously.
24. Floor (carpet/linoleum/concrete, etc.)
Offices and general work areas need carpet for sound dampening.
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
Nothing special required.
26. Walls (vinyl wallcovering, washable paint, etc.)
Nothing special required.
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
Our rolling file cabinets are locked nightly. The offices with privacy needs have locks. The Central storage room will require limited access and should be locked at all times.
28. Question 10: Please share any other comments regarding your space
So many divisions at the City have their own individual break rooms. Those are so unnecessary. We have a large breakroom in the basement that everyone should be sharing/utilizing. The City Clerk's office has a small conference table (seats 4), the Record Admin. has a small table for 2 in order to meet with LEOFF 1 pension members.

Sr No: 7

Response No : 7
1. Name of Stakeholder:
Orville F. Otto II
2. Representing:
City of Yakima, Office of Neighborhood Development Services
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
Currently we only have 2 positions. We have lost four staff members over the last year. So, I believe we will be adding back the four staff members we lost. Manager, Grant Financial Specialist, Home Loan Specialist and a carpenter.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
four. None shared. 1 receptionist area. None foreseen.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
We currently have plenty of space for this department.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
Our facility is located away from City Hall and at this point in time we have all the support facilities that are required. Conference room, storage and a shop.
7. Conference Room: To seat how many people? What type of display?
Our conference room seats 9 people. Has a white board and small TV.
8. Storage Area: What will be stored? How much?
We have a small office upstairs that we use for storage of misc. office supplies.
9. Work Room: What should be included? Copier? Layout space?
The copier is located in the main Office receptionist area.
10. Staff Break Area: For how many people?
Our Building has a kitchen and we normally use the conference room for breaks.
11. Other?
12. Question 5: Please list required adjacencies to other departments/areas:
None.
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Yes. Yes. At least four. No.
14. Heating/Cooling
Yes
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
None.
16. Plumbing (sink, drinking fountain, etc)

Yes, but already in place.
17. Electrical Service (floor outlets, dimming lights, etc)
Yes, but already in place.
18. Special Lighting
No
19. Audio/Visual (projectors, television)
No
20. Communications (intercom, internet)
Yes, already in place.
21. Special Acoustics (privacy issues)
None.
22. Wall Display (markerboard, tackboard, etc)
Yes, already in place.
23. How many printers do you anticipate?
4
24. Floor (carpet/linoleum/concrete, etc.)
None
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
None
26. Walls (vinyl wallcovering, washable paint, etc.)
None
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
Our building has a security system due to sensitive files and locking cabinets.
28. Question 10: Please share any other comments regarding your space

Sr No: 2

Response No : 2
1. Name of Stakeholder:
Randy Beehler
2. Representing:
Community Relations
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
There are currently 5 staff positions in the Community Relations office. No additional staff are anticipated to be added in the next 5 years.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
One enclosed office is required at the Community Relations/YCTV/Y-PAC building. 4 open work stations are needed.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
The current space at the Community Relations/YCTV/Y-PAC building is adequate now and will accomodate any future growth.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
The Community Relations/YCTV/Y-PAC building contains edit bays, two studios, a studio control room, a conference room, a garage, an equipment room, and work areas. Other departments likely would not share those spaces.
7. Conference Room: To seat how many people? What type of display?
The existing conference room at the Community Relations/YCTV/Y-PAC building can accomodate about 8.
8. Storage Area: What will be stored? How much?
TV production equipment
9. Work Room: What should be included? Copier? Layout space?
N/A
10. Staff Break Area: For how many people?
N/A
11. Other?
N/A
12. Question 5: Please list required adjacencies to other departments/areas:
N/A
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Yes, our department requires public interface. The waiting area at the existing Community Relations/YCTV/Y-PAC building accomodates about 3 people.
14. Heating/Cooling
The HVAC equipment at the existing Community Relations/YCTV/Y-PAC building serves only that building.

15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
N/A
16. Plumbing (sink, drinking fountain, etc)
Plumbing the existing Community Relations/YCTV/Y-PAC building serves only that building.
17. Electrical Service (floor outlets, dimming lights, etc)
Electrical service at the existing Community Relations/YCTV/Y-PAC building serves only that building.
18. Special Lighting
Studio lighting is in place at the existing Community Relations/YCTV/Y-PAC building.
19. Audio/Visual (projectors, television)
Multiple audio/visual equipment is in place at the existing Community Relations/YCTV/Y-PAC building.
20. Communications (intercom, internet)
Communications systems are in place at the existing Community Relations/YCTV/Y-PAC building.
21. Special Acoustics (privacy issues)
Some sound deading material is in place in on edit bay at the existing Community Relations/YCTV/Y-PAC building.
22. Wall Display (markerboard, tackboard, etc)
N/A
23. How many printers do you anticipate?
1
24. Floor (carpet/linoleum/concrete, etc.)
Flooring is in place at the existing Community Relations/YCTV/Y-PAC building.
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
Ceiling material is in place at the existing Community Relations/YCTV/Y-PAC building.
26. Walls (vinyl wallcovering, washable paint, etc.)
Walls are painted at the existing Community Relations/YCTV/Y-PAC building.
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
The existing Community Relations/YCTV/Y-PAC building has a security system in place.
28. Question 10: Please share any other comments regarding your space

Sr No: 6

Response No : 6
1. Name of Stakeholder:
Joan Davenport
2. Representing:
Community Development Department
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
23 FTE currently. In the next 5 years, we would like to add 2 Planners, for a total of 25 staff
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
The Department Head, the Division managers, Supervising Code Inspector and the Planners require a private office, due to the confidential nature of their work. 9 Offices are needed. 3 open work station areas would be needed for Code Inspection staff, Building inspectors and Plan review. Additionally, we operate a front counter to handle the public for both Planning and Codes/Permitting. We have three staff that work in this front area.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
The front counter and shared areas betweenPlanning and Codes is ideal
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
We need a conference room for public meetings and staff meetings.
7. Conference Room: To seat how many people? What type of display?
we need between 15 to 20 seats inthe conference room. a ZOOM room and a large wall monitor are used
8. Storage Area: What will be stored? How much?
we have a shared file room for street address information in City hall
9. Work Room: What should be included? Copier? Layout space?
copy room is used heavily
10. Staff Break Area: For how many people?
kitchen area is needed.
11. Other?
front counter design! need an update.
12. Question 5: Please list required adjacencies to other departments/areas:
Planning, Permitting/Codes and Engineering
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
This is themost important aspect of our Department - daily access to staff is vital to our service. At times, we can have up to 12 people waiting.
14. Heating/Cooling
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)

16. Plumbing (sink, drinking fountain, etc)
17. Electrical Service (floor outlets, dimming lights, etc)
18. Special Lighting
19. Audio/Visual (projectors, television)
20. Communications (intercom, internet)
21. Special Acoustics (privacy issues)
22. Wall Display (markerboard, tackboard, etc)
23. How many printers do you anticipate?
24. Floor (carpet/linoleum/concrete, etc.)
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
26. Walls (vinyl wallcovering, washable paint, etc.)
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
28. Question 10: Please share any other comments regarding your space

YAKIMA CITY HALL
STAKEHOLDER QUESTIONNAIRE

Dear Stakeholder,

The ALSC Team is looking for feedback that will provide guidance for the design of the Yakima City Hall project. We are underway with the Pre-Design phase of work and seeking input from all project stakeholders. The input received will be processed and used to inform the Project Program, a document that will establish the project scope, quality level and budget. With approval of the program, the team will use that information to complete the Conceptual Design phase, expected to be complete by mid-2023.

As part of the planning process, a set of Guiding Principles will be developed. These principles will be used as a framework to guide the team throughout the project and ultimately be used as a method of measuring whether the finished project is a success. A draft version of the Guiding Principles is listed below, the finished design should embody these objectives.

Service First	Efficient, friendly, interpersonal treatment
Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

Name of Stakeholder: Glenn Denman **Date:** 2/22/23

Representing: City of Yakima Codes Division (within Community Develpment Department)

QUESTION 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?

18, with potential of 20. This applies to the Code Administraion Division within the Community Development Department.

QUESTION 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?

4 enclosed offices, none shared. 16 open workstations. The 2 potential positions will need open workstations.

QUESTION 3: Considering your current space and looking towards the future, what works well now? what would you change? We need space for a kiosk for public to use for self-help electronic permitting and licensing. Our permit counter needs accomodations for public interaction.

QUESTION 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments? Conference room for 20 people, to be shared with the Planning Division, a property record file room (approx. 12x24, shared by the Planning Department), 12x12 storage room for building plans, plus a 10x10 storage room for our code compliance staff.

Conference Room: To seat how many people? What type of display? 20 with Zoom Room display

Storage Area: What will be stored? How much? Property files, pending building plans, other documents. Also, stationary, envelopes, etc.

Work Room: What should be included? Copier? Layout space? Copier needs to be readily available to front counter staff, with additional workroom with another copier.

Staff Break Area: For how many people? 20

Other?

QUESTION 5: Please list required adjacencies to other departments/areas:

Permit Project Coordinator in proximity to building Plans Examiners and front counter staff. Code Compliance Project Cordinator with Code Compliance Officers, Supervising Code Inspector with Codes Manager.

QUESTION 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?

Yes, our 3-6 permit technicians/staff meet with the public daily, and queing needs room for 10 people. This is shared with Planning staff.

QUESTION 7: Please list any special utility requirements:

- Heating/Cooling
- Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
- Plumbing (sink, drinking fountain, etc) Drinking fountain, lunch sink.
- Electrical Service (floor outlets, dimming lights, etc)
- Special Lighting
- Audio/Visual (projectors, television) All staff need dual monitors, 3 positions use 40 inch monitors.
- Communications (intercom, internet) All staff need internet access, including at the public counter.
- Special Acoustics (privacy issues) Staff spends a lot of time of phones.
- Wall Display (markerboard, tackboard, etc) Bulliten board at public counter, marker boards in offices.
- How many printers do you anticipate? 5

QUESTION 8: Please list required room finishes:

- Floor (carpet/linoleum/concrete, etc.) Carpet in offices and conference room; otherwise, linoleum.
- Ceiling (lay-in acoustical panels, gyp soffits, etc.)
- Walls (vinyl wallcovering, washable paint, etc.)

QUESTION 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs) Property record room needs badge access, barrier between public and staff, office doors need locks, panic button (to access dispatch).

QUESTION 10: Please share any other comments regarding your space Our current hallways/offices are separated from public access areas, this will need to continue. Building plans examiners, codes manager, codes supervisor and permit project coordinator need room to roll out large sets of building plans such as 30"x42" or more with additional space for code books. GD

Thank you!

Sr No: 4

Response No : 4
1. Name of Stakeholder:
Joseph Calhoun
2. Representing:
Planning Division
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
Three current staff (full-time) and one part-time. However, we have two positions that just closed last week and hopefully will be hired soon. We are also budgeted for another position which will likely be filled in the next few months. Full-staff will be 1 manager, 2 senior planners, 1 associate planner, 1 assistant planner, and 1 planning technician for 6 full time FTE's.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
All FTE's are in enclosed offices. No offices are shared. No open workstations needed. New positions will need offices.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
The current layout works well. It is important for planning staff to have their own office space. We frequently hold individual meetings with customers and/or city staff that do not require a full meeting space - these can be accomplished in an individual office and would not be feasible in an open workstation. We also frequently lengthy phone calls and zoom meetings.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
We frequently utilize the Planning Conference room for weekly development service team meetings and staff meetings. This conference room is outfitted for virtual meetings and utilizes online applications such as GIS and our permit tracking system. The conference room is shared with other departments which can be scheduled through a shared calendar. We use a streetfile room that contains hard copies of documents based on address. This area is shared with Codes.
7. Conference Room: To seat how many people? What type of display?
20+ - Neat board display
8. Storage Area: What will be stored? How much?
Street files - thousands
9. Work Room: What should be included? Copier? Layout space?
Copier, layout area - not enough space to type above. Shared with Codes
10. Staff Break Area: For how many people?
Kitchen area - room for a couple people. Not really a break area
11. Other?
Front counter shared with Codes
12. Question 5: Please list required adjacencies to other departments/areas:
Codes and Engineering
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Yes. The front counter has a waiting area for several people. It is shared with Codes and Engineering.

14. Heating/Cooling
Both
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
N/A
16. Plumbing (sink, drinking fountain, etc)
Yes
17. Electrical Service (floor outlets, dimming lights, etc)
Nothing out of the ordinary
18. Special Lighting
No
19. Audio/Visual (projectors, television)
Neat Board in the Planning Conference Room
20. Communications (intercom, internet)
Internet, Phone
21. Special Acoustics (privacy issues)
Individual offices
22. Wall Display (markerboard, tackboard, etc)
Whiteboard
23. How many printers do you anticipate?
1 full printer/scanner
24. Floor (carpet/linoleum/concrete, etc.)
Carpet
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
No preference
26. Walls (vinyl wallcovering, washable paint, etc.)
No preference
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
Card-access area for street files. Card-access from front counter area to offices.
28. Question 10: Please share any other comments regarding your space
I want to highlight the importance of individual office space. As mentioned previously, meetings, phone calls, zoom meetings frequently require private space. We have several project deliverables from presentations and staff reports to public hearing documents and committee/commission work that require a quite, uninterruptable space.

Sr No: 1

Response No : 1
1. Name of Stakeholder:
Jennifer Ferrer-Santa Ines
2. Representing:
Director of Finance & Budget
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
33 FTEs within Financial Services, Purchasing, and Utility Services I anticipate the addition of 1-2 additional FTEs in the next five years Buyer, Accountant
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
19 offices, none are shared. A workstation is needed for each FTE. 3 open stations for Financial Services 1 in Purchasing 12 in Utility Services
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
It would be great to have all divisions on the same floor
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
conference room for staff meetings-can be shared storage area for files and supplies-Finance Only Break rom-can be shared
7. Conference Room: To seat how many people? What type of display?
20
8. Storage Area: What will be stored? How much?
Payroll, Registers, Published Reports, supplies
9. Work Room: What should be included? Copier? Layout space?
copier, fax, large table
10. Staff Break Area: For how many people?
20
11. Other?
Kitchen-shared
12. Question 5: Please list required adjacencies to other departments/areas:
All divisions of Finance
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Yes to public interface, will require a waiting area to accommodate up to 10 people at a time
14. Heating/Cooling
yes and air purifiers
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
Yes

16. Plumbing (sink, drinking fountain, etc)
Yes
17. Electrical Service (floor outlets, dimming lights, etc)
Yes
18. Special Lighting
19. Audio/Visual (projectors, television)
Yes
20. Communications (intercom, internet)
Yes
21. Special Acoustics (privacy issues)
Yes
22. Wall Display (markerboard, tackboard, etc)
Yes
23. How many printers do you anticipate?
Depends on how staff are situated 3-4
24. Floor (carpet/linoleum/concrete, etc.)
Yes
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
Yes
26. Walls (vinyl wallcovering, washable paint, etc.)
Yes
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
locked cabinets, doors,
28. Question 10: Please share any other comments regarding your space
Having all divisions will improve collaboration

Sr No: 3

Response No : 3
1. Name of Stakeholder:
Kimberly Dominé
2. Representing:
City of Yakima - Finance Division
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
Currently have a staff of 15 with no anticipated growth. This includes myself and my 11 direct reports plus the Finance Director and 2 of her direct reports.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
12 enclosed offices not shared. 2 open work stations 1 open work station that is currently located in the Utility Customer Service area. No anticipated growth.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
Our current set up is ideal. We have exactly the right amount of offices, open work stations and shared space. Plus we are in a secured area that is only accessible by a key card. Also within the secured area is our conference room, copier/supply room and a private bathroom.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
a) Conference room: Lots of meetings are held in this room and is available to other departments to use. b) Copier / Supply / Kitchen comb room: copier, check printer and pc, all the office supplies, refrigerator, microwave, coffee pot, toaster oven, toaster, air fryer. Has a nice countertop and cabinets. c) Storage room: currently located in the basement, not within our secured area and is locked.
7. Conference Room: To seat how many people? What type of display?
Seats 14-16 people comfortably. A screen with a projector hooked up to a laptop is needed.
8. Storage Area: What will be stored? How much?
We have a large locked storage room in the basement that holds 6 Years worth of documents.
9. Work Room: What should be included? Copier? Layout space?
Copier / Supply / Kitchen comb room: Copier, Check Printer & PC, Frig, & Countertop Appliances.
10. Staff Break Area: For how many people?
There is a common break room in the basement, my staff will use the conference room if available.
11. Other?
Private Bathroom: we actually have 2. Very nice to not have to leave the area to use the public one.
12. Question 5: Please list required adjacencies to other departments/areas:
Utility Customer Service division, primarily because I have that 1 employee that sits over there.
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
No - we are not accessible to the public.
14. Heating/Cooling
Yes we need heat and cooling.
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)

Not that I'm aware of.
16. Plumbing (sink, drinking fountain, etc)
Bathroom with a toilet and sink.
17. Electrical Service (floor outlets, dimming lights, etc)
Floor outlets, and dimming lights in a couple of spaces. I have a couple of staff members that are light sensitive.
18. Special Lighting
I think this goes with the dimming lights from above.
19. Audio/Visual (projectors, television)
Projector and screen in the conference room.
20. Communications (intercom, internet)
Internet.
21. Special Acoustics (privacy issues)
Privacy is important and sound. Many of my staff will participate in zoom meeting or calls from their office and we need to make sure that the noise from the meetings don't interrupt the rest of the staff and that the information from these meetings is not audible to the rest of the staff.
22. Wall Display (markerboard, tackboard, etc)
Whiteboards.
23. How many printers do you anticipate?
8 in total; 1 main printer/copier 1 check printer 6 desk top printers
24. Floor (carpet/linoleum/concrete, etc.)
Carpet.
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
Acoustical drop ceiling with lights.
26. Walls (vinyl wallcovering, washable paint, etc.)
Washable paint.
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
The Finance division includes the payroll, we have sensitive information in the office that needs to be secure. We also have supplies such as our check stock that needs to be secure. That is why we are in a secured area.
28. Question 10: Please share any other comments regarding your space
As I stated before, our space is ideal as is, everyone has the space they need. Another item we have within our area is, the director and manager offices have additional space that holds a small table and chairs for those small private meetings.

YAKIMA CITY HALL
STAKEHOLDER QUESTIONNAIRE

Dear Stakeholder,

The ALSC Team is looking for feedback that will provide guidance for the design of the Yakima City Hall project. We are underway with the Pre-Design phase of work and seeking input from all project stakeholders. The input received will be processed and used to inform the Project Program, a document that will establish the project scope, quality level and budget. With approval of the program, the team will use that information to complete the Conceptual Design phase, expected to be complete by mid-2023.

As part of the planning process, a set of Guiding Principles will be developed. These principles will be used as a framework to guide the team throughout the project and ultimately be used as a method of measuring whether the finished project is a success. A draft version of the Guiding Principles is listed below, the finished design should embody these objectives.

Service First	Efficient, friendly, interpersonal treatment
Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

Name of Stakeholder: Susan Knotts **Date:** 02-23-2023

Representing: Department: Finance Division: Purchasing

QUESTION 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?

Current Staff Members: 4

Anticipated Additional Staff: 1 Buyer within the end of 2023

QUESTION 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?

5 closed offices. This includes the additional Buyer that will be added by the end of 2023

None of our offices are shared.

No open work spaces are needed.

QUESTION 3: Considering your current space and looking towards the future, what works well now? what would you change? What works well: Purchasing does not have desktop printers. We share an all-in-one printer/copier/fax machine. Purchasing staff shares its own refrigerator, microwave, toaster and coffee maker.

What would we change: Purchasings offices to be closer to each other. Our current offices are separated by offices for another division.

QUESTION 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments? Meeting space and/or conference room for holding staff meetings, meetings with vendors and performing RFP/RFQ evaluations with committee members and holding vendor presentations. Storage area for record retention files and and office supplies. Both can be shared. A room for copier/printer/fax and refrigerator, microwave, etc.

Conference Room: To seat how many people? What type of display? Accommodate about 10 people plus equipment. Audio/visual equipped with internet & network and the ability to conduct virtual Mtgs.

Storage Area: What will be stored? How much? About 60 boxes and one large file cabinet of retention files and a closet of office supplies like toner, paper, binders, etc.

Work Room: What should be included? Copier? Layout space? Copier/printer/fax machine, phone and other office related items. Work table with chairs and bookcase to hold binders.

Staff Break Area: For how many people? We eat lunch in our offices and utilize Engineering's sink in their break room to wash dishes and get water for plants.

Other? _____

QUESTION 5: Please list required adjacencies to other departments/areas:

None.

QUESTION 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?

Purchasing does not require public interface but we do occasionally meet with vendors. When we do meet with vendors, our waiting area only needs to accommodate about 3-4 people. This area can be shared.

QUESTION 7: Please list any special utility requirements:

- Heating/Cooling Only that it works. Being adjustable would be super.
- Ventilation/Exhaust (any equipment requiring separate vent, exhaust) No
- Plumbing (sink, drinking fountain, etc) A sink and drinking fountain to share is nice
- Electrical Service (floor outlets, dimming lights, etc) Outlet to run computers, monitors, scanners, speakers, heater/fan, and all that jazz along with connection to the network and internet.
- Special Lighting No
- Audio/Visual (projectors, television) Computers and speakers, projector for meeting/conf. room.
- Communications (intercom, internet) Phone, internet and network connection.
- Special Acoustics (privacy issues) No real privacy issues but quite for focus on documents & projects
- Wall Display (markerboard, tackboard, etc) Markerboards and tackboards.
- How many printers do you anticipate? One all-in-one unit

QUESTION 8: Please list required room finishes:

- Floor (carpet/linoleum/concrete, etc.) Carpet.
- Ceiling (lay-in acoustical panels, gyp soffits, etc.) Don't need anything special.
- Walls (vinyl wallcovering, washable paint, etc.) Washable paint and the ability to hang items on walls. Windows would be wonderful.

QUESTION 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs) Doors on offices. Security badge to enter area so general public doesn't have access.

QUESTION 10: Please share any other comments regarding your space Purchasing works independently on projects. Would like office space large enough to meet with about 2 people at a time to discuss projects and review various documents.

Thank you!

Sr No: 9

Response No : 9
1. Name of Stakeholder:
James Dean
2. Representing:
Utility Services Division
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
14 staff members. no anticipated growth.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
3 enclosed offices 8 cubicle style work stations
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
current offices and break room and mail room work well current floor layout/cubicles need to be changed and front customer service counter need to re designed.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
conference room can be shared space, storage room for paper goods, envelopes mail supplies etc.
7. Conference Room: To seat how many people? What type of display?
conference room should seat 16 comfortably av hook up are needed
8. Storage Area: What will be stored? How much?
computer paper, office supplies.
9. Work Room: What should be included? Copier? Layout space?
copy machine, mail processing machine
10. Staff Break Area: For how many people?
8-10 comfortably.
11. Other?
12. Question 5: Please list required adjacencies to other departments/areas:
none
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
yes we are public facing. waiting area should accommodate 4-5 people
14. Heating/Cooling
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
16. Plumbing (sink, drinking fountain, etc)

17. Electrical Service (floor outlets, dimming lights, etc)
18. Special Lighting
19. Audio/Visual (projectors, television)
20. Communications (intercom, internet)
21. Special Acoustics (privacy issues)
22. Wall Display (markerboard, tackboard, etc)
23. How many printers do you anticipate?
3
24. Floor (carpet/linoleum/concrete, etc.)
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
26. Walls (vinyl wallcovering, washable paint, etc.)
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
security cameras to monitor area and safe.
28. Question 10: Please share any other comments regarding your space

Sr No: 13

Response No : 13
1. Name of Stakeholder:
Connie Mendoza
2. Representing:
Human Resources Department
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
Current staffing level is 11 employees. Potential growth over the next 5 years is anticipated to be approximately 3 or 4 additional staff members. Possible classifications for that growth may be: HR Division Manager/Deputy, Labor Negotiator, Trainer and an Administrative Assistant to the Director.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
Current staffing levels require a minimum of 9 enclosed office spaces with 2 being shared. This is due to space constraints, not need. As we grow, we would need closed office spaces for all positions except the Administrative Assistant position. If we add all of the proposed positions over the next five years, that would be 14 enclosed offices and one could be open in the reception area where the assistant would be located.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
Offices close in proximity is beneficial for collaboration, we have easy access for employees and the public. Entry/Exit access points are secured. Department is very cramped with limited space. Additional enclosed office space is needed. A larger reception area, dedicated space for files, equipment, training, computer lab, conference room and breakroom is needed rather than lining all the hallways.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
Application Kiosk located in a lobby accessible to public but in close proximity. Secure storage room, copy/supply room. We also need a dedicated break room, conference room, training room, computer lab and lobby area. These areas could be shared but would need to be in close proximity to office area.
7. Conference Room: To seat how many people? What type of display?
seat a minimum of 15 people. Set up as a zoom room with networked computer access.
8. Storage Area: What will be stored? How much?
Required retention documents, medical records, recruitment docs, personnel files, workers comp files
9. Work Room: What should be included? Copier? Layout space?
Large Copier/Fax/Scanner, shredding machine, recycle bin, work table, supply storage
10. Staff Break Area: For how many people?
15
11. Other?
12. Question 5: Please list required adjacencies to other departments/areas:
None required.
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Public interface is required and also a waiting area that can accommodate 5-10 people. I could be a shared space.

14. Heating/Cooling
Normal
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
Normal
16. Plumbing (sink, drinking fountain, etc)
Break room - normal such at refrigerator, sink, electrical, etc.
17. Electrical Service (floor outlets, dimming lights, etc)
Normal
18. Special Lighting
none
19. Audio/Visual (projectors, television)
Zoom room equipment, computer access, telephones, etc.
20. Communications (intercom, internet)
Internet access required in all areas
21. Special Acoustics (privacy issues)
Solid doors for offices and insulation to allow for confidential conversations, etc.
22. Wall Display (markerboard, tackboard, etc)
none
23. How many printers do you anticipate?
One large for entire office use and up to 4 additional in individual offices depending on assigned tasks.
24. Floor (carpet/linoleum/concrete, etc.)
Carpeting
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
26. Walls (vinyl wallcovering, washable paint, etc.)
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
Offices, doors, cabinets, room privacy is required for Human Resources. Secured access is also important and the ability to lock doors upon demand in the event of an emergency.
28. Question 10: Please share any other comments regarding your space

YAKIMA CITY HALL
STAKEHOLDER QUESTIONNAIRE

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Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

Name of Stakeholder: BILL PRESTON **Date:** 3/1/23

Representing: ENGINEERING

QUESTION 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?

current - 9

future - 1 (Asst Engineer)

QUESTION 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?

6 4 ~~0~~

QUESTION 3: Considering your current space and looking towards the future, what works well now? what would you change? - counter works well, copier space works well, Need to combine hard copy of (storage) documents, (Conference Room) (Kitchen) Need - dedicated equipment storage

QUESTION 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?

Equipment Storage, Front facing counter - Customer Service
Hard copy storage, Copier Area, Project book Area
Access to conference room - white board
Kitchen area - w/ sink, refriperator, microwave, toaster space

Conference Room: To seat how many people? What type of display?

10-15, A/V resources

Storage Area: What will be stored? How much? 20x25

Maps, documents, plans, files

Work Room: What should be included? Copier? Layout space?

Copier, Plotter, large format Copier/Scanner, (2) layout tables, ~~Mailing~~ supplies table for copier,

Staff Break Area: For how many people? 10

Other? 2 workstations (vacant for transient coworkers)

QUESTION 5: Please list required adjacencies to other departments/areas:
Desired - Planning, Codes, Comm. Dev, Finance

QUESTION 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Yes, yes, shared, 15 people

QUESTION 7: Please list any special utility requirements:

- Heating/Cooling
- Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
- Plumbing (sink, drinking fountain, etc)
- Electrical Service (floor outlets, dimming lights, etc)
- Special Lighting
- Audio/Visual (projectors, television) (conference room A/V)
- Communications (intercom, internet)
- Special Acoustics (privacy issues)
- Wall Display (markerboard, tackboard, etc)
- How many printers do you anticipate? Bill, Common
  Scanners - 1
  Plotter, Scanner
  white boards - (10 + conference)

QUESTION 8: Please list required room finishes: N/A

- Floor (carpet/linoleum/concrete, etc.)
- Ceiling (lay-in acoustical panels, gyp soffits, etc.)
- Walls (vinyl wallcovering, washable paint, etc.)

QUESTION 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
~~Locked desk - me - Bill~~
All offices need locking drawer

QUESTION 10: Please share any other comments regarding your space _____

Thank you!

YAKIMA CITY HALL
STAKEHOLDER QUESTIONNAIRE

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Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

Name of Stakeholder: Kerry Jones **Date:** 2/21/23

Representing: Fleet and Facilities Manager

QUESTION 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?

Fleet has 13 and Facilities has 6, We will need at least 3 more in Facilities to take care of new building and manitain old buildings. Will not affect Fleet.

QUESTION 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?

Will need a office in new building and a storage room and work/tool room.

QUESTION 3: Considering your current space and looking towards the future, what works well now? what would you change? We are understaffed so we strugle to get by. New building will have more pressure with it.

QUESTION 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?

Storage room and Work/Tool room.

Conference Room: To seat how many people? What type of display? N/A

Storage Area: What will be stored? How much? Product for the building

Work Room: What should be included? Copier? Layout space? N/A

Staff Break Area: For how many people? N/A

Other?

QUESTION 5: Please list required adjacencies to other departments/areas:

None

QUESTION 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?

No, We will not be working with the public.

QUESTION 7: Please list any special utility requirements:

- Heating/Cooling HVAC in office, not needed in storage or work room.
- Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
  Could need Ventilation in Work Room.
- Plumbing (sink, drinking fountain, etc)
- Electrical Service (floor outlets, dimming lights, etc)
- Special Lighting
- Audio/Visual (projectors, television)
- Communications (intercom, internet)
- Special Acoustics (privacy issues)
- Wall Display (markerboard, tackboard, etc)
- How many printers do you anticipate?

QUESTION 8: Please list required room finishes:

- Floor (carpet/linoleum/concrete, etc.) Simple and easy.
- Ceiling (lay-in acoustical panels, gyp soffits, etc.)
- Walls (vinyl wallcovering, washable paint, etc.)

QUESTION 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
Just doors with Master Key locks.

QUESTION 10: Please share any other comments regarding your space _____

_____

_____

_____

_____

_____

_____

Thank you!

YAKIMA CITY HALL
STAKEHOLDER QUESTIONNAIRE

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Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

Name of Stakeholder: CHARLES E. ROBIN **Date:** 2/22/23

Representing: CAPITOL THEATRE COMMITTEE

QUESTION 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?

6 adding 1 in near future

QUESTION 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?

4 enclosed
3 work stations

QUESTION 3: Considering your current space and looking towards the future, what works well now? what would you change? Currently we have an accessible conference area that is used regularly. We have a mini fridge and microwave would love a sink. Our copier is in the hallway and office supplies in storage area. Server currently in same storage area as supplies.

QUESTION 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments? Definitely a conference room. We need a climate controlled space for our server with locking door. Would like a kitchen/prep area with a sink. Storage area for supplies and file cabinets, plus copier.

Conference Room: To seat how many people? What type of display? 10-15 monitors, zoom interface in conference room

Storage Area: What will be stored? How much? Servers, file cabinets

Work Room: What should be included? Copier? Layout space? If not in supply room a copier space with shelf work table

Staff Break Area: For how many people? 5-6 - Kitchen/prep - not necessarily a dining space.

Other?

QUESTION 5: Please list required adjacencies to other departments/areas:

n/a

QUESTION 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?

Yes, few and irregular visitors. Could possibly be shared space.

QUESTION 7: Please list any special utility requirements:

- Heating/Cooling nothing out of ordinary
- Ventilation/Exhaust (any equipment requiring separate vent, exhaust) climate control for server area.
- Plumbing (sink, drinking fountain, etc) sink preferred in kitchen space
- Electrical Service (floor outlets, dimming lights, etc) plug in for copier
- Special Lighting
- Audio/Visual (projectors, television) monitors, zoom interface in conference room
- Communications (intercom, internet) internet (Fat Beam)
- Special Acoustics (privacy issues)
- Wall Display (markerboard, tackboard, etc)
- How many printers do you anticipate? potentially in each office

QUESTION 8: Please list required room finishes:

- Floor (carpet/linoleum/concrete, etc.)
- Ceiling (lay-in acoustical panels, gyp soffits, etc.)
- Walls (vinyl wallcovering, washable paint, etc.)

QUESTION 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs) locking cabinets in at least 2 enclosed offices

QUESTION 10: Please share any other comments regarding your space _____

_____

_____

_____

_____

_____

_____

Thank you!

Sr No: 11

Response No : 11
1. Name of Stakeholder:
Sara Watkins
2. Representing:
Legal Department
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
Fully staffed we have 22 staff members in the Legal Department. I would anticipate adding 2-4 more staff persons in the next five years to address increasing criminal law cases, including one additional prosecutor and one additional legal assistant for the prosecution division and one additional attorney and legal assistant for the civil division.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
There are 13 necessary enclosed offices currently. 12 for attorneys, one for the legal office manager. None of these offices can be shared. Additional work space is necessary for the 8 staff members with 2 extra necessary for interns, plus the front desk. 2 of those staff members are domestic violence advocates who would work well sharing an office if possible. In the event of the additional hiring above, the Legal department would need two additional enclosed offices.
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
Although small, having a space devoted solely to the family violence unit so that the team can work together works well. Our current offices work well for attorneys, although the windows don't open, which is not great. Our "kitchen" does not work well and we do not have a conference room big enough for a full staff meeting, nor do we have a dedicated break room, so staff uses the library/conference room.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
We need two conference rooms (one large, and one small 8-10 people), an interview room that seats 6 people, a small storage area, kitchen and a break room. We are happy to share a large conference room (accommodate up to 25 for staff meetings and training), storage, kitchen and break rooms with other departments.
7. Conference Room: To seat how many people? What type of display?
One large, 25 people Zoom capable, one small 8-10 people, and one interview room 6
8. Storage Area: What will be stored? How much?
We store limited files, office and cleaning supplies, and miscellaneous.
9. Work Room: What should be included? Copier? Layout space?
Could use a small work room with copiers, printers and shredding bins.
10. Staff Break Area: For how many people?
Large enough for 8-10 people.
11. Other?
2 gender neutral interior restrooms
12. Question 5: Please list required adjacencies to other departments/areas:
Our prosecution division should be in the same building as the court to minimize travel with file and computers, and the ability to quickly update things or make copies in the office. The family violence unit

would benefit from a shared space with offices, much like they have now but larger, and perhaps incorporate the detectives working on family violence cases in that area.
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
Yes. We need a waiting area for approximately 4 people, although we normally only have 1 or 2. It should not be shared with others due to the fact that the majority of those waiting are victims of domestic violence. We would like to use best practices in designing that waiting room and interview room to accommodate victims if possible.
14. Heating/Cooling
Individual heating/cooling capabilities per office and/or windows that open would be nice.
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
16. Plumbing (sink, drinking fountain, etc)
Drinking fountain with bottle filler requested.
17. Electrical Service (floor outlets, dimming lights, etc)
More floor outlets for equipment.
18. Special Lighting
19. Audio/Visual (projectors, television)
We have a zoom room with television we would like to keep.
20. Communications (intercom, internet)
Internet
21. Special Acoustics (privacy issues)
Conference rooms should be designed and built so that there cannot be anyone in adjacent areas/rooms hearing the conversation due to the sensitivity of conversations. Offices adjacent to non-legal areas, hallways, or non-legal offices should be the same to preserve attorney-client privilege.
22. Wall Display (markerboard, tackboard, etc)
23. How many printers do you anticipate?
We have 2 copy machines and 2 printers that are used by everyone. There are a number of people with individual printers in their offices.
24. Floor (carpet/linoleum/concrete, etc.)
Carpet, with linoleum in kitchen/breakroom
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
26. Walls (vinyl wallcovering, washable paint, etc.)
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
We require locked cabinets, but most of those are file cabinets. We also need security measures available at the front desk (i.e. protective glass, panic button), in addition to individual offices for the attorneys.
28. Question 10: Please share any other comments regarding your space

Our office has significantly outgrown our space, and it does not work for some of the collaborative work being done in the prosecution division. We also do not have a kitchen or dedicated break room, which would be helpful for people eating at the office, but wanting to get away from their desk. A break room with a tv, kitchenette, etc. would be a welcome addition to the department. Please use this survey and replace the previously submitted survey with this one. Thank you!

Sr No: 5

Response No : 5
1. Name of Stakeholder:
Kelley Olwell
2. Representing:
Yakima Municipal Court
3. Question 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?
Seven and adding one more clerk.
4. Question 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?
None
5. Question 3: Considering your current space and looking towards the future, what works well now? what would you change?
We are currently in the process of a remodel so I don't anticipate anything else that we'd need.
6. Question 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?
We have to have a jury room and then an open (neutral) room for a second jury. The second jury room can be shared but has to be in a neutral area - it can't be in the police department or prosecutor's office.
7. Conference Room: To seat how many people? What type of display?
30+ people with moveable tables and chairs.
8. Storage Area: What will be stored? How much?
One medium storage room.
9. Work Room: What should be included? Copier? Layout space?
2 copiers
10. Staff Break Area: For how many people?
That is currently being done.
11. Other?
12. Question 5: Please list required adjacencies to other departments/areas:
No.
13. Question 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?
See response to jury room answer. And it has to be in this building - jurors cannot be walking across the street.
14. Heating/Cooling
None.
15. Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
None.
16. Plumbing (sink, drinking fountain, etc)
Sink in the clerk's office with hot water service/water cooler.

17. Electrical Service (floor outlets, dimming lights, etc)
Dimming lights for courtrooms.
18. Special Lighting
None.
19. Audio/Visual (projectors, television)
Courtroom 2 has a projector and screen, whi ch is necessary for trials.
20. Communications (intercom, internet)
Computers at all stations, including courtrooms.
21. Special Acoustics (privacy issues)
None.
22. Wall Display (markerboard, tackboard, etc)
None.
23. How many printers do you anticipate?
8 plus three judges, two courtrooms and one court services manager.
24. Floor (carpet/linoleum/concrete, etc.)
Currently being done.
25. Ceiling (lay-in acoustical panels, gyp soffits, etc.)
None.
26. Walls (vinyl wallcovering, washable paint, etc.)
Currently being done.
27. Question 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs)
Safe. All desks should have some type of lock for purses, etc.
28. Question 10: Please share any other comments regarding your space
I just want to make sure the court receives a second neutral space for a second jury on Thursdays.

Space Survey Responses, Yakima Police Department

1. The Yakima Police Department currently houses approximately 197 FTEs in the police and legal center at 200 S 3rd St and the Special Assault Unit building at 207 S 3rd St. The above number does not include the municipal court or City of Yakima legal department which also occupy the building. The department is broken into five principal areas; Administration, Patrol, Investigations, Services and Jail. There are no planned increases in staffing in the immediate future.

2. It will be easiest to define this based on each area of operation:

   Administration: 5 enclosed offices, not shared; Chief (w/conference table/meeting area), Administrative assistant to the Chief, Corrections/Services Commander, Administrative Lieutenant, Public Information Officer. Also included in the administration realm are the Internal Affairs unit, recruiting and training, crime analysts and volunteers. The IA unit requires 2 enclosed offices in a secure work area housed in the 207 S 3rd St building. The training and recruiting unit currently use 6 workstations in a shared space in the 207 S 3rd St building. Crime analysts currently require 1 enclosed office (Supervisor) and 3 work stations in a shared space, currently on second floor of 200 S 3rd St. The volunteer unit currently uses a shared space with 3 workstations in the main 200 S 3rd St building.

   Investigations: Divided into 5 work groups; Gang Unit, Major Crimes, Property Crimes, Special Assault and DEA Task Force.

   Administration/Support require 4 enclosed offices (Captain, Lieutenant and two forensic analysts).

   Gang Unit requires 1 enclosed office (Sergeant) and 5 workstations in a shared secure work area.

   Major Crimes requires 1 enclosed office (Sergeant) and 4 work stations in a shared secure work area.

   Property crimes requires 2 enclosed offices (Sergeant and computer forensics detective) and 4 shared work stations in a common area.

   Special Assault Unit requires 1 enclosed office (Sergeant) and 4 enclosed offices shared with two detectives each. This unit also requires a shared space central meeting area/waiting area for parents and victims of crime, and two recorded interview rooms for specialized interviews. All currently housed at 207 S 3rd St building.

   DEA Unit does not require space since they operate from a shared work space in a federal unit.

   Patrol: The traffic unit, which performs investigations as well as enforcement activities, is under the patrol division, however they have their own shared work area which requires 1 enclosed office (Sergeant) and 4 work stations, can be in a common area similar to property crimes. Currently on second floor of 200 S 3rd St.

   The Community Services Officers (Parking Enforcement and Animal Control) also are included in the patrol division. They require 1 enclosed office (Sergeant) and 5 shared workstations.

   The bulk of the patrol division is focused on uniformed patrol. This requires 5 separate enclosed offices (Captain and 4 Lieutenants), 2 large shared offices for 4 Sergeants each, and a large common work area for officers to complete reports at 8 workstations.

   Services: The services unit was recently remodeled last year with new offices and work spaces, and currently utilizes 3 separate offices and 15 work stations in the back area, and 4 reception work stations at the front counter area.

Jail: The jail requires a shared office for three Sergeants, and 2 separate offices for jail administration assistant and medical staff.

3. Currently most areas function well, however separation in the Investigations unit and Patrol division creates some issues for communication amongst employees during work operations. The Special Assault unit building being separate from the main department does create some communication issues, but is necessary due to the unique nature of the crimes and victims handled by the unit. Further separation is not recommended since detectives still require daily contact with other functions of the department and currently are within walking distance.

4. Administration: Copy room and mail receiving room. Large multi use training room capable of housing up to 75 persons. Training room should accommodate seated learning, audio visual capability and also lower level defensive tactics training (mat drills).

   Patrol: Large muster room capable of seating up to 20 officers, a medium forms and supply storage room, medium traffic unit storage room, small K-9 unit storage room, large fleet and building maintenance office for 3 employees with 2 workstations and storage for tools and equipment, medium armory, an employee break room for 5 people. Vending machine area. 4 hard holding cells for suspects in custody.

   Investigations: Conference area for daily briefings and mission planning with room for up to 15 people. Storage room for equipment and supplies. Three interview rooms for suspects and victims of crime.

   Jail: Small storage room outside of the main jail facility for supplies and equipment.

   Services: Break room for 5 people, small storage for supplies.

5. The Police Department should be in close proximity to the legal department and municipal court.

6. The Police Department, Municipal Court and legal department share a common lobby for community members to conduct necessary business, currently holds up to 40 persons in waiting.

7. Many systems at the police department are original to the date of building construction in 1996. Some major components have recently been replaced or are already planned. Electrical service improvements are needed to the south parking lot of the PD across Spruce St. Audio/Visual upgrades to main conference areas have been made recently, but some are still in need of upgrade. Building WIFI should be enhanced to support increased traffic from new technologies being carried by every officer such as laptops with wireless connectivity. Interview rooms should have acoustic materials to ensure privacy.

8. No specific answer, most flooring is outdated linoleum, would desire a more durable floor material for heavy traffic volume (officers wearing duty boots).

9. This has been answered above.

10. The department as a whole is functional at this time. While many items are beginning to show age due to normal wear and tear, there are no emergency improvements needed outside of mechanical and building infrastructure issues. There has been discussion of moving some units in the department away from the current 200/207 S 3rd St campus. This would not be desired, as it would result in fractured work groups reducing efficiency.

ALSC ARCHITECTS

YAKIMA CITY HALL
STAKEHOLDER QUESTIONNAIRE

Dear Stakeholder,

The ALSC Team is looking for feedback that will provide guidance for the design of the Yakima City Hall project. We are underway with the Pre-Design phase of work and seeking input from all project stakeholders. The input received will be processed and used to inform the Project Program, a document that will establish the project scope, quality level and budget. With approval of the program, the team will use that information to complete the Conceptual Design phase, expected to be complete by mid-2023.

As part of the planning process, a set of Guiding Principles will be developed. These principles will be used as a framework to guide the team throughout the project and ultimately be used as a method of measuring whether the finished project is a success. A draft version of the Guiding Principles is listed below, the finished design should embody these objectives.

Service First	Efficient, friendly, interpersonal treatment
Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

Name of Stakeholder: Stephanie Hsu **Date:** 3/3/23

Representing: Yakima Music en Acción (YAMA)

ALSC ARCHITECTS

QUESTION 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?

6 full-time staff + 5 part-time staff. We foresee the addition of 2 full-time and 4-6 part-time staff over the next 5 years. Full-time staff need desks & personal storage space; part-time staff just storage.

QUESTION 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?

3-4 offices required at minimum, with ~~sig~~ additional rehearsal spaces and storage spaces. (see attachment for detail.)

QUESTION 3: Considering your current space and looking towards the future, what works well now? what would you change? n/a – YMMA does not have any current space with the city.

QUESTION 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments? see attachment for detail.

Conference Room: To seat how many people? What type of display? 15 people max.

Storage Area: What will be stored? How much? see attachment

Work Room: What should be included? Copier? Layout space? copier, printer, shelving, table space for laying out & collating papers

Staff Break Area: For how many people? n/a

Other?

QUESTION 5: Please list required adjacencies to other departments/areas:

none required

QUESTION 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?

waiting area for parents preferable (not shared) to fit up to 20 people.

QUESTION 7: Please list any special utility requirements:

- Heating/Cooling temperature-controlled storage room
- Ventilation/Exhaust (any equipment requiring separate vent, exhaust)
- Plumbing (sink, drinking fountain, etc) drinking fountain or sink
- Electrical Service (floor outlets, dimming lights, etc) accessible outlets in each room, dimmable lights in rehearsal spaces
- Special Lighting none besides dimmable lights
- Audio/Visual (projectors, television) 1 projector in largest rehearsal space
- Communications (intercom, internet) Internet
- Special Acoustics (privacy issues) Soundproof rehearsal spaces
- Wall Display (markerboard, tackboard, etc) large white boards in each space
- How many printers do you anticipate? 2

QUESTION 8: Please list required room finishes:

- Floor (carpet/linoleum/concrete, etc.) carpeted rehearsal spaces
- Ceiling (lay-in acoustical panels, gyp soffits, etc.) acoustical panels
- Walls (vinyl wallcovering, washable paint, etc.)

QUESTION 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs) 24-hour access for staff, secure locked instrument storage

YAMA Space Wishlist (Daily use spaces for 120+ musicians (+ audience for performances)

- 2 Large rehearsal spaces (1 large enough for a concert) + 3rd medium rehearsal space
    - If possible, these rooms would contain a room divider to split up the room for smaller configurations
- 10 **carpeted** sectionals spaces (some could be smaller, fit 3 - 4 students, some big enough for 13 bodies + instruments, stands, and chairs)
- Storage spaces near practice rooms and rehearsal spaces to store large chair racks, stand racks
- 3-4 Offices
    - Entryway welcome desk near front doors: welcome area w/ chairs
    - 1-2 smaller offices for private meetings, 2 larger offices for shared workspace
        - Larger meetings can take place in the rehearsal spaces if necessary
    - Work room with copier is a must.
    - Student accessible storage with separate entryway from 1st and 2nd rehearsal spaces
        - regulate temperature (e.g., metal doors, insulation)
        - Enough space for 120+ instruments to be stored
- 1 space dedicated to instrument repairs
- Music library
    - Music storage + space to sit and spread out music
    - Possible for lounge chairs?
- Access to a small kitchen area
- Bathrooms for daily use of the space
    - Gender Neutral bathrooms for students
    - 1-2 staff gender neutral bathrooms
- Soundproofing / acoustically well thought out spaces for music making
- YAMA signage visible from street
- At least 1 Projector in a large rehearsal space.
    - A projector in another large space would be great!
- Closets for cleaning supplies + storing extra supplies
    - Student Accessible
- Outdoor space - *rooftop?*
    - nice to have options for more space
    - Place for parents to congregate and to host music gatherings
- 24 hour access
- Weekend access
- Parking Lot
    - Pick up and drop off of students by parents
    - 10 dedicated spots for YAMA
- Big front windows

9.3 LIST OF RECENT MAINTENANCE/REPAIRS

EXISTING CITY HALL

FORMER BANK OF AMERICA

RICHARD A. ZAIS, JR. CENTER FOR LAW AND JUSTICE

EXISTING CITY HALL

REPAIRS/IMPROVEMENTS MADE

- Janitors basement hot water tank 2023.
- Elevator #1 & #2 replaced 2023.
- LED interior and exterior lighting updates 2022.
- HVAC controller (Johnson Controls) update 2021.
- Installed new water main line and back-flow valve 2020.
- Domestic hot water tank replaced 2015.
- New fire alarm panel 2014.
- 3rd & 4th floor exterior windows replaced 2010.
- Card reader control/camera system initial install 2007.
- Roof replaced (Firestone 60 mil) 2004.
- Replaced galvanized DW lines with copper 1996.
- Main boilers replaced 1995.
- Chiller replaced 1995.

FORMER BANK OF AMERICA

REPAIRS/IMPROVEMENTS MADE

- Step down transformer for panel P 2022.
- Replaced the two main sewer sump pumps, assembles and controls 2022.
- Added a third backup sewer pump 2022.
- Elevator serviced and working 2022.
- Added an alarm system 2022.

RICHARD A. ZAIS, JR. CENTER FOR LAW AND JUSTICE REPAIRS

REPAIRS/IMPROVEMENTS MADE

- HVAC main controllers upgraded 2013
- HVAC AHUs-5,6,7 controllers upgraded 2018
- HVAC AHUs 1,3 controllers upgraded 2020
- HVAC RTU 2 controller upgraded 2017
- HVAC RTU 1,3 and AHU-3 controllers upgraded 2022
- Chillers Tux controller upgraded 2021
- HVAC boiler replaced 2020
- HVAC SAU West unit replaced 2016
- Main Building 4 Overhead doors added photo eyes 2015
- Annex Building overhead door added photo eye 2015
- Main Building NE overhead door operator replaced 2017
- SE overhead door operator replaced 2015
- Swat Station East overhead door operator replaced 2021
- Swat Station East roof replaced 2022
- SAU, Public and Police parking lots sealed cracks and repainted stripes 2021
- Employee and Swat Stations parking lots sealed cracks and repaint stripes 2022
- Patched west tile roof valley 2021
- Jail flat roof replaced 2020
- Jail C tank sky light replaced 2018
- All police parking lots lights upgraded to LEDs 2017
- Law and justices center lights upgraded to LEDs 2016
- Patrol entrance gate replaced 2014
- Patrol exit gate replaced 2020
- Employee parking lot entrance gate replaced 2019
- Fire alarm panel replaced 2014

SCHEDULED TO BE REPAIRED/REPLACED

- East side municipal Court roof is scheduled to be done 2023
- Chiller is scheduled to be replaced 2023

9.4 ALTERNATE EXPLORATIONS

CITY HALL

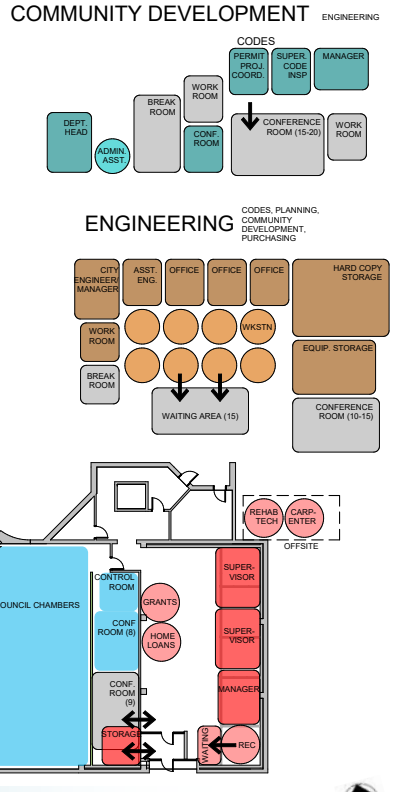
CITY HALL ANNEX

RICHARD A. ZAIS, JR. CENTER FOR LAW AND JUSTICE

9.4 CITY HALL ALTERNATE EXPLORATIONS *FORMERLY BANK OF AMERICA*

The initial goal for the new City Hall was to locate all customer oriented services in one location, including Council Chambers. It soon became apparent that the new building was not large enough to accommodate this plan, even if some of the departments went in the basement, which was not a desirable option.

Ultimately the decision was made for City Council, Council Chambers, City Manager, City Clerks, and Police Department Training and Storage to occupy the new City Hall, and options were explored for how best to use the remaining space. This included potentially moving either or both Capitol Theater and Economic Development/ONDS into the building. Partially into the process the suggestion was made to relocate Y-PAC/YCTV in order to repurpose their current building. Space was available in the basement for use as the studio, control room, and associated storage, which solidified the decision to have Y-PAC move to City Hall. The remaining space in both size and location became a good fit for Capitol Theater.



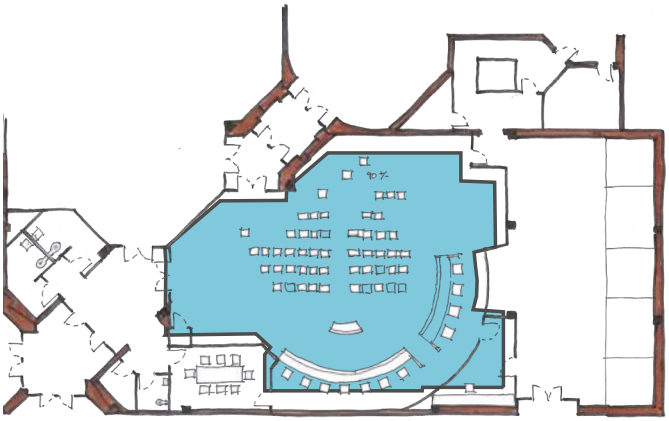
CITY HALL EXPLORATION 1

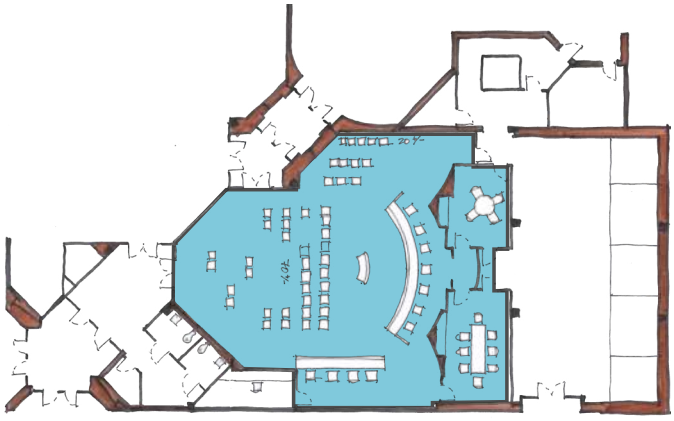
CITY HALL EXPLORATION 2

CITY HALL EXPLORATION 3

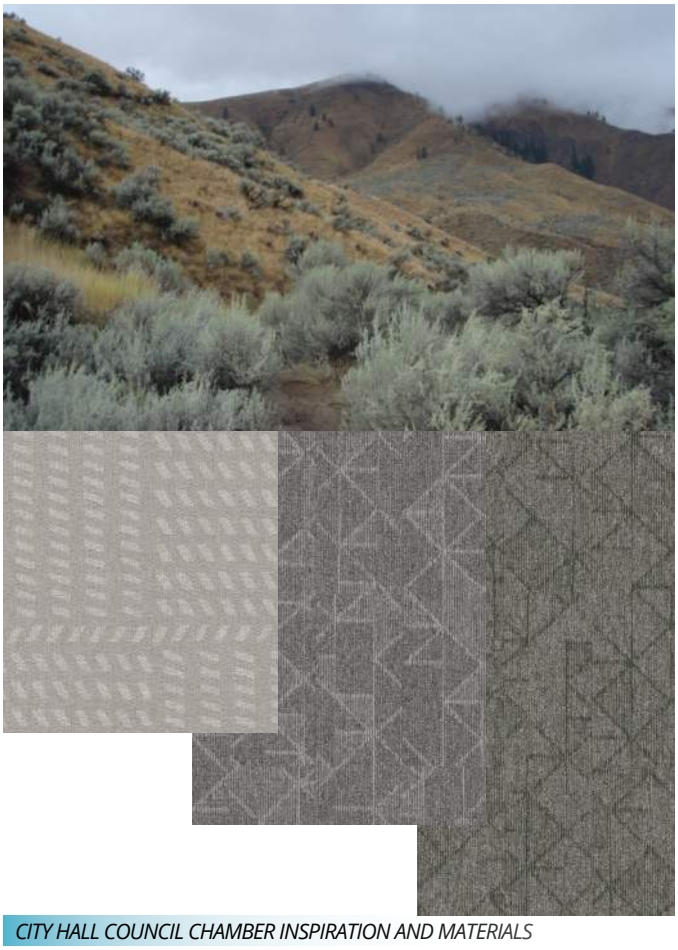
CITY HALL EXPLORATION 4

CITY HALL LOBBY - COOL TONE MATERIAL PALETTE





CITY HALL COUNCIL CHAMBER SKETCHES



CITY HALL COUNCIL CHAMBER INSPIRATION AND MATERIALS

A variety of exterior upgrades were explored, ranging from simply removing stone at the entry and repainting the existing concrete to almost fully recladding the building in brick veneer.

Studies for screening the mechanical equipment and basement exit at the north end of the building were also conducted.

EXTERIOR MATERIAL SKETCHES

EXTERIOR MATERIAL EXPLORATION 1 - PAINT + METAL PANEL

EXTERIOR MATERIAL EXPLORATION 1 - PAINT + METAL PANEL

EXTERIOR MATERIAL EXPLORATION 1 - PAINT + METAL PANEL

EXTERIOR MATERIAL EXPLORATION 1 - SCREEN

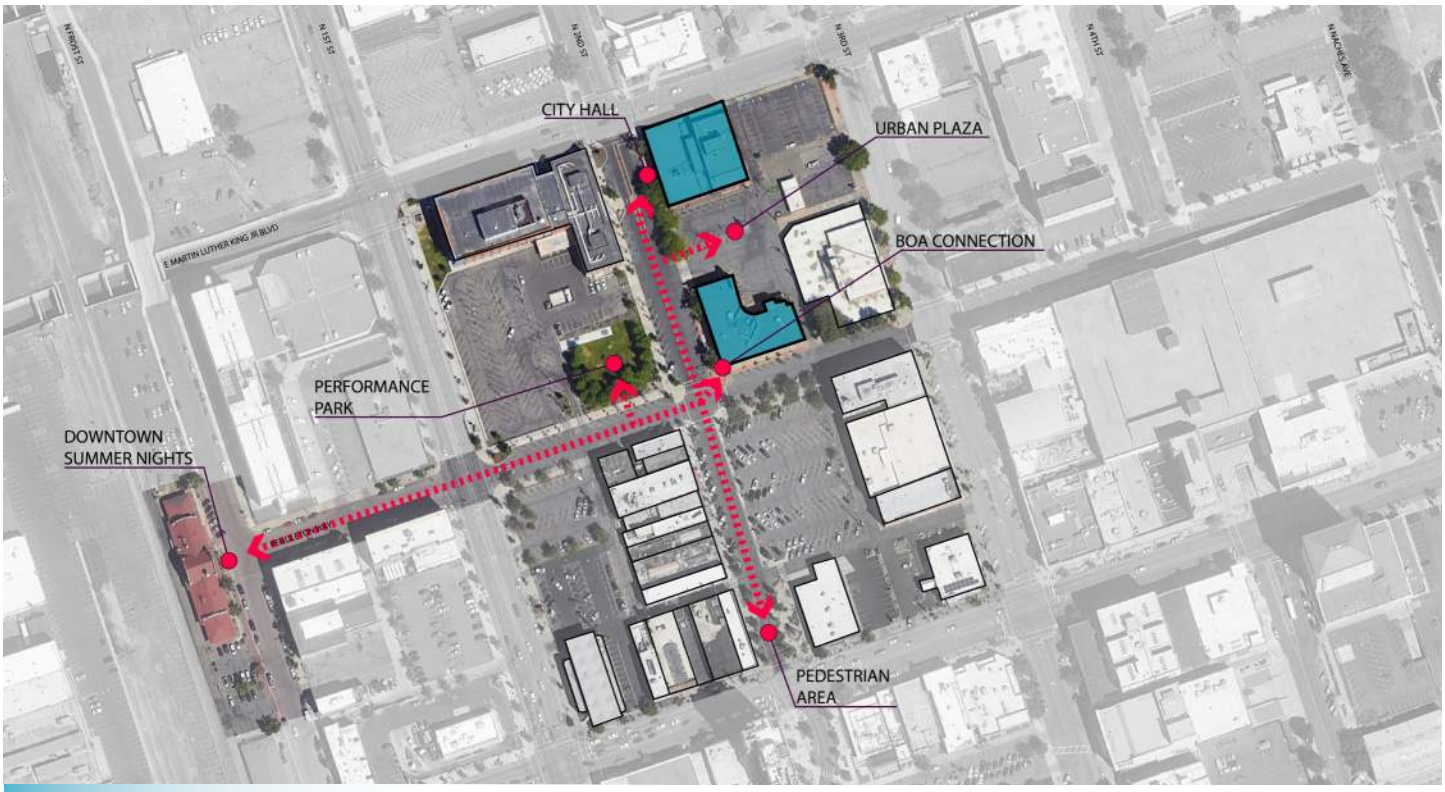
EXTERIOR MATERIAL EXPLORATION 2 - PAINT + METAL PANEL

EXTERIOR MATERIAL EXPLORATION 3 - PAINT

EXTERIOR MATERIAL EXPLORATION 2 - PAINT + METAL PANEL

EXTERIOR MATERIAL EXPLORATION 3 - PAINT

EXTERIOR MATERIAL EXPLORATION 4 - PAINT + BRICK VENEER



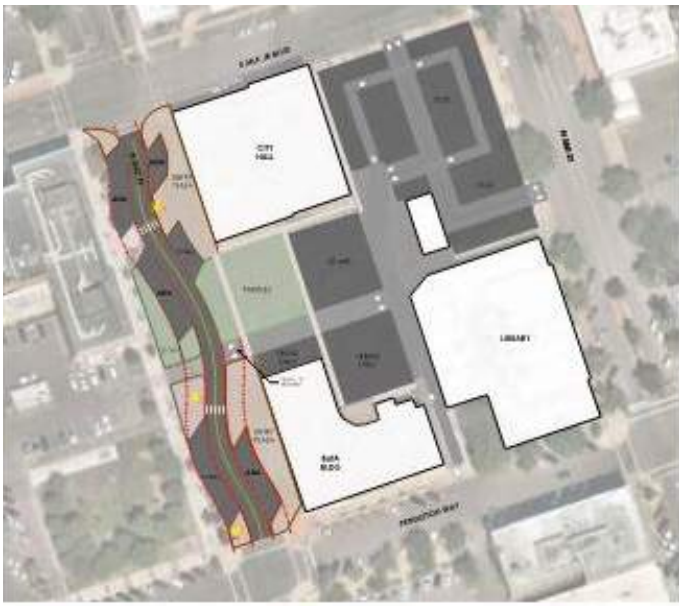
SITE ANALYSIS - OVERALL CONNECTIONS TO CITY

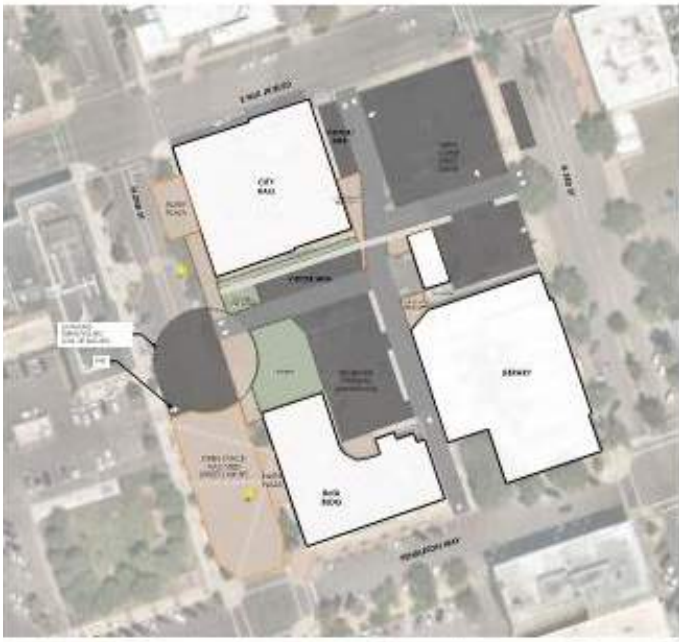
SITE ANALYSIS - SKETCHES

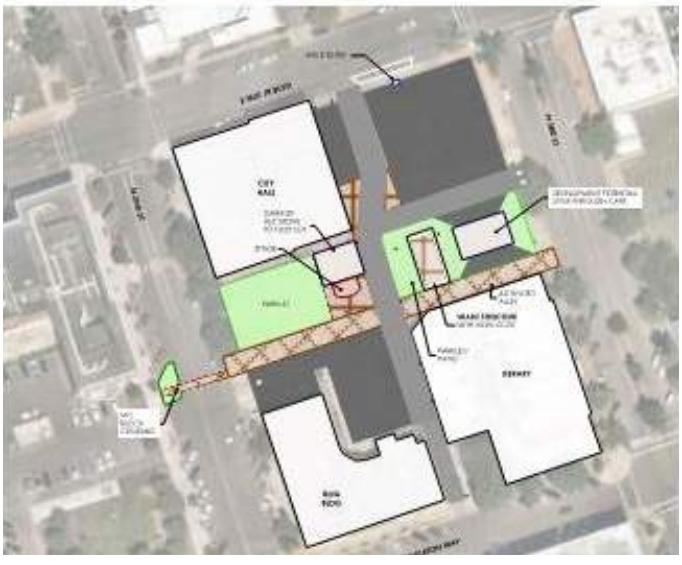
LANDSCAPE DESIGN ALTERNATIVES - SCJ ALLIANCE

Design considerations included:

- Vacating 2nd Street (half street) and how to address vehicle turnaround required radius between buildings
- Vacating whole block at 2nd Street
- Whether or not to provide access from 2nd Street to rear parking areas
- Vehicular circulation (aisles, entry/exit points) in parking area and alley
- Primary pedestrian routes and ways to increase visibility and safety
- Size/span of public spaces and balance of paved versus planted areas (softscape vs hardscape)
- Locations of ADA parking stalls







SITE ANALYSIS - SCJ ALLIANCE EXPLORATIONS

9.4 CITY HALL ANNEX ALTERNATE EXPLORATIONS *FORMERLY CITY HALL*

After it was determined that Community Development and Engineering would need to remain in the former City Hall building, options were explored that moved both departments to the main floor.

CITY HALL ANNEX EXPLORATION 1 - LEVEL 01

CITY HALL ANNEX EXPLORATION 1 - LEVEL 02

The driving force behind the final layout was the desire to maintain the existing Council Chambers as a large meeting room.

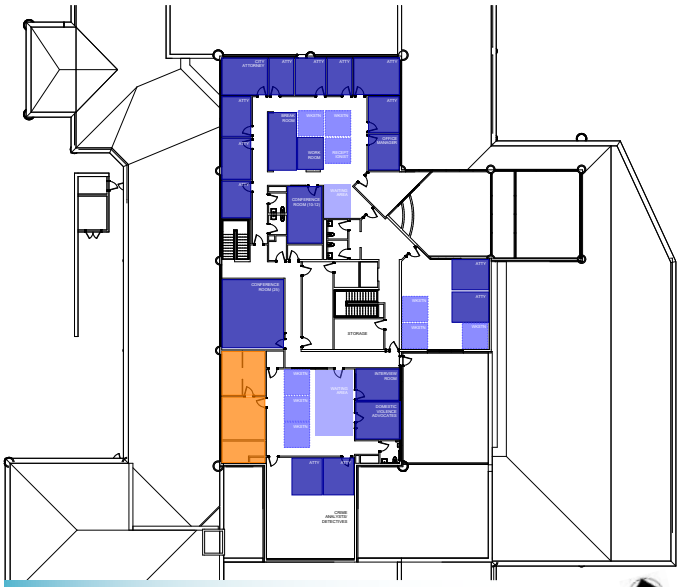
CITY HALL ANNEX EXPLORATION 2 - LEVEL 01

CITY HALL ANNEX EXPLORATION 2 - LEVEL 02

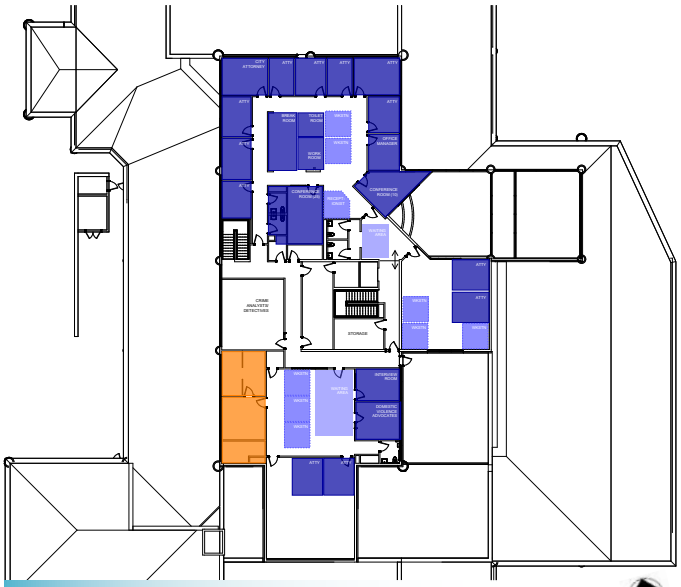
CITY HALL ANNEX EXPLORATION 3 - LEVEL 01

SUPERVISOR
SUPERVISOR
ECONOMIC DEVELOPMENT MANAGER
STORAGE
CONFERENCE ROOM (25)
IT DEPT HEAD
ADM ASST
APPLICATION DEV SUPERVISOR
ONDS
WORK ROOM
EC DEV ASST
GRANT WRITER
WAITING AREA
GRANT FINANCIAL SPECIALIST
HOME LOAN SPECIALIST
RECEP-TION
BREAK ROOM
FACILITIES SERVICES
TOILET ROOM
ADM ASST
CONFERENCE/ TRAINING ROOM (15-20)
OFFICE
OFFICE
HUMAN RESOURCES
OFFICE
OFFICE
CONFERENCE ROOM (15)
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE

The preferred legal center layout was quickly determined after if it was decided that existing offices and toilet rooms did not need to be adjusted.



EXPLORATION 1 - FLOOR PLAN



EXPLORATION 2 - FLOOR PLAN

ADDITIONAL ACOUSTICS NARRATIVE - STANTEC

Richard A. Zais Jr. Center for Law and Justice
Two courtrooms are located on the first floor of the justice center. Each are uniquely designed as shown in Figures 2 through 5. Due to the building being occupied, we were unable to conduct reverberation time testing during our stie visit.

Courtroom 1 had a more dampened room response with overhead acoustic tile absorption, and acoustic wall panels located on the rear wall and one long wall. Figures 2 & 3 show the existing interior treatments of Courtroom 1.

COURTROOM 1 FRONT VIEW

COURTROOM 1 REAR VIEW

Courtroom 2 was much more lively, from an acoustic standpoint, which correlated to the increased amount of hard surfaces. As shown in Figures 4 and 5, all of the surfaces within Courtroom 2 are hard except for the rear wall.

COURTROOM 2 FRONT VIEW

The judges' chambers were not acoustically secure. Some of the doors did include full door seals with perimeter and bottoms seals, while some only included perimeter seals, and some didn't include any. We will work with the design team to ensure that the appropriate level of acoustic privacy is met for the jury deliberation rooms, judges' chambers, and any conference rooms used for legal council.

COURTROOM 2 REAR VIEW

ADDITIONAL AUDIOVISUAL NARRATIVE - STANTEC

2ND FLOOR

- Conference Rooms
  - •Wall mounted display sized for the room configuration. Inputs will be available at the table for users to connect to the display and VTC system.
  - •An all-in-one camera/speakerbar will be used in conjunction with user devices for VTC calls.
  - •When room size requires, table microphones and overhead loudspeakers will be used for program and VTC audio.
- Break Room
  - •A wall-mounted display with a CATV connection will be available. Audio will be available from the monitors integrated loudspeakers. Control will be from the manufacturer's remote.
- Select Offices
  - •As program requires, some offices will have wall mounted displays with CATV connections.

9.5 MEETING NOTES

STUDY KICK-OFF MEETING MINUTES *2/14/23*

DEPARTMENT INTERVIEW NOTES *2/28/23*

BUILDING COMMITTEE MEETING PRESENTATION *3/21/23*

BUILDING COMMITTEE MEETING PRESENTATION *4/4/23*

BUILDING COMMITTEE MEETING MINUTES *4/18/23*

BUILDING COMMITTEE MEETING MINUTES *5/9/23*

BUILDING COMMITTEE MEETING MINUTES *6/6/23*

BUILDING COMMITTEE MEETING MINUTES *6/27/23*

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Project No.: 2022-040

Project Name: City of Yakima
Space Study

Subject: Meeting Minutes
Kick-Off Meeting
February 14, 2023

By: Jodi Kittel

Attendees	**Representing**
Bob Harrison	City of Yakima
Rosylen Oglesby	City of Yakima
Sara Watkins	City of Yakima
Joan Davenport	City of Yakima
Jennifer Ferrer-Santa Ines	City of Yakima
Ira Cavin	City of Yakima
Susan Knotts	City of Yakima
Rustin Hall	ALSC Architects
Kim Phelps	ALSC Architects
Jodi Kittel	ALSC Architects

This report is not intended to provide a transcript of proceedings, but rather to record the general content of the discussion that took place.

Action Item

I. PROJECT SCOPE/PROCESS

A. Process will include:
Phase 1
1. Analyses of existing City Hall and Bank of America buildings, the Richard A. Zais Jr. Center for Law and Justice building, Police Department Training Facility, annexes, and the ONDS Building.
2. Interview department heads regarding space needs and develop a program (space list) for each.

B. Begin unit cost projections.
Phase 2
1. Develop conceptual layouts based on information gathered in Phase 1.
2. Develop cost projections.

C. It is expected that the result will be a multi-phase, multi-year project and will likely start with the Bank of America building.

D. Schedule
1. Pre-Design/Programming phase (Phase 1) to be complete by early April.
2. Conceptual Design phase (Phase 2) to be complete by end of June.
3. Committee meetings will be Tuesday mornings, presented dates were tentatively agreed upon. Susan will send invites for all meetings.
4. ALSC and consultants will come the week of February 27th for two to three days to tour buildings and interview department heads.
5. Questionnaires will be sent at the end of this week (by 2/17), in preparation for interviews. They will need to be returned by 2/24.

II. GUIDING PRINCIPALS

A. Ideas to be used as a framework to guide the project and ultimately as a method for determining whether the proposed layouts are most effective.

B. Draft Guiding Principles were presented and include:
1. Service First – Efficient, friendly, interpersonal treatment.
2. Approachable – Serve unique population needs of all citizens.
3. Catalyst – Stimulate redevelopment, public use in Second Street vicinity.
4. Maximize Existing Assets – Creative, effective re-use of existing spaces.
5. Embrace DEI – Serve staff needs of diversity, equity, inclusion.

III. DRAFT QUESTIONNAIRES

A. Two types of questionnaires will be sent out - one for departments and one for building systems.

B. Questionnaires will be sent directly to department heads based on the list that Susan will update.

C. Questionnaires will be sent both as pdf and as a link to an online version, the person filling out the form can choose whichever option they prefer.

IV. DISCUSSION

A. Layouts should explore a “Service First” model, and refer to the new Bellevue City Hall, which has one location for all public interface.

B. The City owns property / assets beyond the list provided, a full list will be sent.

C. Regarding design concepts:
   1. The layouts will include compliance with current codes and ADA access requirements.
   2. Multi-use spaces should be considered. For example, right now the council chambers are also used for several committee meetings that need similar technology.

D. Large training facilities will continue to be needed by multiple departments.

E. Parking should also be considered.

F. In their current building, almost all of level 2 requires public interface.

G. At appropriate times, it will be important to loop in IT, Facilities Manager, City Council, County Commissioners, Building Code Manager, Municipal Court and Presiding Judge, Community Relations Manager, etc.

H. There will be a presentation to City Council toward the end of Phase 2.

I. CYU lease ends this month.

V. ADMINISTRATION

A. Copy Rosylen and Susan on all emails.

B. For the week of February 27th, ALSC will send a draft meeting schedule for interviews and tours based on the updated contacts list. IT and Maintenance will also be included.

C. February 28th at 3:00 is a staff retreat, no interviews to be scheduled, but tours may be possible.

If you have any additions or corrections to these minutes, please bring them to the attention of the editor within two weeks of the date of this meeting.

Distribution:	Bob Harrison	City of Yakima
	Rosylen Oglesby	City of Yakima
	Sara Watkins	City of Yakima
	Joan Davenport	City of Yakima
	Jennifer Ferrer-Santa Ines	City of Yakima
	Ira Cavin	City of Yakima
	Susan Knotts	City of Yakima
	RH/KP/JK	

Yakima City Hall

Kickoff meeting: Tuesday, February 14th
10:00 am - 11:00 am

- Introductions
- Review Project Schedule, Scope
- Review Guiding Principles
- Review Draft Questionnaires, Process
- Validate List of Individuals to be Interviewed
- Q&A/discussion, Action Items, Next Steps

Yakima Space Study | Proposed Meeting Schedule *(Updated 2/17/23)*

Pre-Design Phase

Kick-off Meeting: Tuesday 2/14, 10:00am

- Introductions
- Review Project Scope, Phases, Workflow, Schedule, Meeting Dates
- Review Guiding Principles
- Review Draft Questionnaires, Process for gathering information
- Validate current list of individuals to be interviewed
- Q&A / discussion, Action Items, Next Steps

Week of February 27 (2-3 day effort)

- Facility Tours, Systems Verification
- Conduct Interviews

Meeting #2 (Zoom)

- Filter Questionnaire Results

Meeting #3: Tuesday 3/21, 10:30am

- Review Questionnaire Results and Existing Facility discoveries
- Review Guiding Principles
- Review Program, Space Diagrams
- Q&A / discussion, Action Items, Next Steps

Meeting #4: Tuesday 4/4, 10:30am

- Review Draft Facility Program Report
- Review Initial Cost Projections
- Q&A / discussion, Action Items, Next Steps

Conceptual Design Phase

Meeting #1: Tuesday 4/18, 10:30am

- Review Guiding Principles
- Review Design Concept options
- Review Cost Projections
- Q&A / discussion, Action Items, Next Steps

Meeting #2: Tuesday 5/2, 10:30am

- Review Refinements to Design Concepts
- Review Cost Projection Refinements
- Q&A / discussion, Action Items, Next Steps

Meeting #3: Tuesday 6/6, 10:30am

- Select preferred Design Concept Scheme
- Review Draft Conceptual Design Report
- Q&A / discussion, Action Items, Next Steps

Meeting #4: Tuesday 6/27, 10:30am

- Present Final Conceptual Design Report

Yakima City Hall
Guiding Principles

Service First	Efficient, friendly, interpersonal treatment
Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

YAKIMA CITY HALL
STAKEHOLDER QUESTIONNAIRE

Dear Stakeholder,

The ALSC Team is looking for feedback that will provide guidance for the design of the Yakima City Hall project. We are underway with the Pre-Design phase of work and seeking input from all project stakeholders. The input received will be processed and used to inform the Project Program, a document that will establish the project scope, quality level and budget. With approval of the program, the team will use that information to complete the Conceptual Design phase, expected to be complete by mid-2023.

As part of the planning process, a set of Guiding Principles will be developed. These ideas will be used as a framework to guide the team throughout the project and ultimately be used as a method of measuring whether the finished project is a success. A draft version of the Guiding Principles is listed below, the finished design should embody these objectives.

Service First	Efficient, friendly, interpersonal treatment
Approachable	Serve unique population needs of all citizens
Catalyst	Stimulate redevelopment, public use in Second Street vicinity
Maximize Existing Assets	Creative, effective re-use of existing spaces
Embrace DEI	Serve Staff needs of diversity, equity, inclusion

Name of Stakeholder:_____ **Date:**_____

Representing:_____

QUESTION 1: How many staff are currently in your department? How much growth do you anticipate in the next five years? What positions would be added?

_____

_____

_____

QUESTION 2: How many enclosed offices are required for your department? Are any of them shared? How many open workstations are needed? If growth is anticipated in the next five years, will the new positions need offices or open workstations?

_____

_____

_____

_____

_____

QUESTION 3: Considering your current space and looking towards the future, what works well now? what would you change?_____

_____

_____

_____

_____

_____

QUESTION 4: What support facilities are required for your space? (i.e. conference room, storage area, work room) Can any of these be shared with other departments?_____

_____

_____

_____

_____

Conference Room: To seat how many people? What type of display?_____

_____

Storage Area: What will be stored? How much? _____

_____

Work Room: What should be included? Copier? Layout space? _____

_____

Staff Break Area: For how many people? _____

_____

Other? _____

_____

QUESTION 5: Please list required adjacencies to other departments/areas:

_____

_____

_____

_____

QUESTION 6: Does your department require public interface? waiting area? If so, how many people should it accommodate? Also, can it be shared with other departments?

_____

_____

_____

QUESTION 7: Please list any special utility requirements:

- Heating/Cooling _____
- Ventilation/Exhaust (any equipment requiring separate vent, exhaust) _____
  _____
- Plumbing (sink, drinking fountain, etc) _____
- Electrical Service (floor outlets, dimming lights, etc) _____
  _____
- Special Lighting _____
- Audio/Visual (projectors, television) _____
  _____
- Communications (intercom, internet) _____
- Special Acoustics (privacy issues) _____
- Wall Display (markerboard, tackboard, etc) _____
- How many printers do you anticipate? _____

QUESTION 8: Please list required room finishes:

- Floor (carpet/linoleum/concrete, etc.) _____
- Ceiling (lay-in acoustical panels, gyp soffits, etc.) _____
  _____
- Walls (vinyl wallcovering, washable paint, etc.) _____
  _____

QUESTION 9: Please describe any specific security requirements for your space (locked cabinets, doors, room privacy, security equipment needs) _____

_____

_____

_____

QUESTION 10: Please share any other comments regarding your space _____

_____

_____

_____

_____

_____

_____

Thank you!

YAKIMA CITY HALL
BUILDING QUESTIONNAIRE

The ALSC Team is looking for feedback that will provide guidance for the design of the Yakima City Hall project. We are underway with the Pre-Design phase of work and seeking input on the condition of your existing facilities. Our mechanical and electrical engineers will be visiting the buildings as well, information provided will help guide them.

Name:_____ **Date:**_____

E-mail/Phone Number:_____

Building Name/Address: _____

QUESTION 1: Rate the building's mechanical system operational efficiency:

___ Excellent ___ Good ___ Fair ___ Poor ___ Unacceptable

Please explain if rating is less than fair:

_____

_____

_____

_____

_____

QUESTION 2: Rate the building's energy usage:

___ High ___ Average ___ Low

Please explain if higher than average:

_____

_____

_____

_____

_____

QUESTION 3: Please identify perceived deficiencies in the building:

___ Poor Temperature Control
___ High Maintenance Repair
___ Inadequate Plumbing System Access
___ Poor Water Flow
___ Repair Parts Hard to Find
___ Inadequate Ventilation
___ Frequent Overload Breakers
___ Inadequate Landscape Irrigation
___ Inadequate HVAC Service Access
___ Inadequate Water Shut-offs

QUESTION 4: Rate the present system's ability to meet thermal comfort needs:

___ Excellent ___ Good ___ Fair ___ Poor ___ Unacceptable

Please explain if rating is less than fair: _____

_____

_____

_____

_____

QUESTION 5: What envelope deficiencies exist? (i.e. roof leaks, windows in need of repair)

_____

_____

_____

_____

QUESTION 6: Please list any other concerns with uilding maintenance/repair:

_____

_____

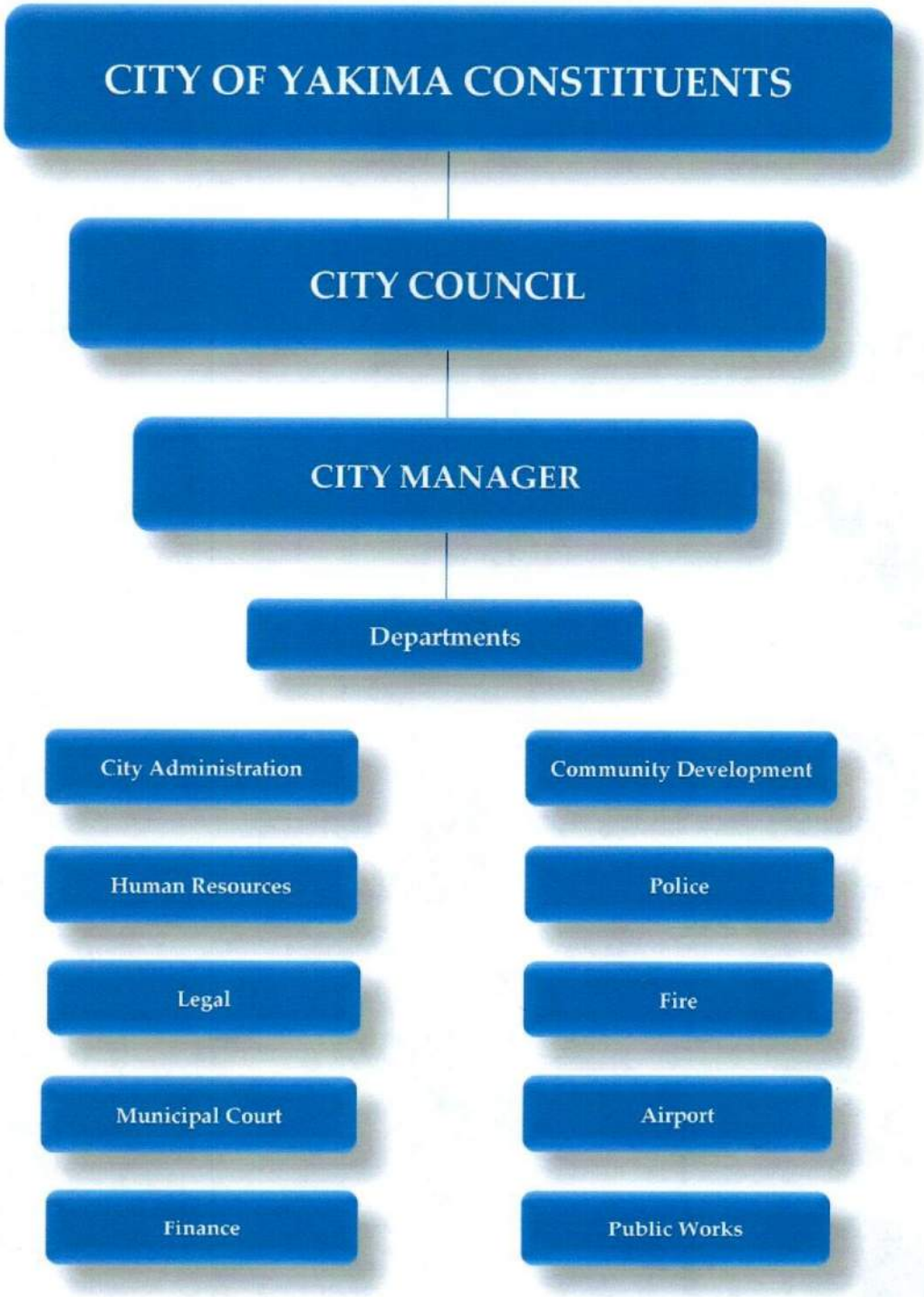
_____

_____

Thank you!

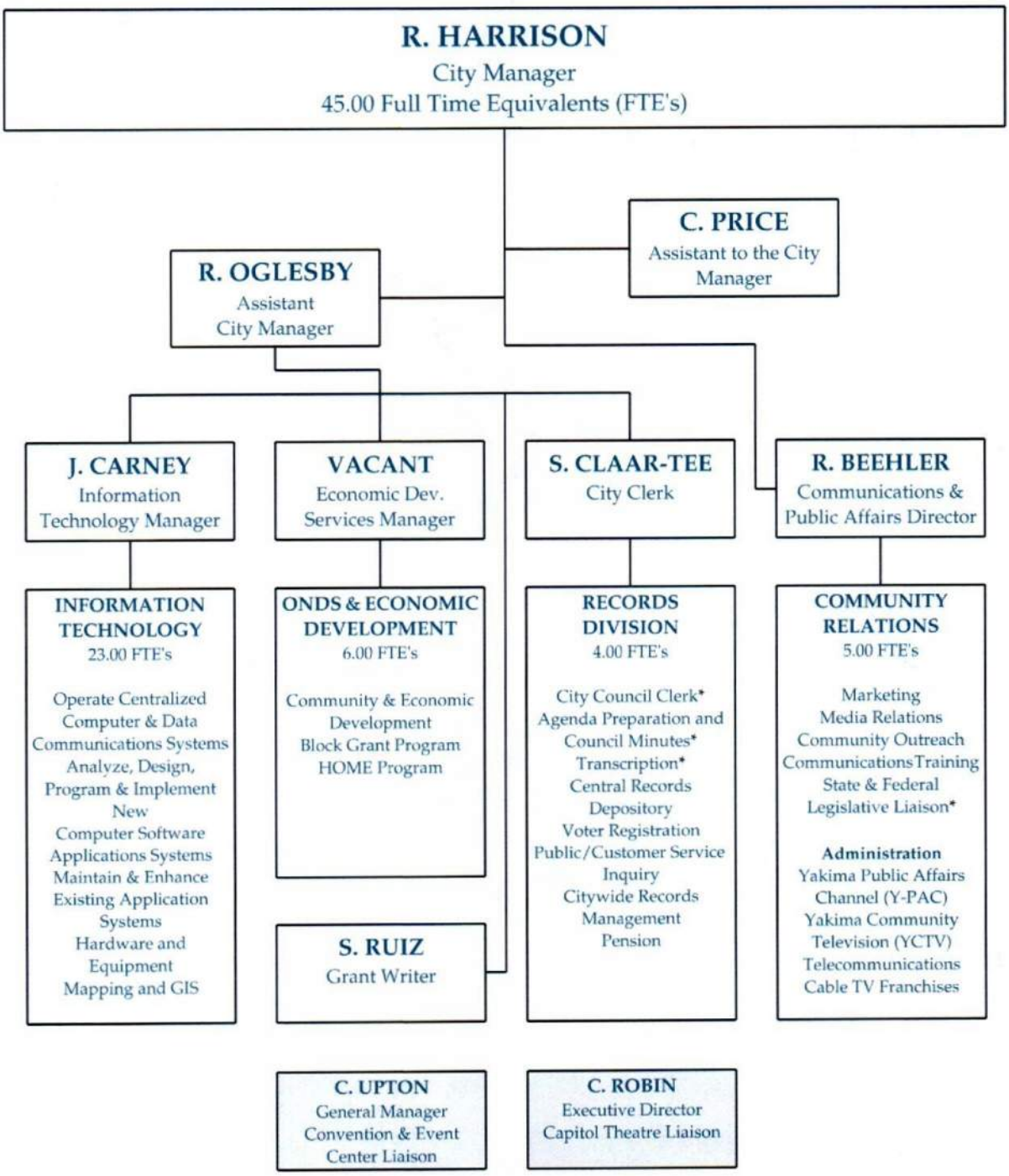
CITY OF *Yakima*

2023 ORGANIZATIONAL CHART



CITY ADMINISTRATION

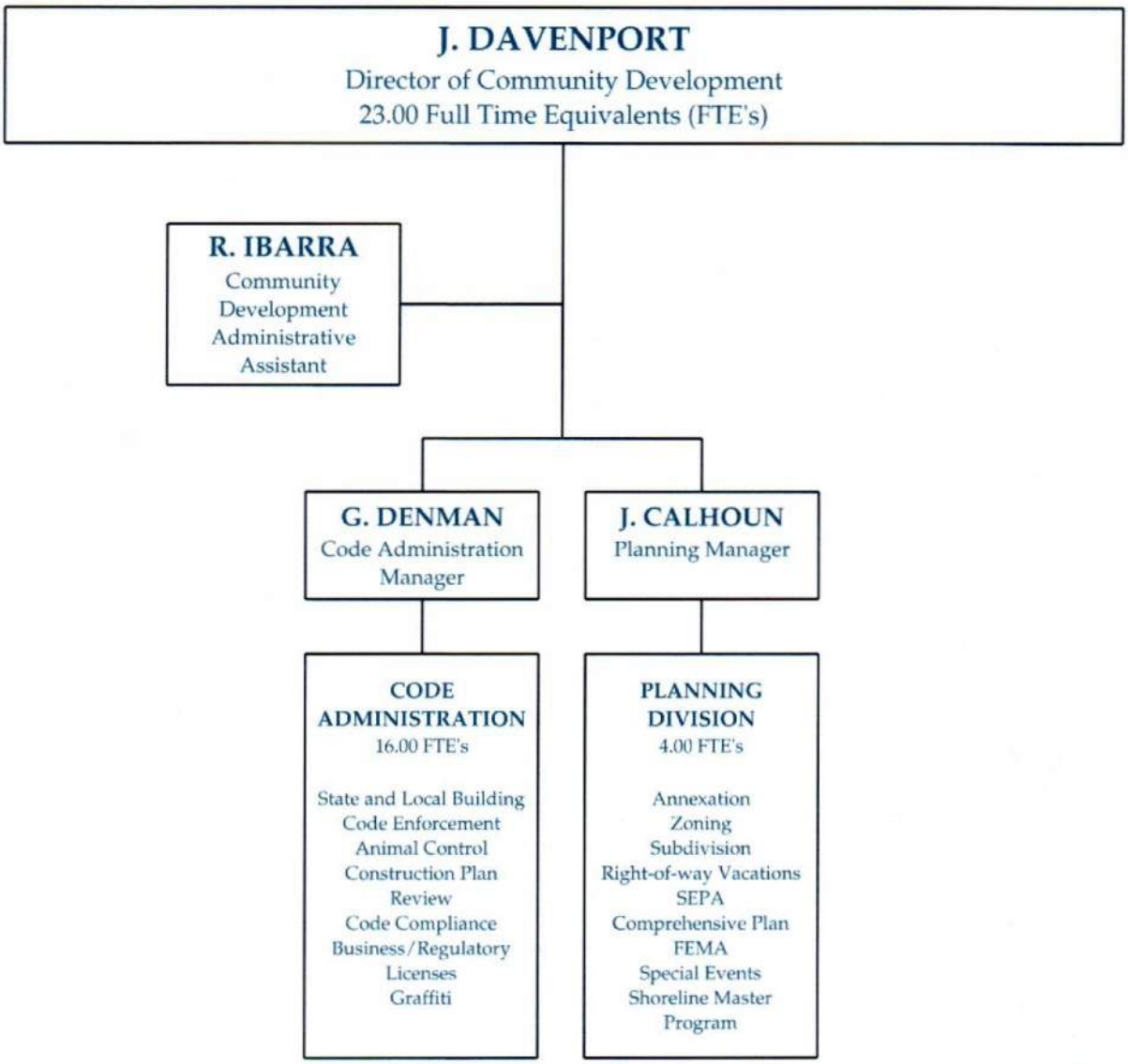
Organizational Chart as of January 1, 2023



* All Legislative functions are directly overseen by the City Manager.

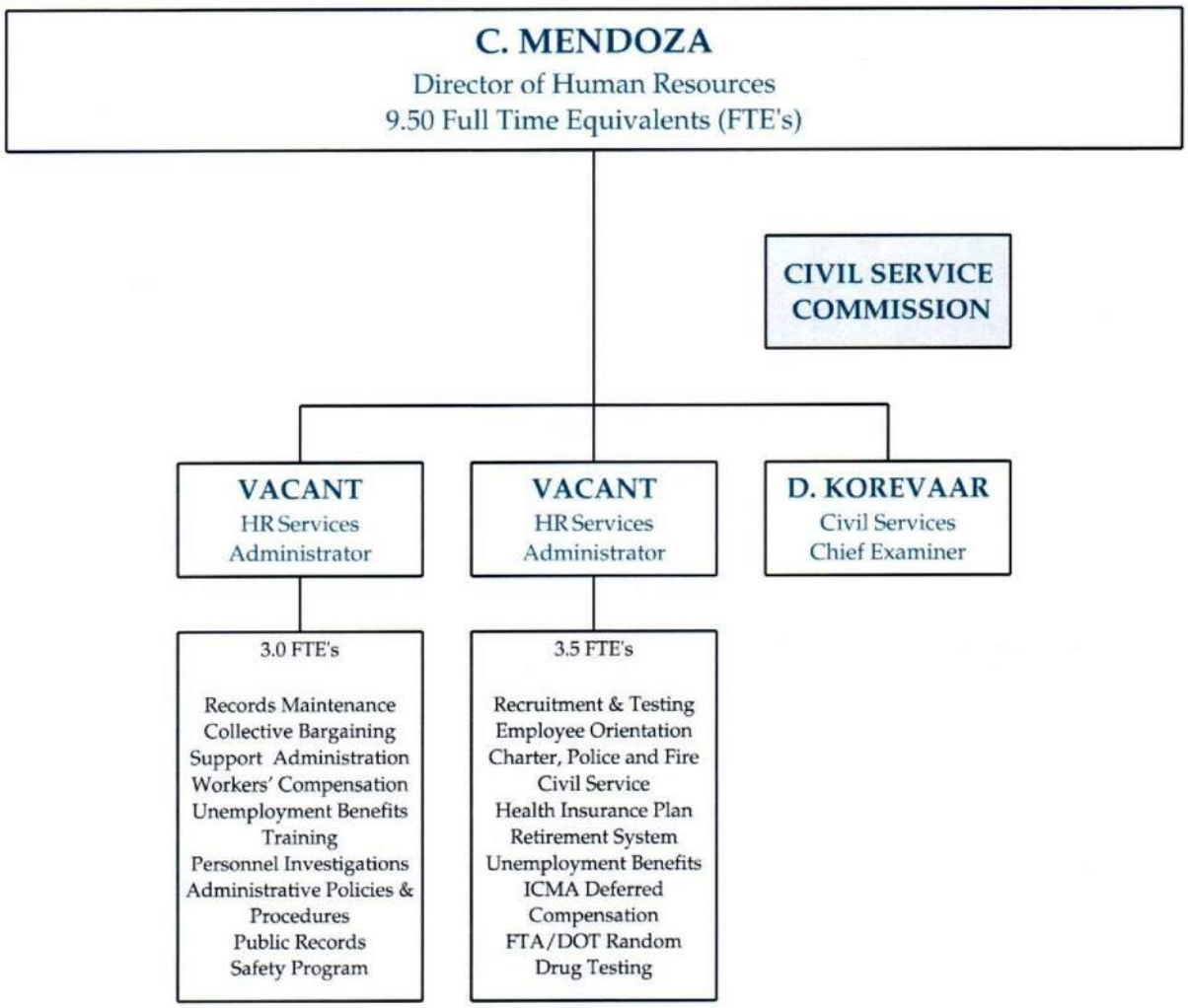
COMMUNITY DEVELOPMENT

Organizational Chart as of January 1, 2023



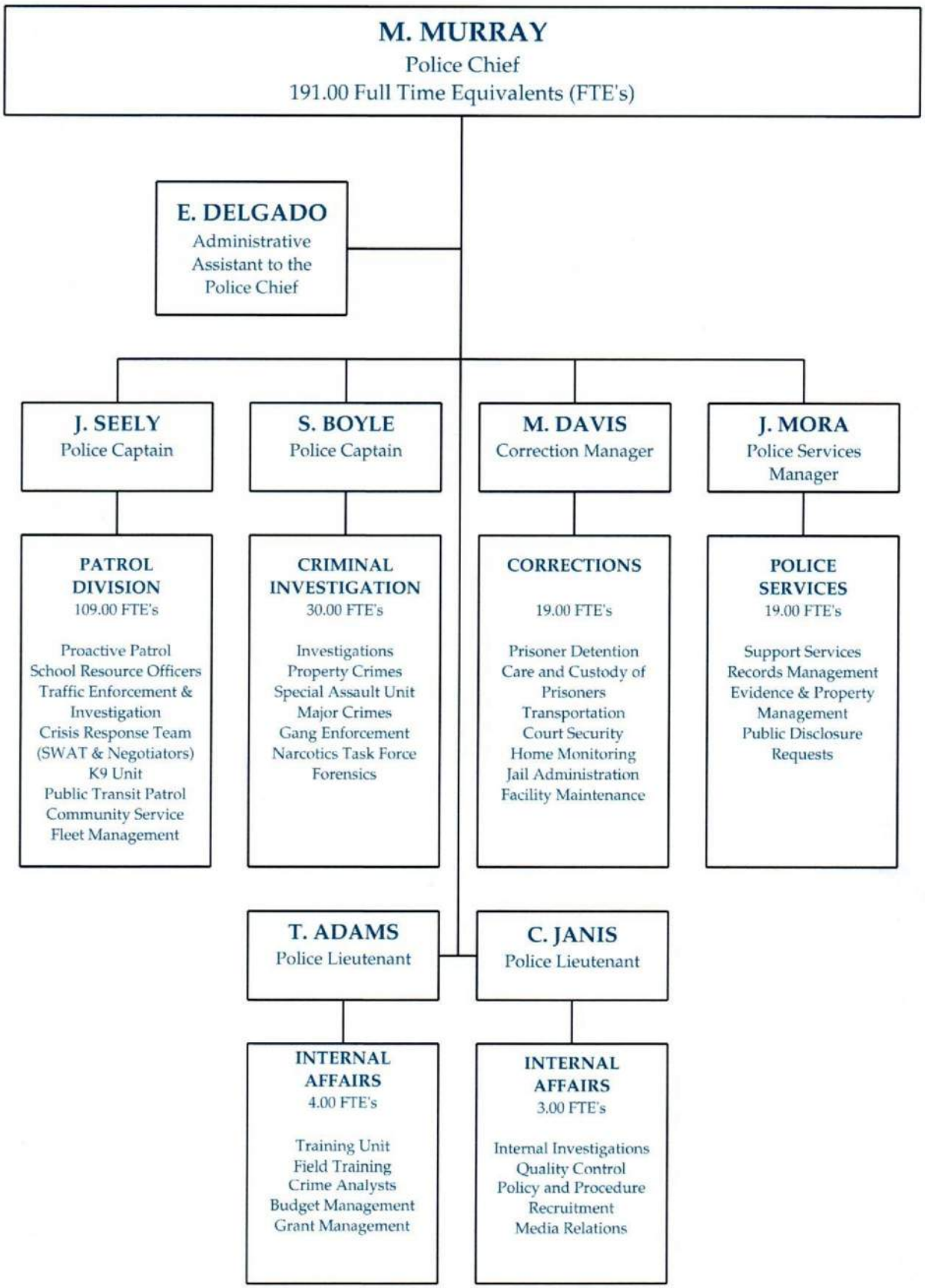
HUMAN RESOURCES

Organizational Chart as of January 1, 2023



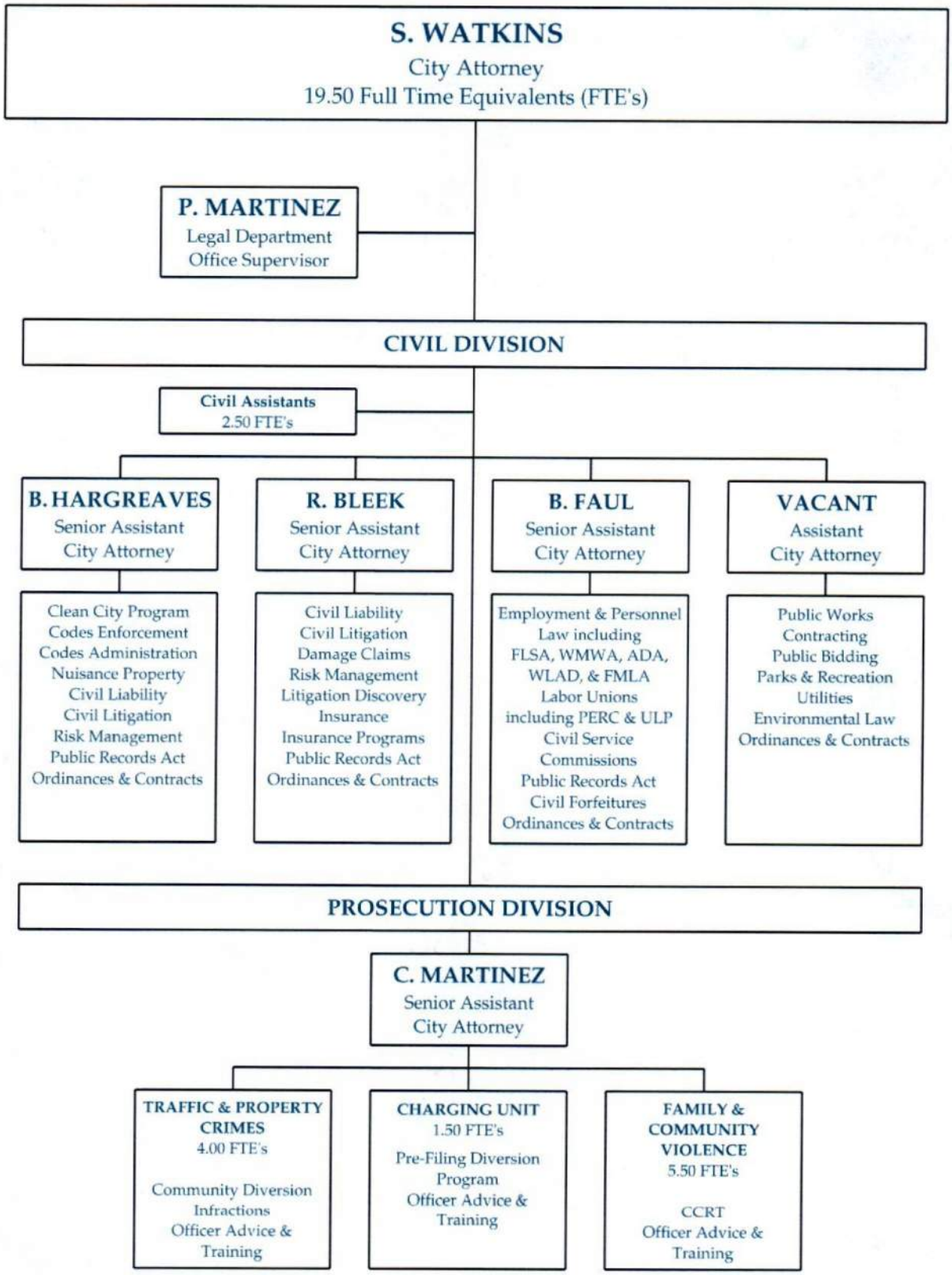
POLICE

Organizational Chart as of January 1, 2023



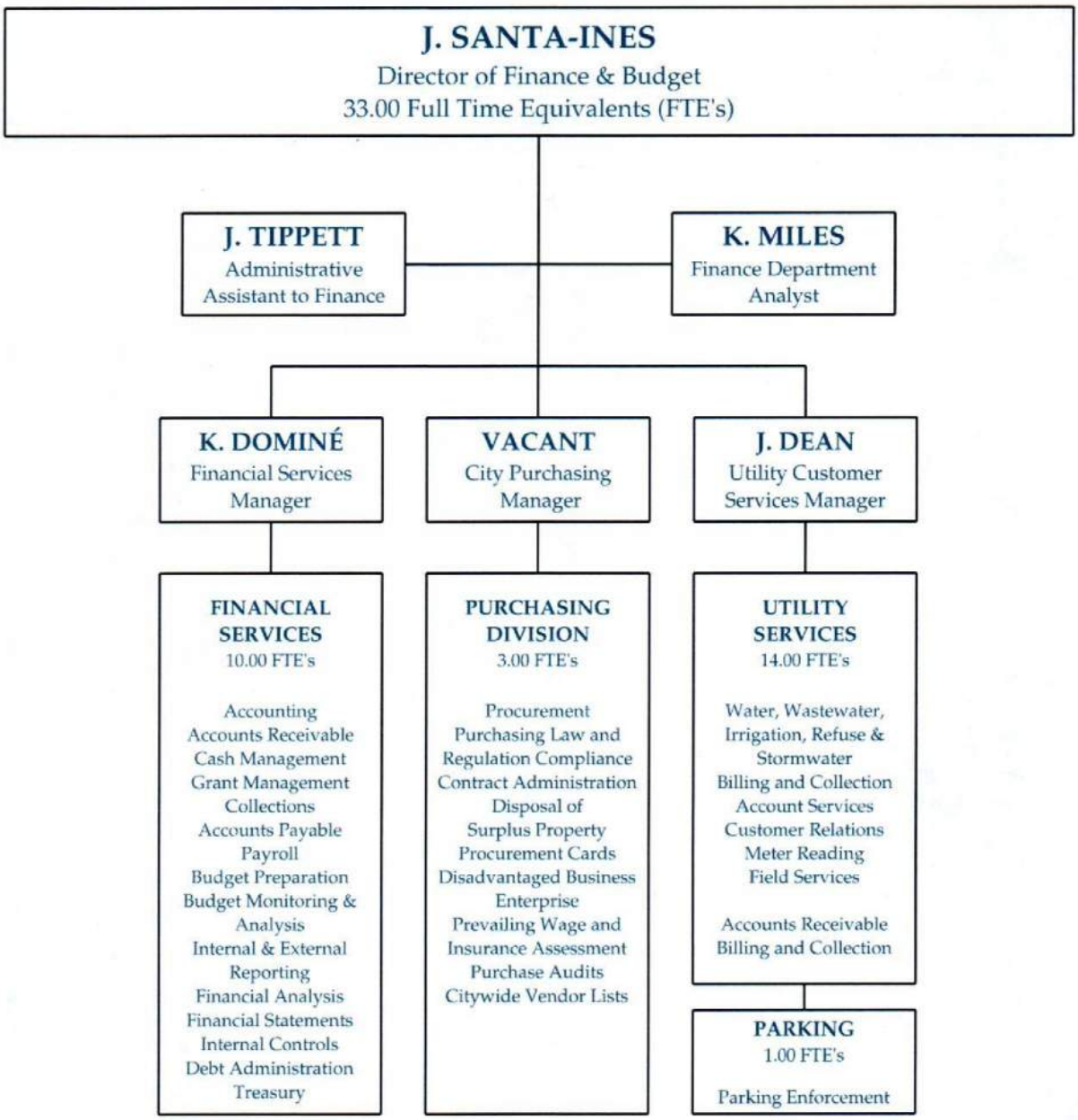
LEGAL

Organizational Chart as of January 1, 2023



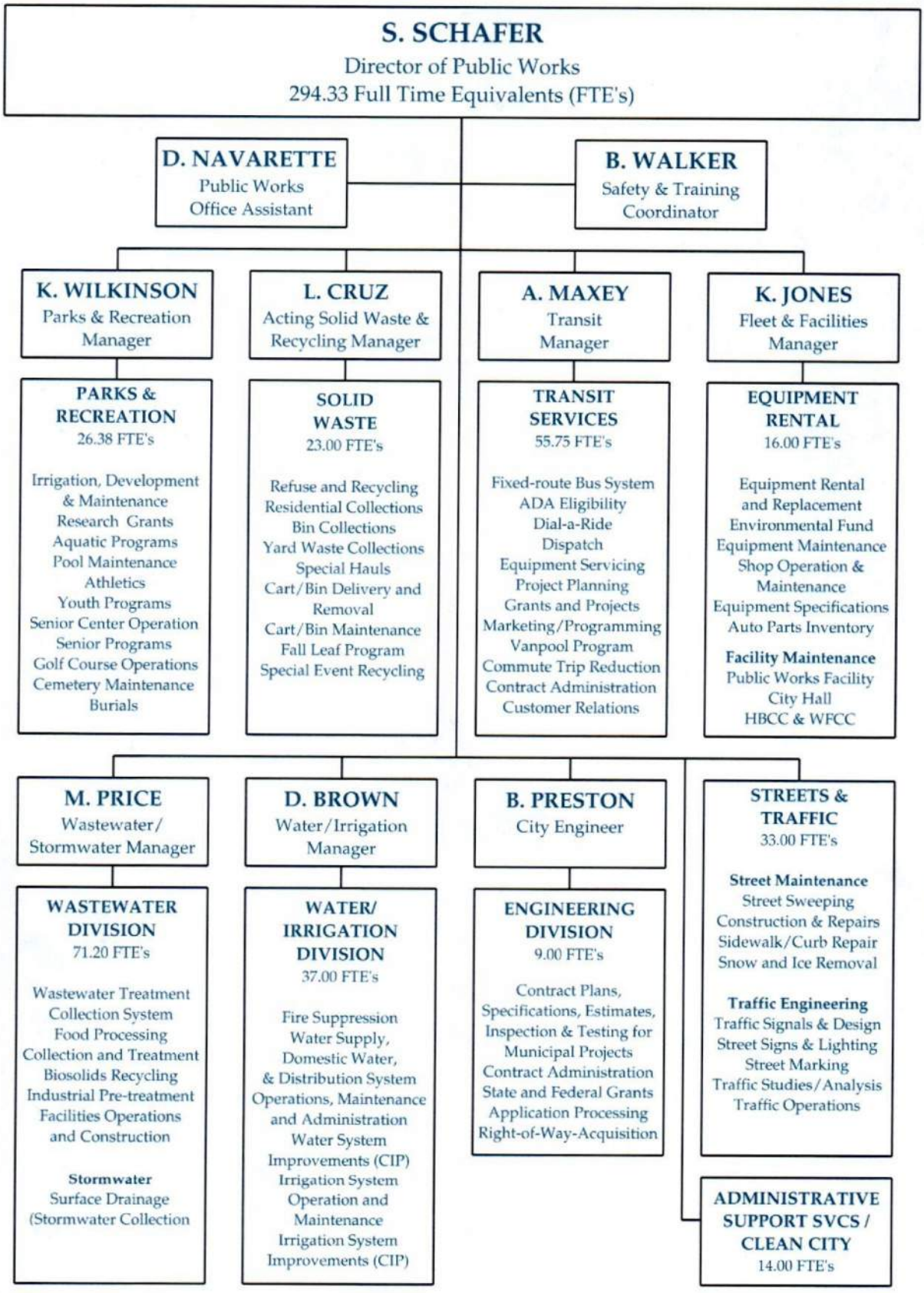
FINANCE

Organizational Chart as of January 1, 2023



PUBLIC WORKS

Organizational Chart as of January 1, 2023



City of Yakima Contacts

Department	Director	Division	Manager	Email	Phone
City Manager Office	Bob Harrison – City Manager			Bob.Harrison@YakimaWA.Gov	509-575-6006
			Rosylen Oglesby – Asst. City Mgr.	Rosylen.Oglesby@YakimaWA.Gov	509-575-6008
		Information Technology Serv.	John Carney	John.Carney@YakimaWA.Gov	509-249-6804
		City Clerks	Sonya Claar Tee	Sonya.Claartee@YakimaWA.Gov	509-575-6271
		Economic Dev. ONDS	Rosylen	Rosylen.Oglesby@YakimaWA.Gov	509-575-6008
Legal		Civil	Sara Watkins	Sara.Watkins@YakimaWA.Gov	509-576-6307
Community Development	Joan Davenport		Joan Davenport	Joan.Davenport@YakimaWA.Gov	509-576-6417
		Codes	Glenn Denman Admin. Mgr.	Glenn.Denman@YakimaWA.Gov	509-575-6268
		Planning	Joseph Calhoun	Joseph.Calhoun@YakimaWA.Gov	509-575-6042
Finance	Jennifer Ferrer-Santa Ines			Jennifer.Ferrer@YakimaWA.Gov	509-576-6644
		Finance	Kimberly Domine	Kimberly.Domine@YakimWA.Gov	509-576-6639
		Purchasing	Vacant		
		Utilities Services	James Dean	James.Dean@YakimaWA.Gov	509-576-6615
Human Resources			Connie Mendoza	Connie.Mendoza@YakimaWA.Gov	509-249-6868
Legal		Civil	Sara Watkins	Sara.Watkins@YakimaWA.Gov	509-576-6307
Public Works	Scott Schafer			Scott.Schafer@YakimaWA.Gov	509-576-6411
Public Works		Engineering	Bill Preston	Bill.Preston@YakimaWA.Gov	509-576-6754
		Facilities	Kerry Jones	Kerry.Jones@YakimaWA.Gov	
Police	Chief Murray			Matt.Murray@YakimaWA.Gov	509-575-6211
Capitol Theatre	Charlie Robin			Charlie@CapitolTheatre.org	509-853-8000
			Brian Palandri	Brian@CaitolTheatre.org	509-853-8324

Space Study Committee

Rosylen Oglesby, Asst. City Mgr.	Rosylen.Oglesby@YakimaWA.Gov	509-575-6008
Ira Cavin	Ira.Cavin@YakimaWA.Gov	509-576-6532 C: 509-728-6895
Joan Davenport, Community Development Director	Joan.Davenport@YakimaWA.Gov	509-576-6417
Sara Watkins, City Attorney	Sara.Watkins@YakimaWA.Gov	509-576-6307
Jennifer Ferrer-Santa Ines	Jennifer.Ferrer@YakimaWA.Gov	509-576-6639

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Project No.: 2022-040

Project Name: City of Yakima
Space Study

Subject: Meeting Minutes
Department Interviews
February 28 – March 2, 2023

By: Kim Phelps, Rustin Hall & Jodi Kittel

Attendees **Representing**
See attached sign-in sheets

This report is not intended to provide a transcript of proceedings, but rather to record the general content of the discussion that took place.

Action Item

I. Communications & Public Affairs
Randy Beehler

A. Goals: Properly sized council chambers, maintain relationship with city manager, assistant city manager, city clerk, administrative staff.

B. Currently, most of his staff works in a different building, which they have adapted to since 1998. Not critical to have his department staff in the same building.

C. Most programming in his department utilizes the council chambers.
1. Chambers need to be sized to accommodate everyone.
   a. Currently seats 50-60; don't often have groups bigger than that. Occasionally 50 additional people, so plan on seating for 100.
2. Biggest headache is limited space / limited production value in current chambers.

C. Technology for hybrid meetings needed.

D. Existing building has been pretty adaptable; been in it since 1998.

1. Bullpen area has worked well – needs 4 open stations. Interaction with public is primarily for interviews.

2. Studios and edit bays are used to produce video. Produces government and public access television. Community access may eventually go away.

E. The biggest challenge is council chambers.
   1. Council chambers are used by the community for other public meetings as well as committee meetings.

F. Likes the Redmond City Council Chambers.
   1. Randy will send council chambers examples that resonate with him.

G. Existing chambers seem intimidating to the general public.
   1. It is not an “us” and “them” in Yakima.
   2. Raised dais, theater style audience seating or all on the same floor level changes the feel of the room.

H. Daylight not ideal in council chambers.
   1. Daylight needs to be able to be controlled.

I. Current storage room is ± 25’x20’. Equipment is shrinking over time, so this size is still adequate.

J. Wayfinding to chambers is important for the public.
   1. Easy, close access for security.

K. This department interacts a lot with the City Clerk.

L. Existing office size is 15’x15’, but it doesn’t need to be that large.

II. Capitol Theatre

Charlie Robin, Carol West, Cat McMillen, Meghan Darragh

A. Offices need to be close to the theatre.
   1. Walkability is important. Their office is currently two blocks away.

B. Currently leasing their space.
   1. City wants to house in one of their facilities instead.

C. Capitol Theatre is not a division of the City of Yakima.
   1. Have an agreement with the city.
   2. Only resource allocation from the city would be the office space.
   3. Does not need to be directly connected to any other city departments. Separation is OK.
   4. Approach location of offices as if they are a tenant of the city.

D. Security is important.

E. Space should be accessible.

F. Windows to offices is important.

G. Team is very collaborative in what they do. A central area to meet is important.
   1. Could be an enclosed conference room capable of seating 12 for executive committee meetings. Should not be shared with other departments.
   2. If the central meeting space is open, they would also need access to a conference room. This would preferably have hybrid meeting capabilities and could be shared with other departments in the City.

H. Charlie needs enclosed office with door, and space for a couch.
   1. Finance, Development Services, and Patron Services also need enclosed offices. But if the number of offices is limited, priority would be for the CEO, then Finance, then Development Services, then Patron Services.

I. Finance sometimes meets with auditor, currently has small table in her office (four people) which is convenient but not necessary. They could use a small conference room instead.

J. Don’t need a separate entrance from other city departments, off of a central lobby is fine.

K. Space needs to feel inviting and lively, not institutional. Casual and

welcoming for patrons, renters, board members.

L. Typically print to a copier, which needs to be centrally located.

M. Would like a sink and access to water. A break room with refrigerator could be shared with other departments.

O. Alliant.net is their current local network provider. They will be touring their existing space to assess needs for their upcoming move.

P. Current office lease ends August 1st. May temporarily go to the Eighth Street house.

III. City Manager/City Clerks

Bob Harrison, Cally Price, Sonya Claar Tee, Brandy Bradford

A. City Clerk

1. Would like offices to be closer together.
2. Need to be near council chambers.
3. Need to be near City Manager's offices.
   a. The City Clerk works closely with the City Manager.
   b. Clerks provide backup for the City Manager's Assistant.
4. Work with public regarding public records requests and damage claims, pensions, and lawsuits.
   a. Number of visitors just depends on the day, generally 5-20. Often is busier around city council meeting times.
   b. There are a few drop-ins that need a space to sit; people looking through public records, for example.
5. Would be nice to have civil legal closer, but not a requirement. They are not close to each other now.
6. Some collaboration amongst staff, but mostly individual offices; locked and secure.
   a. Offices need to be able to see front counter.
7. Need seating for elderly visitors
   a. Privacy issues, pension review, HIPPA.
8. City Clerk takes in all mail.
   a. Everyone accesses, so can get into the space, which is sometimes a concern. If possible this should be moved to

outside the secure area, with 3 to 4 rooms for 5 people.

9. Feel like there are too many breakrooms in the building. Rather than each department having its own small area, they could be consolidated and shared.
10. One central customer service center at the entry desired.
    a. Right now the clerks field all general office calls and often help direct people that approach their window in the lobby. Ideally this would be done by someone else that was centrally located.
11. Office size:
    a. Sonya – table for four currently.
    b. Brandy – table for two currently.
    c. Existing desks are large.
12. Once a month there is a ten-person meeting, shared conference room works, shared with Human Resources. Staff meetings have 14 people.
13. Storage: need central records storage for all departments. Some files they keep forever per state retention guidelines. Needs to be secure with limited access, humidity controlled, and safe from flooding.

B. Council Chambers
1. Safety is important.
    a. Need an “escape” door for council members near the dais.
2. Current space is too small, needs to seat about 100 plus council and 2-10 staff presenters.
3. Like the Spokane Council Chambers.
4. Where should interpreter be located?
    a. Right now they tend to be in the lobby when there is more than one person that needs them, but that is easily heard within the chambers and can be a distraction.
5. Tiered chambers vs. flat.
    a. Want to be able to use space for other things (multi-purpose).
6. Will likely need to move chambers to Bank of America building, the structure of the City Hall limits expansion of the current space.
    a. Chambers are used by outside organizations.
7. Need an office and a small meeting room (six people) for council (shared).

8. Council needs a conference room for executive session; adjacent to chambers (also used for committee meetings).
    a. A small kitchenette should also be located next to Council Chambers. Enough space for a sink and storage of drinks, etc.
9. There is also a control room adjacent to Council Chambers.

C. City Manager
1. Cally's (city manager's assistant) office is next to Bob's (city manager), which works well (gatekeeper). She also is within earshot of Rosylen (assistant city manager). 2 new positions report to Rosylen.
2. City Council members also depend on Cally and their office/conference room should be near her space.

D. Current phone system is antiquated.
1. Use cell phones to minimize hard line system?
2. Some don't need voice mail. Perhaps a small hybrid system could be used.

E. TVs in offices with cable so they can stream news if needed for City Manager, City Clerk.

F. Would like to move IT out of City Hall basement.

G. County may want to lease space (basement offices)?

H. Want to try to create multiple activity centers in downtown, in the area next to city hall. Lots of pedestrian activity on 2nd Ave. Potential to close 2nd from MLK to the south to develop a plaza between city hall and county building.
1. City/county owns from 3rd to railroad tracks.
2. 4th Ave. mall is empty.
3. Downtown Summer Nights activities
4. Activate plaza by Capitol Theater
5. Create a sense of place. Outdoor screen, games, involve restaurants, fountains (like Kansas City), food trucks, breweries.

I. Library expansion possible in the future. Would expand to the west.

J. Potential for low-income housing behind Bank of America.

K. CYU lease ended today (2/27).
   1. Will need some space allocated for teaching CPR, etc.

L. Parking on site now is adequate. There is also parking available to staff behind the church across the street, but fewer people use that since the city acquired the Bank of America building and parking lot.

IV. City Council

A. Council Chambers:
   1. Room needs to be larger. Horseshoe needs to be larger. Need larger space for audience.
      a. Current room too long/narrow; needs to be wider. More square than long would be good.
   2. Need A/V technology upgrade.
      a. Provide chargers in horseshoe.
   3. A report was done by the Community Integration Committee that included recommendations for what could be done to make the Council Chambers more welcoming for the audience. Will forward to ALSC.
   4. Safety at horseshoe is important for people at the meeting.
   5. Chambers needs to be a multi-purpose space.
      a. Leaning toward tiered theatre audience, but that limits multi-use capability. Raised dais may be better solution. Being able to view the audience is important.
   6. Executive committee conference room.
      a. Video/media capability needed.
   7. Currently have one office with table and computer. Would be nice to have two.
      a. More important for this office to be closer to Cally's office than the council chambers.
   8. Need locking storage for council members.

V. YAMA (Yakima Music en Accion)

Stephanie Hsu, Alex Pualani

A. YAMA is an after-school music (orchestra) and leadership program: 3rd –

12th grades.

1. Pre-pandemic: 120+ students. Have 80 students now, which should be considered a minimum. Maximum of 150 students.
2. Currently utilize Garfield Elementary, which is not big enough.
3. Need space for performance / audience.

B. Rehearsal spaces

1. Need two large rehearsal spaces for large gatherings. 30-40 students. One large enough for a concert. Projection screens.
2. Need one medium rehearsal space. 20-30 students.
3. Acoustics important.
4. Ceiling height – 10-12 ft minimum. ALSC typically sees these types of spaces with 16 – 18 ft ceilings.
5. Prefer to have daylight.
6. Needs to feel welcoming.
7. Don't want to hide students.
8. Practice rooms
    a. Ten practice rooms desired. Carpet flooring. Two practice rooms for a larger group (up to 13 people). The rest for smaller groups (3 to 6 students). Include space for instruments, stands and chairs.

C. Administration – Six people right now.

1. Three or four offices with doors (1-2 small, 2 larger).
    a. Larger offices – multiple desks and small table. Co-working.
    b. Grants, fundraising, etc.
3. Main open space with table, monitors and printers.
4. Some people work from home part time.
5. Up to three private workstations.
6. Natural light is important.
7. Welcome desk near entry with waiting area.
8. Need work room with copier.

E. Storage

1. Store all instruments on site.
    a. Needs to be temperature regulated.
    b. Needs to be lockable, accessed by students. Access separate from rehearsal spaces.

c. 20+ cellists. 90+ other instruments (120+ instruments)
d. Currently have 4 chair racks (high stacking), 2 stands racks and 60 travel stands that they store.
e. Closet for cleaning supplies, other supplies easily accessible to students, too.

F. Physical music library
1. Three large filing cabinets in admin space, but not too far from practice space.
2. Space to spread music out.
3. Lounging area desired.

G. Support Space
1. Bathrooms, small kitchen (could be shared).
a. A couple gender neutral bathrooms. All gender neutral would be ideal.
b. Currently four toilet stalls total – not enough.
2. Small Kitchen
a. Students have snack between rehearsals.
b. 15-30 students.
3. Outdoor space would be incredible. Provide connection with students and the public, views in.
a. Roof space?

H. Instrument repair
1. Teach students how to repair; take care of instruments.

I. Projection
1. Projector and screen in one large rehearsal space. And another space if possible.
2. Internet capability

J. Hours of Operation
1. 8:00 am to 9:00 am start to 6:30 pm – 7:00 pm end.
2. Occasional weekends.
3. 24-hour access is desired.
4. Ability to do private lessons at practice rooms.
5. 3:00-3:45 pm and 5:00 – 6:15 pm there is lots of activity; traffic; student drop-off, etc.

a. Need parent waiting area. Want parents to feel welcome.
b. Issue key cards to everyone?
c. Volunteers access space as well.
d. Security is a concern.

6. Pull-up drop-off area would be used.
   a. Pick-up: parents come into the facility to get their student, for security purposes.
   b. Need 10 to 15 parking stalls.

K. Welcome / check-in area, near entrance to space.
1. With 24-hour access, may need direct street access.
2. Ideally would have auditorium with 200 to 300 seats for performance in front of an audience.
2. Don't want visitors and families to feel under surveillance.
   a. Many immigrant participants

L. Currently have no affiliation with city.
1. Bob has talked about forming a non-profit for the arts.

VI. Community Development, Codes, and Planning

Joan Davenport, Joseph Calhoun, Glenn Denman, Rosalinda Ibarra

A. Planning and codes share front counter, also take in items for engineering.

B. Like to be up front and transparent.

C. Money is taken upstairs.
1. If taken at one spot for entire city, they feel this is not efficient, and could be confusing.

D. Permit and land use shares same software.

E. Currently four stations at front counter.
1. Want to maintain current level of service.
2. (2) printers of adequate size for permits at the front counter.
3. Would like the ability to show monitor / screen at front counter. Currently not enough room to rotate for customer viewing.
4. Would like the ability to roll out plans at the front counter, or at small seating area (see item below). 3' x 4'.

F. Need space for larger printer.
   1. Easy access for permit tech, proximity to printer is needed.

G. Need small cubicle area with tables (2 or 3) to be able to lay out plans for mini meetings.
   1. Projects are private until submitted officially.

H. Kiosk for customers to apply for business license.

I. Moving to electronic submittals.
   1. Electronic plan review, but not likely that all will be electronic.

J. Common files room
   1. Currently have high capacity movable/sliding storage.

K. Share common kitchen and printing/work room (second floor shared).
   1. Need two copy/printer rooms.

L. Need to be close to engineering division.
   1. Work continually with them.
   2. Engineering has a counter, but not used much.
   3. Would still receive / take in engineering items.

M. Location in building - Wouldn't want to be higher than level 2.
   1. Level 2 is good, just needs complete re-design.

N. Offices
   1. Planning has three staff; will be hiring two or three additional.
   2. All enclosed offices, or five private offices. One open workstation.

O. Codes
   1. Building inspectors: 3 share an office. Could be cubicles.
   2. Code compliance officers – currently have 7
      a. Do lots of printing. Could use common printer.
      b. Open workstations are OK.
   3. Permit project coordinator:
      a. Needs separate office.
      b. Big tables for large plans.

c. Two big monitors needed.

P. Community Development Director, Joan, needs an office.

Q. Conference rooms – one large and one small with Zoom capability.

R. Shared kitchenette/break room area needed.

S. Storage
1. File room: Rolls of plans (maybe 200 at a time) and index.
2. Bankers boxes and rolls of plans in basement.
3. Planning Manager, Joseph, has six or seven file cabinets, legacy files.
4. Planning has files on 4th floor.
5. Plan storage – needs climate, humidity control. Don't have anything now. Leaks have occurred in the past. Consider CYU training in basement.

T. Planning
1. Lots of committees (five to seven commissioners). Possibly meet some place other than council chambers in the future. (mini-chambers?)
   a. Number of people varies depending on the topic. 15-25 people total.
   b. Public meetings, bid openings, etc.
2. Y-PAC (Channel 194) friendly.

U. Animal control moved to the police department. Dog licenses will now be paid at the permit counter.

V. Economic Development and Neighborhood Development should be in close proximity to Community Development.

VII. Finance, Purchasing, Utilities Services

Kimberly Domine, Christina Payer, James Dean

A. Finance and purchasing interact via email. OK to be separate from each other.

B. Purchasing
   1. Spread out on level 2, which is OK if it needs to stay that way.
      a. Would like to bring offices together in one row.
   2. Need improved storage room. Now: shelves behind accordion door.
   3. Getting a part-time purchaser, but don't know where they will be housed.
      a. At Public Works?
      b. At City Hall?
      c. Part time at both?
   4. Work with Engineering coordination on small works. Share conference room with code enforcement.
   5. Hiring a new purchasing manager.
      a. Currently have an empty office in their area.

C. Finance
   1. Space is ideal as it is now.
   2. No public interaction. Other departments are "customers".
   3. Currently in secured area.
   4. All currently in office, except two.
      a. Two are in open workstations - they service front counter, service city departments
   5. Constantly use conference room.

D. Departments can use shared conference room.

E. Utilities services:
   1. Counter is inefficient.
      a. Extend out a couple feet to give room at workstation behind.
      b. Provide divider partitions at counter (like a bank) for acoustical control.
      c. Need place for central printer near counter.
   2. Counter usage varies. Can sometimes be busy all day. Typically busy at the beginning / end of the month. Sometimes up to 6 people in line waiting.
   3. Current cubicles not conducive to working.
      a. Phone calls – hard to hear and understand.
      b. Maybe taller cubicles for acoustical control?

3. 1st floor location works for public interaction.
4. Don't need direct connection/adjacency to finance. OK to walk.
5. Safe in utilities services:
   a. Camera needed at safe.
6. Could possible be located in east end of BOA Building on ground floor.

F. Purchasing/Finance Storage
1. Currently have storage in basement.
2. Slowly getting away from paper; hold current paper for six-plus years, then shred. Will never be entirely paperless.
3. No temperature/humidity control requirements.
4. Purchasing:
   a. Needs small storage room in their area.

G. Public restrooms are always a mess.
a. More staff only toilet rooms are needed.
b. Homeless people use public restrooms.

VIII. Legal Department

Sara Watkins, Patricia Martinez, Cynthia Martinez

A. Prosecutor division runs in units.

B. In general, there is not enough space.

C. Conference room not big enough and is an odd configuration.

D. 22 staff total right now.

E. Interview rooms (Family Violence Unit).
1. Need a couple of small conference rooms. Capacity of 6 people.

F. Domestic Violence Center – provide services all in one space would be ideal.
1. House all in one place:
   a. Officers
   b. Prosecutor and support
   c. Victim advocates

2. Make people feel safe; safe place to talk.
3. Separate waiting? Currently wait in lobby, police talk to victim in the lobby. Needs to be more private.

G. Two offices short of need.

H. Kitchen is currently in hallway. Would like a break room.

I. Not enough conference rooms.

J. Should civil division move out to City Hall?
1. Five or six attorneys plus three or four staff.
2. All attorneys need a private office.
3. Prefer to stay all together.

K. Prosecution unit needs to stay in this building.

L. When court is in session, parking lot and lot across the street is full.

M. Could use more toilet rooms.
1. People come from downstairs to use level 2 restrooms.

N. Need to keep badge access to space for security.

IX. Municipal Courts

Jodi Stephens

A. Ergonomics up front is a big concern.
1. 90-degree turn to face customer.
2. No ADA counter.

B. New person will have to sit at front counter for now, because there is not enough space.

C. Break room is needed.

D. New chairs and desks desired.

E. First jury room holds up to 36 people.

F. Second jury room needed.
   1. Table with six jurors – used for deliberation.
   2. Currently (sometimes) use space across the street.
   3. Use current office space, which requires removal of furniture.
   4. Can't be located in police or prosecution areas.
   5. Storage room upstairs could be used as second jury room.
      a. Neutral space.
      b. Close to restroom and elevator.

G. Panic alarms – very delayed in courtrooms.
   1. Takes minutes to be received at the police department. Should be received immediately.
   2. Panic button should be within arm's reach, not behind monitor or other obstructions.

H. Long term storage is across the street at Annex.
   1. Not optimal, climate control is important.

I. Jodi's office needs sound proofing. Can hear TV in gym adjacent to her space.

X. Public Works, Engineering, Facilities

Scott Schafer, Bill Preston, Kerry Jones

A. Engineering:
   1. Like idea of being next to planning. Often goes down to talk to city manager, finance, etc.
   2. Need space for storage of paper.
      a. Currently storage is located on 3rd floor.
   3. Have extra space in the department right now.
   4. Assistant is in other corner of the building.
   5. Purchasing and engineering work together often.
   6. Engineering can help ONDS – some similar work.
   7. ONDS has a lot of equipment, tools, trucks, etc.

B. Public Works:
   1. Building is early 80's construction.
   2. Fairly cramped on space.

a. Transit moving out in two years, so that will free up some space.

3. Will need space to accommodate upcoming alternative fuels: Electric, hydrogen.
   a. Will make change once required – prefer hydrogen.
   b. Electrical grid can't handle electric.
   c. Less infrastructure for hydrogen.
4. Satellite location out west to store equipment, etc.?
5. Transit, police looking at possible location on west side, too – could be combined.

C. City fleet vehicle parking at City Hall.
1. Currently no security or protected parking.
2. No secure place to park personal vehicles when taking city vehicle on trip.

D. All complexes utilize natural gas.
1. Clean Building Act coming up.
2. Current building 80,000 sf – required to comply by 2028.

E. Security
1. Front desk – would like bullet-proof glass.
2. Working on installing more cameras, lighting.
3. There has been multiple break-ins.

F. No fire suppression system at the public works building or at City Hall.

G. Shop is at max capacity. How will EV and/or hydrogen impact that? Will eventually become an issue.

XI. Police Department

Matt Murray

A. Investigative area:
1. Space is very open now. Rows of open workstations.
   a. Can utilize this area as needed in planning future.

B. Annex building is a fire hazard.

C. Storage
   1. PD storage is upstairs City Hall. Need better storage solution.
   2. Cars brought in and need to be held for a period of time.

D. Training Center
   1. Required to do two trainings a month.
      a. 60 to 70 people.
      b. Acoustics important.

E. West side facility – potentially in the future
   1. Buy existing building? Church? Needs to be non-descript and private.
      a. Could work as separate space needed for child victim interviews.
   2. Substation west of 40th – ideal location.
      a. Could be shared with Public Works, but special victims' unit would need separate entry.

F. Some PD teams could move to City Hall or old Bank of America building.

G. Legal department – five trials a year – second jury room is not a priority.

G. A lot of room upstairs not being used, near EOC.

H. Analysts could move downstairs – would need to be quiet.

I. Traffic Division:
   1. Four detectives and two DUI officers.
   2. Could move to ONDS?

J. SWAT:
   1. In building on Fruitvale.

K. Overall, in good shape.

L. Existing B of A building
   1. Open to storage in the basement
   1. Training in basement?
   2. Conference rooms? Never have enough.

III. Human Resources

Connie Mendoza

A. Need a little more space.

B. Not all staff has been located in City Hall.

C. Training / testing space needed; shared is OK.

D. Conference room; shared is OK..

E. Confidential, private space is needed.

F. Don't mind tight space, just need more of it.

G. Some offices are too small.
   1. Typically meet with one or two people in office.

H. Close proximity to labor attorney would be nice – 2nd floor law and justice.

I. Payroll works closely with HR and would like to be located near them.
   a. Also a lot of interaction with the City Manager's office, but don't need to be nearby.

J. Locked files – only accessed by HR.

K. Do have walk-ins / public that they need to serve.

L. Kiosk located outside of the secure area for unemployment searches, etc.

M. Waiting area needed for ± four people, which can be shared.

N. Shared break room is OK.
   1. One per floor would be good.
   2. Multiple refrigerators, microwaves needed.

O. HR storage is in basement currently.
   1. Cleaning out now, may not need that room in the future.

2. Currently have rolling storage within their area.
    a. Access frequently; would keep this area.
    b. It would be nice to have all of their stored materials in their area.

P. Need access to multiple conference rooms in the building, for negotiating in particular. It would be ok for them to be on adjacent floors.

Q. Need to have secure access into employee area.

R. Ability to lockdown entry/exit points is important.

S. Connie would like table for three to four people to meet in her office.

Subject: IT Services Department Interview
March 9, 2023

By: Kim Phelps, Jodi Kittel

Attendees:

John Carney	City of Yakima, IT Services
Mike Robles	City of Yakima, IT Services
Stephen Yu	City of Yakima, IT Services
Randy Bonds Jr.	City of Yakima, IT Services
Kim Phelps	ALSC Architects
Jodi Kittel	ALSC Architects

I. IT Services

A. Server can be on separate floor from IT Services.

B. IT groups need to be on the same floor, within close proximity. Three groups of open cubicles. Need to be separated from each other for sound.

C. Used to have IT at Public Safety building.
   1. Security is a huge deal.
   2. Secondary server room is located there.

D. Garage bay
   1. Currently have one bay in city hall building. Possibly use existing B of A drive-thru as garage?
   2. One bay works most of the time with adequate space to store equipment.
      a. Needs to be secure.

E. Server room
   1. Unimpeded access from a hallway is desired.
   2. Not optimal to have server in separate building but could be okay.
   3. Needs to be secure.
   4. May be cost prohibit to relocate existing main server room.
   5. Current location is susceptible to flooding, pipe leaks, etc.
      a. Server room is elevated 12 to 15” above rest of basement.

b. Wiring is below raised floor on top of concrete slab.

6. If kept in basement, consider re-routing all wiring above.
7. If kept in basement, current location is good; not worth moving.
8. If moved, an outside wall makes most sense. No windows.
9. Cooling and backup cooling system needed.

F. John works closely with three supervisors and an admin assistant.
   1. Supervisors need to be close to their group of staff.

G. Front counter area/help desk:
   1. Mostly works now; larger waiting area is needed.

H. Enclosed offices
   1. John – has table in his office and it has become valuable.
   2. Currently use conference room; if shared, may need more tables in offices.
   3. Supervisors need to be in enclosed offices. Mike – usually one or two people visit. Stephen – has an equipment cart now, and doesn't need a separate meeting table.
   4. Sound dampening needed at offices.

I. Workstations (open)
   1. Size – Randy's area is good (networking).
   2. Stephen's area is too small.
      a. Phones, equipment, switches, network equipment are stacked up.
      b. A little bigger than developers' area.
   3. Current cubicles are u-shaped, 9'x9'. New cubicles will need to be this size.

Subject:	Assistant City Manager Interview with Rosylen Oglesby March 13, 2023
By:	Kim Phelps, Jodi Kittel

Attendees:

Rosylen Oglesby	Assistant City Manager, City of Yakima
Kim Phelps	ALSC Architects
Jodi Kittel	ALSC Architects

A. It was agreed that there should be standard sizes for offices across departments.
   1. A manager's office should be large enough for a desk and small table and that offices other than managers typically just need a desk.

B. ALSC will provide diagrams of different office and workstation sizes/furniture layouts for the committee to review.

C. Rosylen thinks her office is too large at 225 sf.

D. It had been discussed previously that the City Manager's office would move to the old Bank of America building, along with Council Chambers, Clerks, Community Development, Economic Development (including ONDS), and Engineering.

E. The City has another property on Race Street that will house the shop functions currently housed at the ONDS house, so they do not need to have space at the City Hall or Bank of America Building. Only the ONDS administration (4 people) will move downtown. One manager in enclosed office, while the other three could be open workstations.

F. The Economic Development Manager should have an office, the grants writer can have an open workstation.

G. Locating the council chamber at the east side of the Bank of America building, with dais in front of the windows, will be explored.
   1. A separate room for committee meetings (recorded) is desired. They currently use the council chambers.

H. In previous discussions Finance, IT, and potentially HR would stay in the old City Hall.
   1. It is a priority to move the IT department out of the basement.
   2. Training and Break areas could go in the basement (for either building).
   3. The city would like to explore the option of the 3rd and 4th floors being used by the arts community (YAMA in particular), perhaps even including use of the roof. ALSC will first explore what space on those floors might be needed for city departments.

I. Although it is understood that Capitol Theater does not want to move its offices into the ONDS building, their program will be compared to the space available at that location to see if it would fit. Other locations at the City Hall or old Bank of America building will also be explored. If the ONDS building cannot be utilized, it will likely be released from city inventory.

If you have any additions or corrections to these minutes, please bring them to the attention of the editor within two weeks of the date of this meeting.

Distribution:	Bob Harrison	City of Yakima
	Rosylen Oglesby	City of Yakima
	Sara Watkins	City of Yakima
	Joan Davenport	City of Yakima
	Jennifer Ferrer-Santa Ines	City of Yakima
	Ira Cavin	City of Yakima
	Susan Knotts	City of Yakima
	RH/KP/JK	

ALSC ARCHITECTS

City of Yakima
Guiding Principles

SERVICE FIRST	Efficient, friendly, interpersonal treatment
APPROACHABLE	Serve unique population needs of all citizens
CATALYST	Stimulate redevelopment, public use in Second Street vicinity
MAXIMIZE EXISTING ASSETS	Creative, effective re-use of existing spaces
EMBRACE DEI	Serve Staff needs of diversity, equity, inclusion

Yakima Space Study | Proposed Meeting Schedule

Updated 3-20-2023

Pre-Design Phase

Kick-off Meeting: Tuesday 2/14, 10:00am

- Introductions
- Review Project Scope, Phases, Workflow, Schedule, Meeting Dates
- Review Guiding Principles
- Review Draft Questionnaires, Process for gathering information
- Validate current list of individuals to be interviewed
- Q&A / discussion, Action Items, Next Steps

Week of February 27 (2-3 day effort)

- Facility Tours, Systems Verification
- Conduct Interviews

Meeting #2: Tuesday 3/21, 10:30am

- Review Guiding Principles
- Review Questionnaire Results and Existing Facility discoveries
- Review Program, Space Diagrams
- Q&A / discussion, Action Items, Next Steps

Meeting #3: Tuesday 4/4, 10:30am

- Review Draft Facility Program Refinements
- Review Initial ROM Cost Projections
- Department adjacency review
- Q&A / discussion, Action Items, Next Steps

Conceptual Design Phase

Meeting #1: Tuesday 4/18, 10:30am

- Review Guiding Principles
- Review Design Concept options
- Review Cost Projections
- Q&A / discussion, Action Items, Next Steps

Meeting #2: Tuesday 5/2, 10:30am

- Review Refinements to Design Concepts
- Review Cost Projection Refinements
- Q&A / discussion, Action Items, Next Steps

Meeting #3: Tuesday 6/6, 10:30am

- Select preferred Design Concept Scheme
- Review Draft Conceptual Design Report
- Q&A / discussion, Action Items, Next Steps

Meeting #4: Tuesday 6/27, 10:30am

- Present Final Conceptual Design Report

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
City Manager								**2,031**
	City Manager	*1*	*1*		●	*180*	180	
	Assistant City Manager	*1*	*1*		●	*180*	180	
	Assistant to the City Manager	*1*	*1*		●	*150*	150	
	Grant Writer	*0*	*1*	●		*150*	150	
	Economic Development Manager	*0*	*1*		●	*150*	150	
	Conference Room (for 14)	*1*	*1*			*315*	315	
	Storage	*1*	*1*			*100*	100	
	Break Room (for 12)	*1*	*1*			*300*	300	
	Work Room	*1*	*1*			*100*	100	
	CIRCULATION - 25%						406.25	
City Council								**2,913**
	Council Chamber	*1*	*1*			*2000*	2000	
	Conference Room (for 8)	*0*	*1*	●		*180*	180	
	Office	*1*	*1*		●	*150*	150	
	CIRCULATION - 25%						582.5	
Information Technologies (IT)								**6,104**
	Department Head	*1*	*1*		●	*180*	180	
	Supervisors	*3*	*3*		●	*150*	450	
	Administrative Assistant	*1*	*1*		●	*120*	120	
	Help Desk/Tech Area	*5*	*7*	●		*72*	504	
	Help Desk (including waiting area for 2-4)	*1*	*1*			*400*	400	
	Tech Bench	*1*	*1*			*315*	315	
	Application Development and Support	*8*	*10*	●		*72*	720	
	Infrastructure Support	*5*	*7*	●		*72*	504	
	IT Server and Networking Room	*1*	*1*			*320*	320	
	Conference Room (for 25-30)	*1*	*1*			*500*	500	
	Secure Storage (not shared)	*1*	*1*			*450*	450	
	Break/Copy Room	*1*	*1*			*100*	100	
	CIRCULATION - 25%						*1140.75*	
	Car bay	*1*	*1*			*400*	*400*	
City Clerks								**1,625**

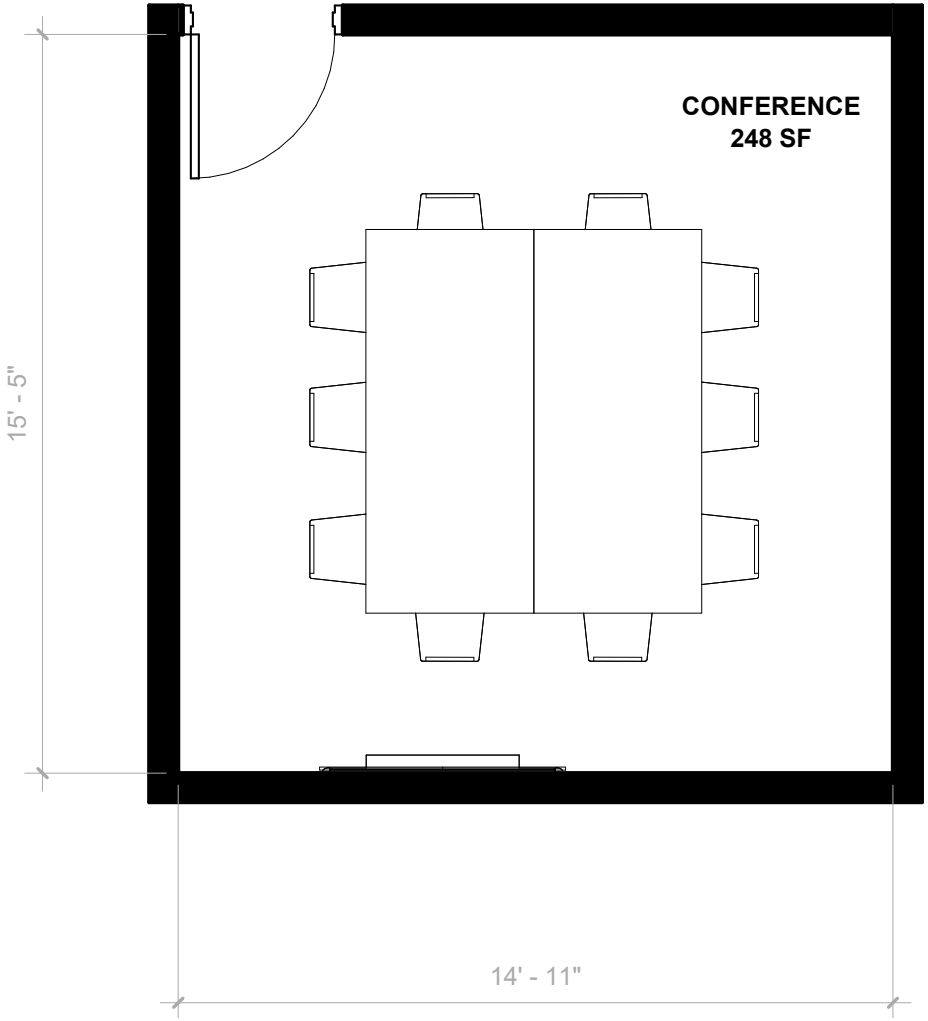
Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
	Manager	1	1		●	180	180	
	Clerks	4	4		●	150	600	
	Clerk	1	1	●		80	80	
	Conference Room (for 10)	1	1		●	240	240	
	Dedicated Storage Room	1	1			200	200	
	CIRCULATION - 25%						325	
ONDS								**1,638**
	Manager	1	1		●	180	180	
	Grant Financial Specialist	0	1		●	150	150	
	Home Loan Specialist	0	1		●	150	150	
	Carpenter	0	1		●	150	150	
	Reception	1	1	●		120	120	
	Conference Room (for 9)	1	1			240	240	
	CIRCULATION - 25%						247.5	
	Shop	1	1			400	400	
Communication and Public Affairs								**225**
	Manager	1	1		●	180	180	
	CIRCULATION - 25%						45	
Community Development								**4,535**
	Department Head	1	1		●	180	180	
Codes	Manager	1	1		●	150	150	
	Offices	3	3		●	120	360	
	Workstations	14	16	●		64	1024	
	Storage Room	1	1			100	100	
	Building Plans Storage Room	1	1			144	144	
Planning	Manager	1	1		●	150	150	
	Planners/Planning Tech	5	5		●	120	600	
	Property Record File Room	1	1			288	288	
	Waiting area for up to 12 people							

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
	CIRCULATION - 25%						*749*	
	Conference Room (for 15-20)	*1*	*1*			*400*	400	
	Work Room	*1*	*1*			*150*	150	
	Break Room	*1*	*1*			*240*	240	
Finance								**5,873**
	Department Head	*1*	*1*		●	*180*	180	
	Administrative Assistant	*1*	*1*	●		*64*	64	
	Finance Dept Analyst	*1*	*1*		●	*120*	120	
Financial Svcs	Manager	*1*	*1*		●	*150*	150	
	Offices	*11*	*11*		●	*120*	1320	
	Workstations	*2*	*2*	●		*64*	128	
	CIRCULATION - 25%						*490.5*	
Purchasing	Manager	*1*	*1*		●	*150*	150	
	Buyers	*4*	*4*		●	*120*	480	
	CIRCULATION - 25%						*157.5*	
Utility Svcs	Manager	*1*	*1*		●	*150*	150	
	Offices	*2*	*2*		●	*120*	240	
	Workstations (including 1 from Finance)	*9*	*9*	●		*64*	576	
	Waiting Area (for 4-5)	*1*	*1*			*100*	100	
	Storage Room	*1*	*1*			*200*	200	
	CIRCULATION - 25%						*316.5*	
	Conference Room (for 16-20)	*1*	*1*			*400*	400	
	Break Room (for 20)	*1*	*1*			*500*	500	
	Work Room	*1*	*1*			*150*	150	
	Waiting Area (10)							
Human Resources								**4,008**
	Director	*1*	*1*		●	*180*	180	
	Offices	*10*	*13*		●	*150*	1950	
	Administrative Assistant	*0*	*1*	●		*64*	64	

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
	Storage	*1*	*1*			*200*	200	
	Work Room	*1*	*1*			*100*	100	
	Conference Room (for at least 15)	*1*	*1*			*312*	312	
	Break Room (for 15)	*1*	*1*			*300*	300	
	Waiting area (for 5-10)	*1*	*1*			*100*	100	
	Training Room (size?)							
	Computer Lab							
	CIRCULATION - 25%						*801.5*	
Public Works								**4,228**
	Department Head	*1*	*1*		●	*180*	180	
Engineering	Manager	*1*	*1*		●	*150*	150	
	Offices	*3*	*4*		●	*120*	480	
	Workstations	*6*	*6*	●		*64*	384	
	Hotel Workstations	*2*	*2*	●		*64*	128	
	Equipment Storage	*1*	*1*			*300*	300	
	Hard copy Storage	*1*	*1*			*500*	500	
	Conference Room (for 10-15)	*1*	*1*			*312*	312	
	Waiting Area (for 15)	*1*	*1*			*300*	300	
	CIRCULATION - 25%						*683.5*	
Facilities	Offices located in Public Works Building won't move							
	City Hall Building Operations Supervisor	*1*	*1*		●	*120*	120	
	Support staff	*2*	*2*	●		*64*	128	
	Car bay	*1*	*1*			*400*	400	
	CIRCULATION - 25%						*162*	
Capitol Theater								**1,765**
	Executive Director	*1*	*1*		●	*180*	180	
	Offices	*4*	*4*		●	*150*	600	
	Workstations	*2*	*3*	●		*64*	192	
	Conference Room (for 10)	*1*	*1*			*240*	240	
	Reception/Waiting area	*1*	*1*			*100*	100	
	Break Room	*1*	*1*			*100*	100	
	CIRCULATION - 25%						*353*	

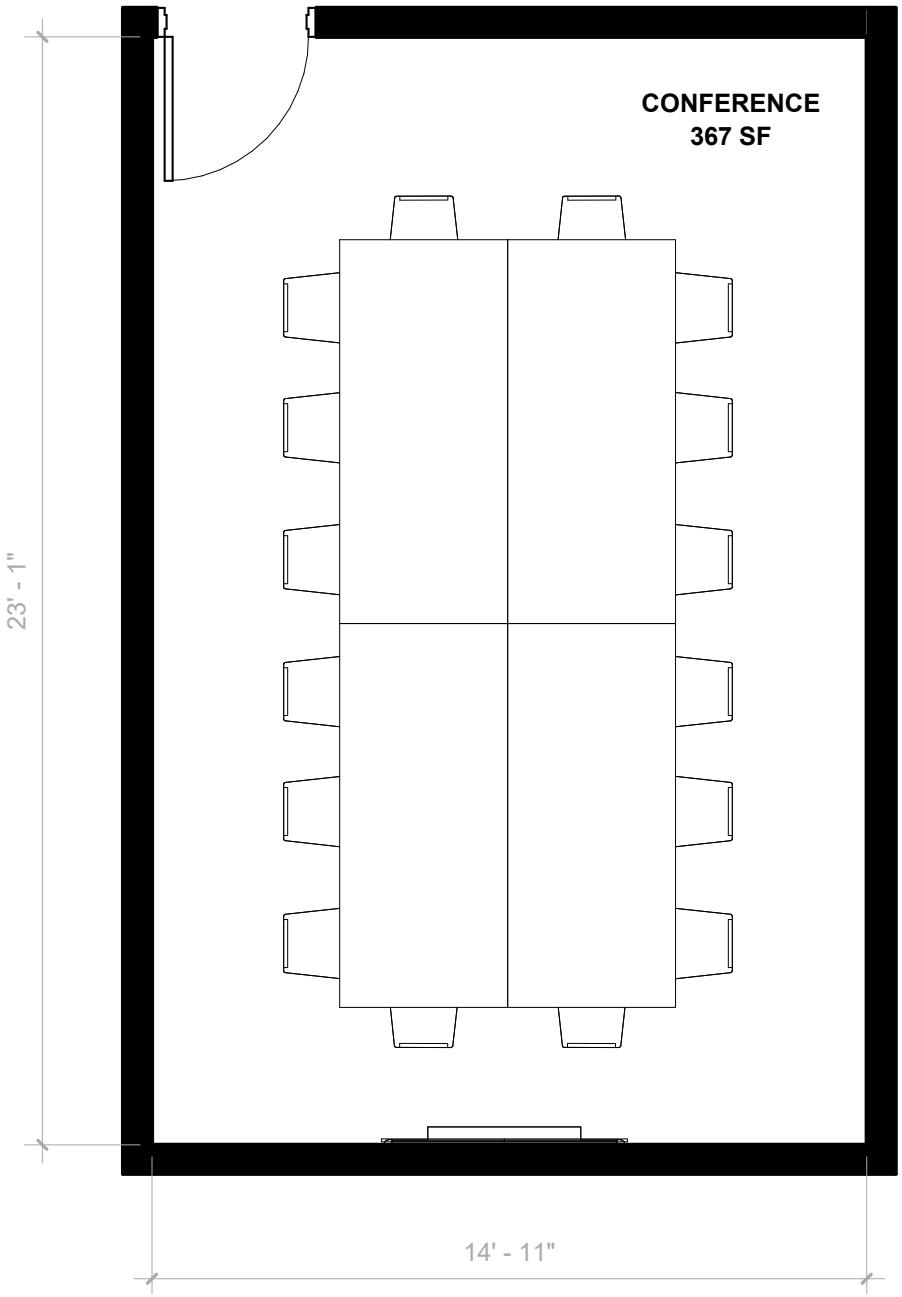
Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
Legal								**5,396**
	City Attorney	*1*	*1*		●	*180*	180	
	Office Manager	*1*	*1*		●	*150*	150	
	Attorneys	*11*	*12*		●	*150*	1800	
	Domestic Violence Advocates (shared office)	*1*	*1*		●	*180*	180	
	Workstations	*7*	*8*	●		*64*	512	
	Reception/Legal Assistant	*1*	*1*	●		*100*	100	
	Waiting Area (4, not shared)	*1*	*1*			*240*	240	
	Conference Room (for 25)	*1*	*1*			*500*	500	
	Conference Room (10)	*1*	*1*			*240*	240	
	Interview Room (6)	*1*	*1*			*150*	150	
	Storage	*1*	*1*			*25*	25	
	Break Room (8-10)	*1*	*1*			*240*	240	
	CIRCULATION - 25%						*1079.25*	
Municipal Courts								**1,973**
	Manager	*1*	*1*		●	*150*	150	
	Clerks	*7*	*7*	●		*64*	448	
	Break Room	*1*	*1*			*120*	120	
	Work Room	*1*	*1*			*80*	80	
	Conference Room (for 30+)	*1*	*1*			*600*	600	
	Jury Room (for 6)	*1*	*1*			*180*	180	
	CIRCULATION - 25%						*394.5*	
Police								**1,750**
	Training area (size: 35'x40'?)						1400	
	CIRCULATION - 25%						*350*	

Department		2023	2028	WORK STATION	PRIVATE OFFICE	SF PER SPACE	TOTAL PROGRAM AREA (2028)	TOTAL DEPT AREA (SF)
YAMA								**14,293**
	Offices	*4*	*4*			*240*	960	
	Workstations	*3*	*3*			*64*	192	
	Conference Room (for 15)	*1*	*1*			*312*	312	
	Large Rehearsal Space (for 30-40 students)	*2*	*2*			*1800*	3600	
	Medium Rehearsal Space (for 20-30 students)	*1*	*1*			*1500*	1500	
	Practice Rooms (for 3-4)	*10*	*10*			*140*	1400	
	Practice Rooms (for 13)	*2*	*2*			*800*	1600	
	Waiting Area (for 20)	*1*	*1*			*400*	400	
	Instrument Storage	*1*	*1*			*600*	600	
	Music Storage	*1*	*1*			*120*	120	
	Break Room (15-30)	*1*	*1*			*750*	750	
	CIRCULATION - 25%						*2858.5*	



10 CHAIRS - Square

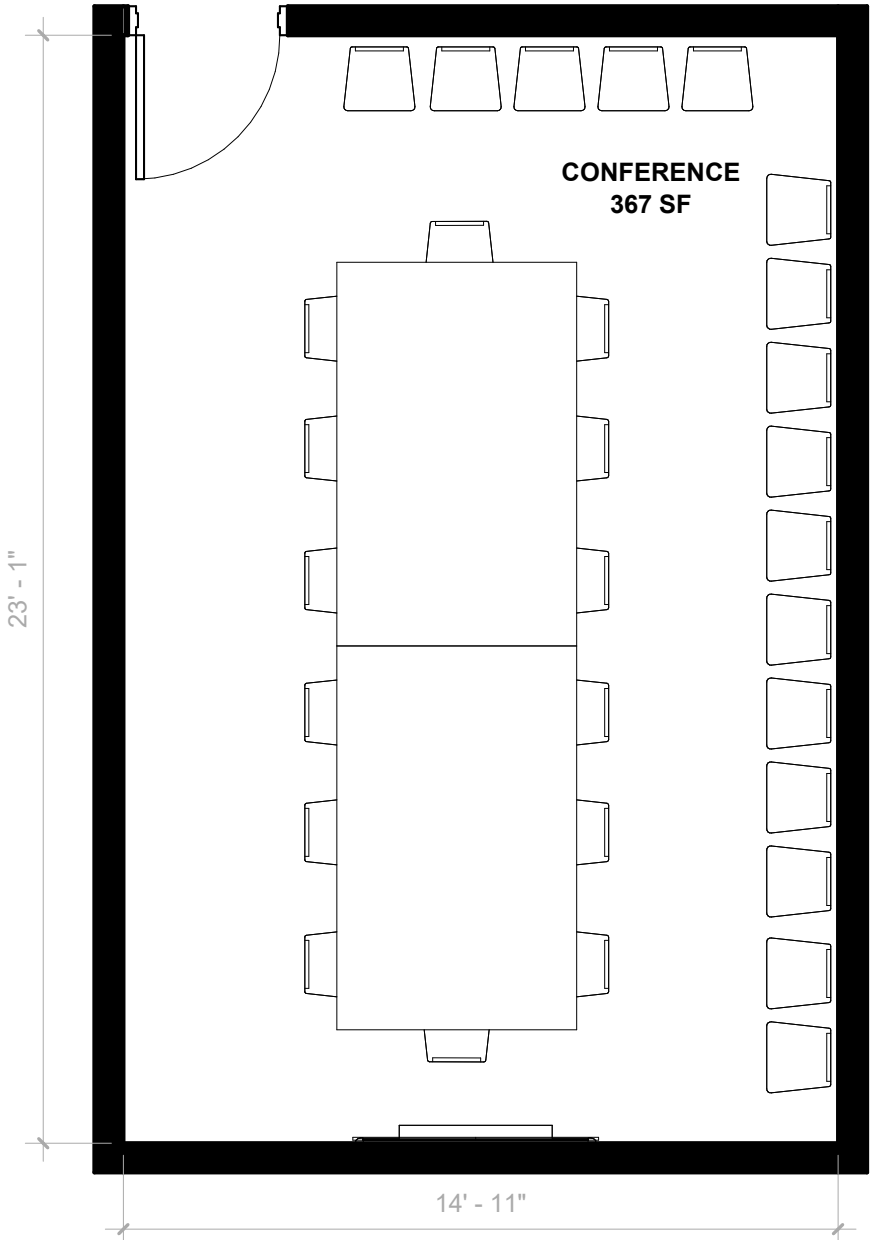
conference table



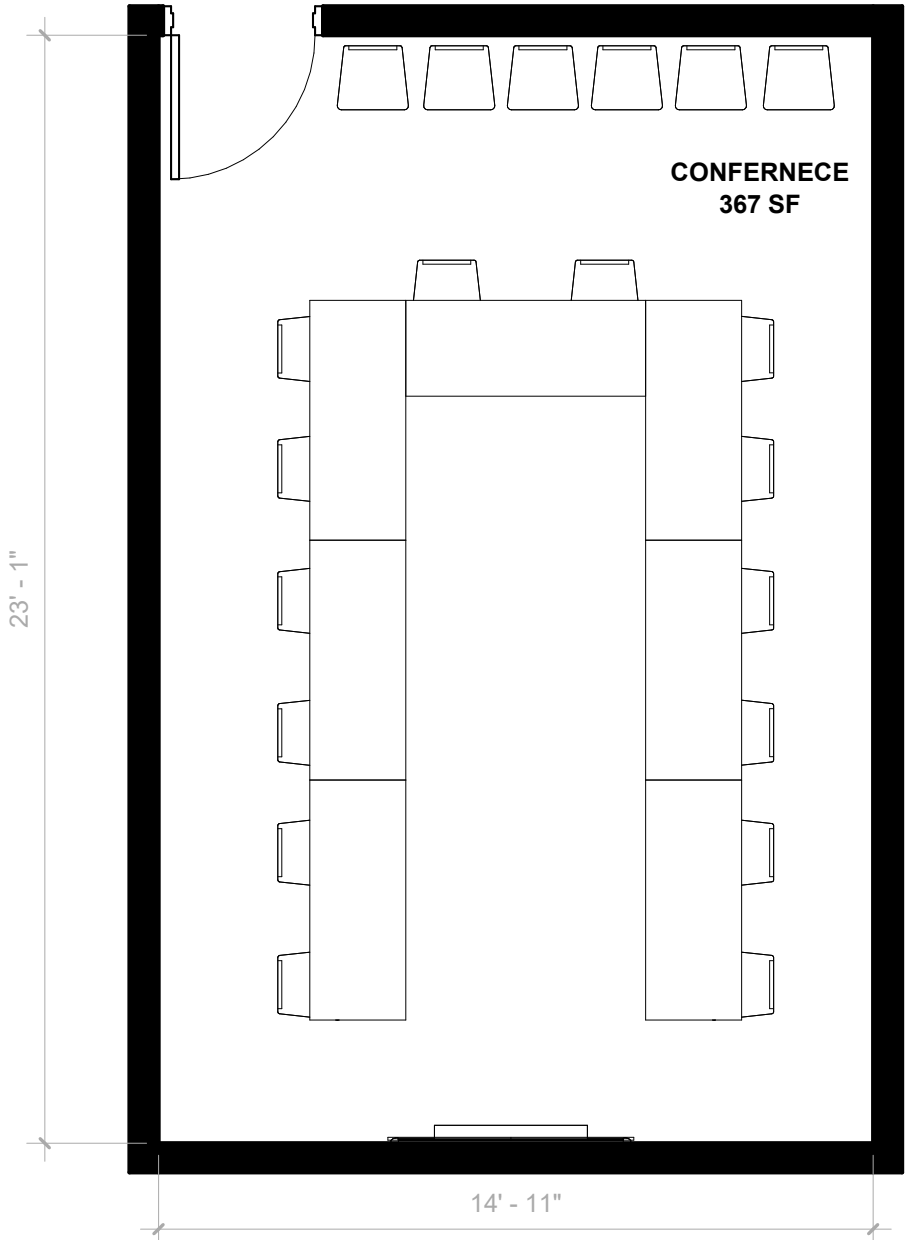
16 CHAIRS - Rectangle

conference table

1/4" = 1' - 0"

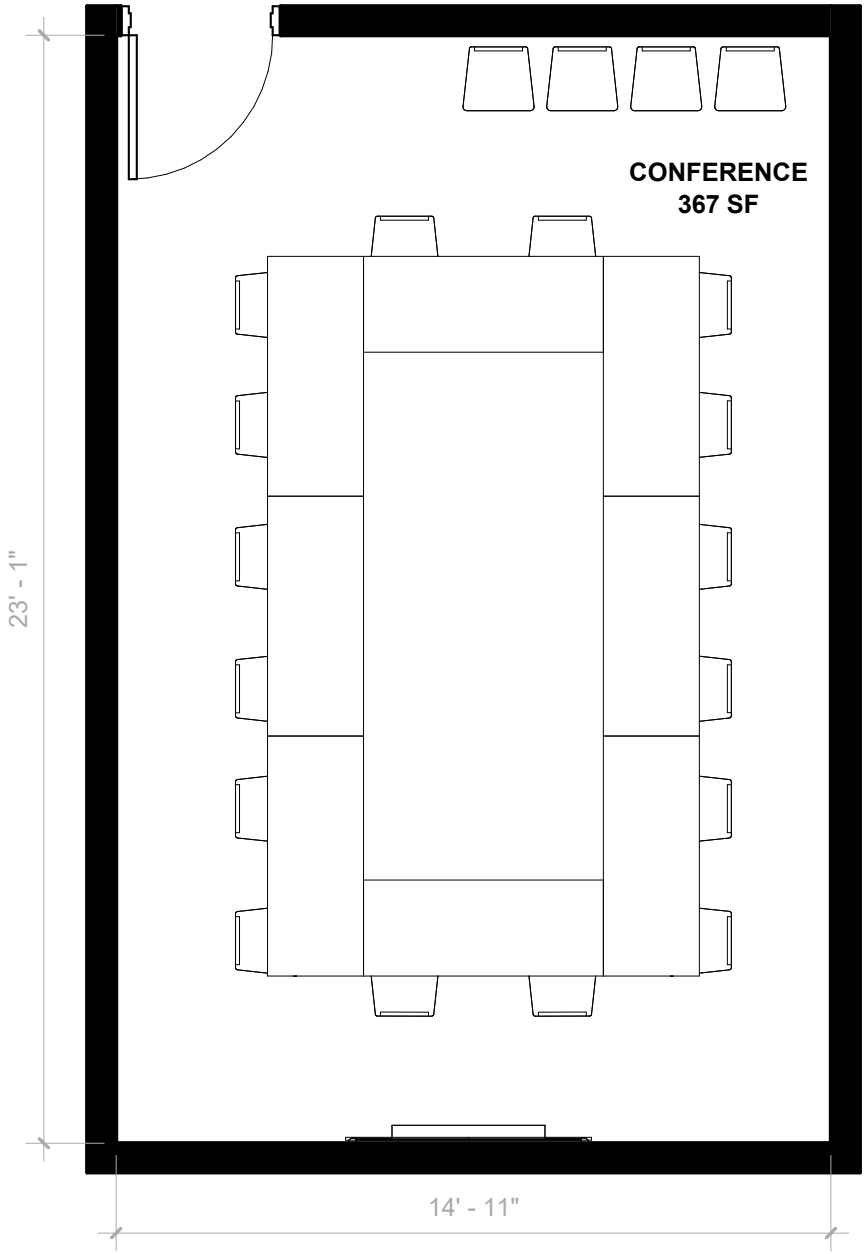


30 CHAIRS - Rectangle conference table with perimiter chairs



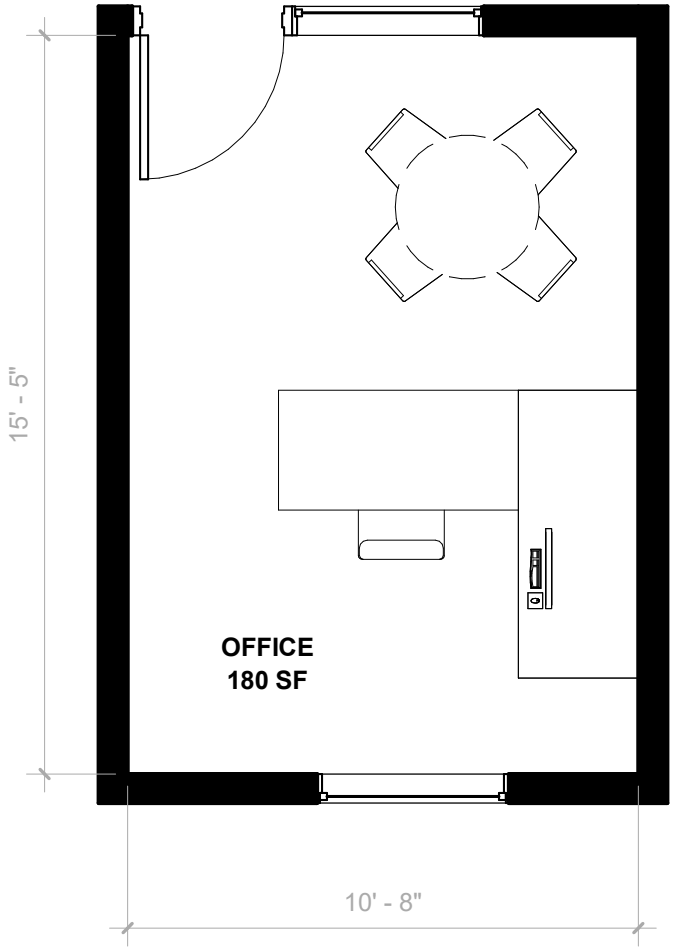
20 CHAIRS - U-Shape conference table

1/4" = 1' - 0"

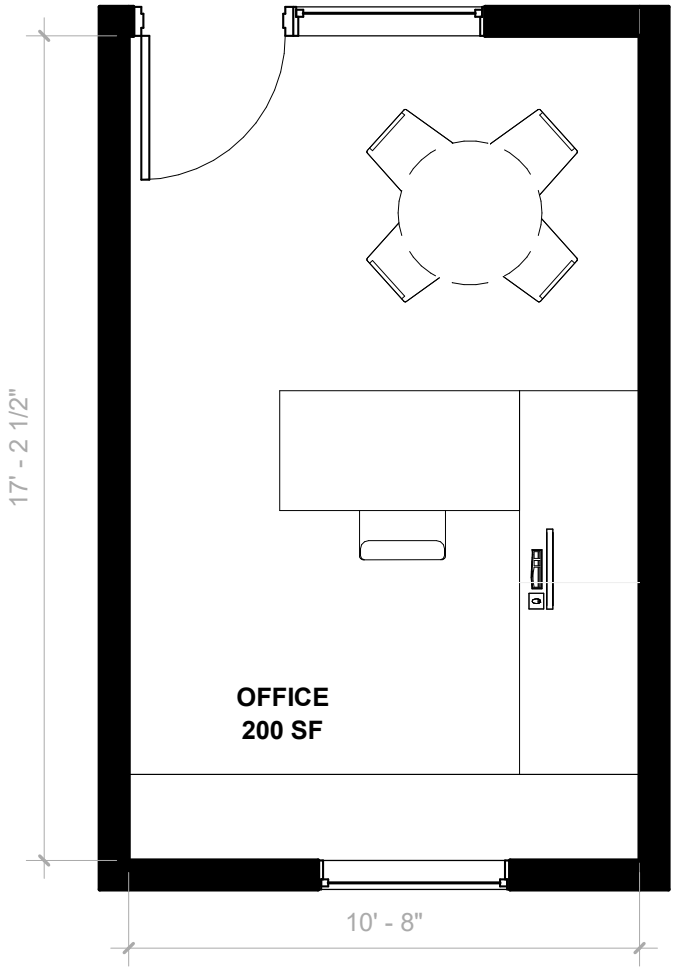


20 CHAIRS - Rectangle confence table

1/4" = 1' - 0"

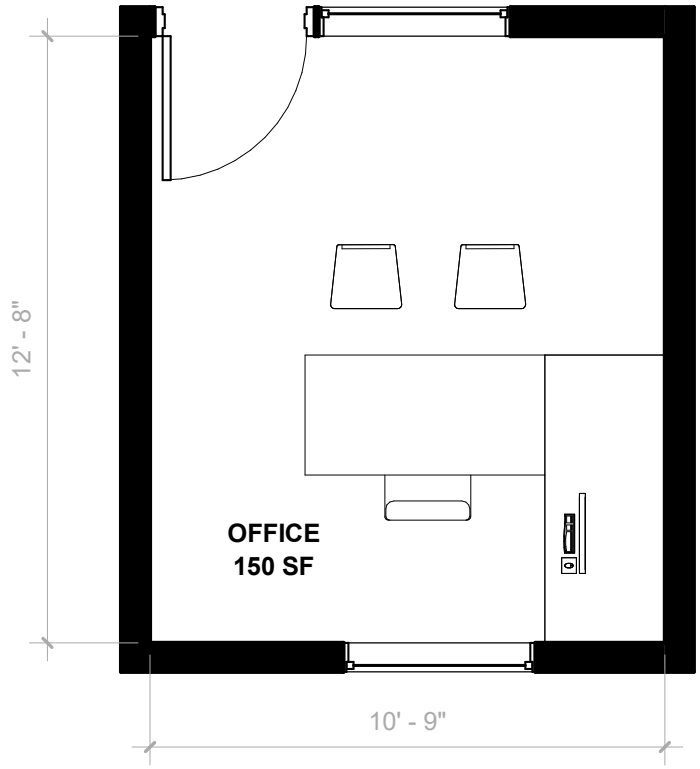


LARGE OFFICE

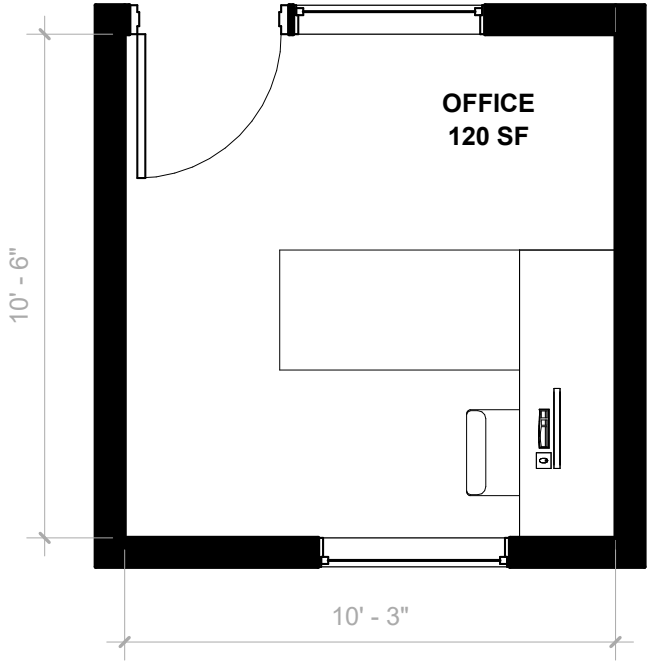


EX-LARGE OFFICE

1/4" = 1' - 0"

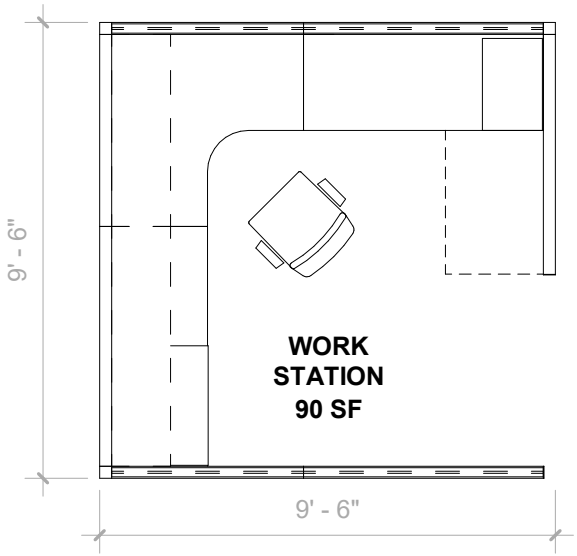


MEDIUM OFFICE



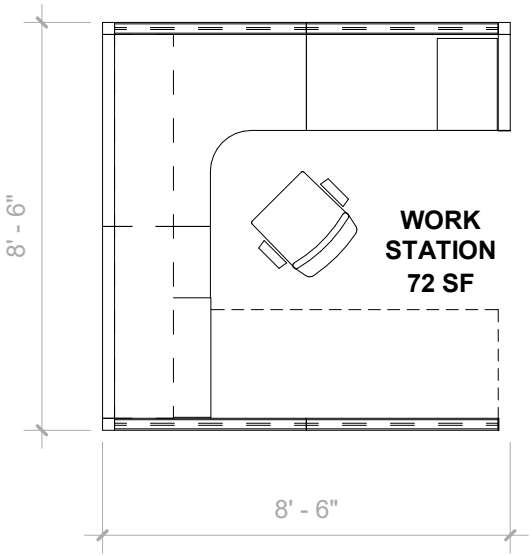
SMALL OFFICE

1/4" = 1' - 0"



9’ X 9’ WORK

STATION



8’ X 8’ WORK

STATION

1/4” = 1’ - 0”

ALSC ARCHITECTS

City of Yakima
Guiding Principles

SERVICE FIRST	Efficient, friendly, interpersonal treatment
APPROACHABLE	Serve unique population needs of all citizens
CATALYST	Stimulate redevelopment, public use in Second Street vicinity
MAXIMIZE EXISTING ASSETS	Creative, effective re-use of existing spaces
EMBRACE DEI	Serve Staff needs of diversity, equity, inclusion

Yakima Space Study | Proposed Meeting Schedule

Updated 3-31-2023

Pre-Design Phase

Kick-off Meeting: Tuesday 2/14, 10:00am

- Introductions
- Review Project Scope, Phases, Workflow, Schedule, Meeting Dates
- Review Guiding Principles
- Review Draft Questionnaires, Process for gathering information
- Validate current list of individuals to be interviewed
- Q&A / discussion, Action Items, Next Steps

Week of February 27 (2-3 day effort)

- Facility Tours, Systems Verification
- Conduct Interviews

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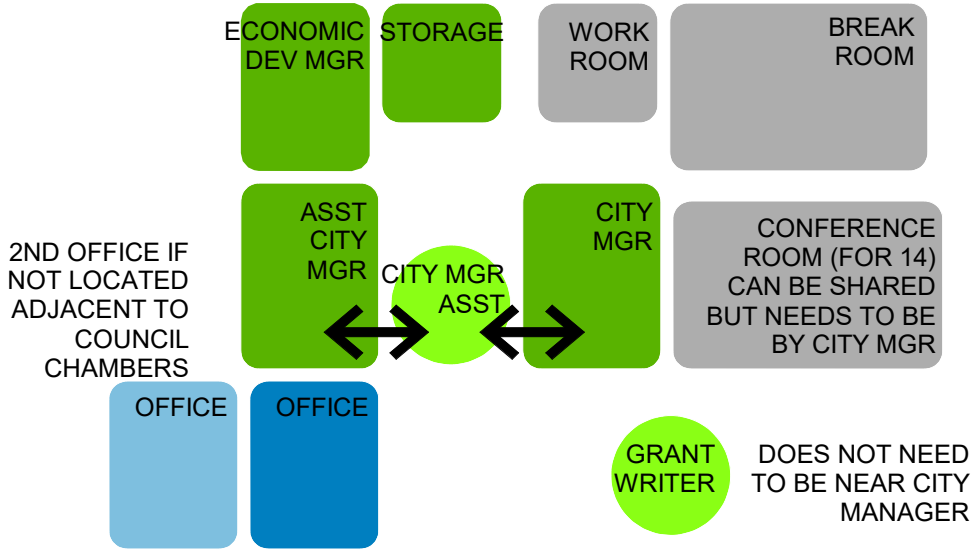
Meeting #4: Tuesday 6/27, 10:30am

- Present Final Conceptual Design Report

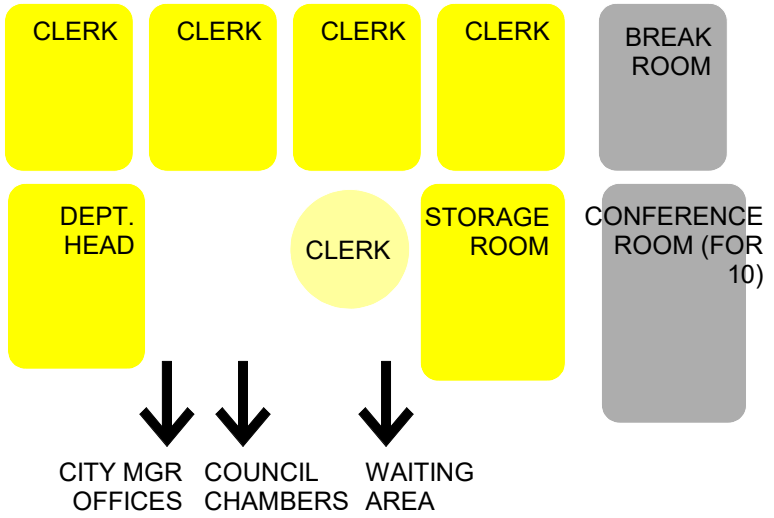
CITY MANAGER

CITY CLERKS, ECONOMIC DEVELOPMENT



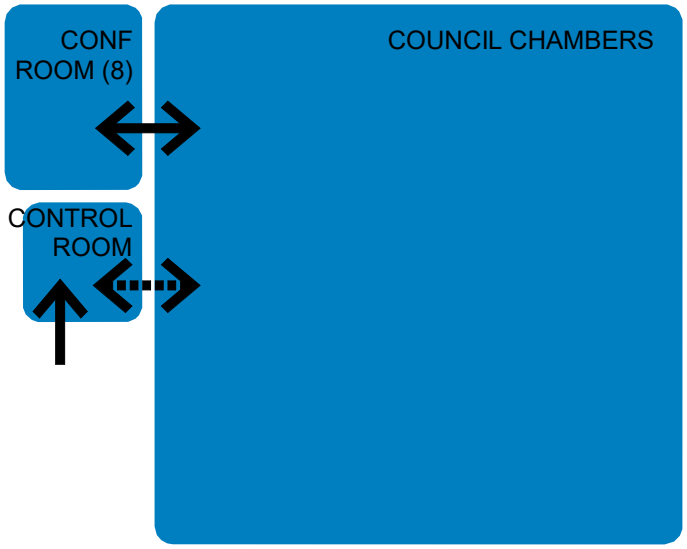
CITY CLERKS

CITY MANAGER, CITY COUNCIL, CHAMBERS

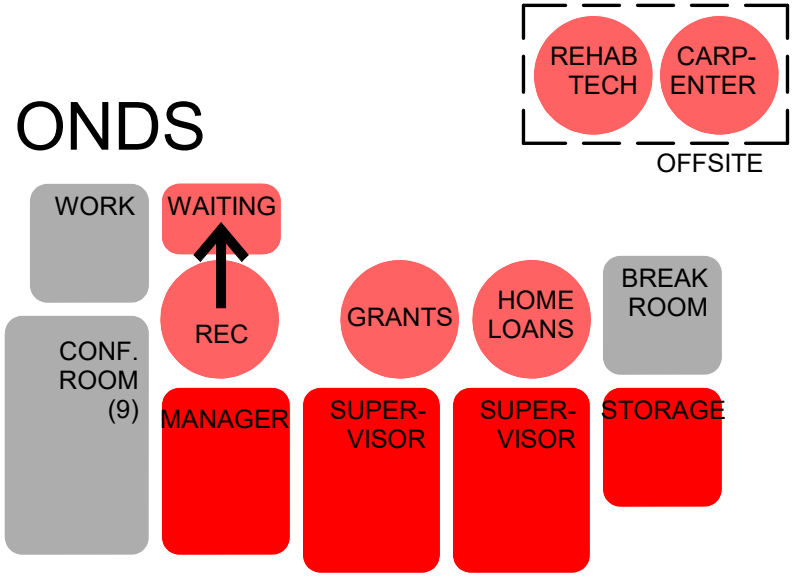


CITY COUNCIL

CITY CLERK

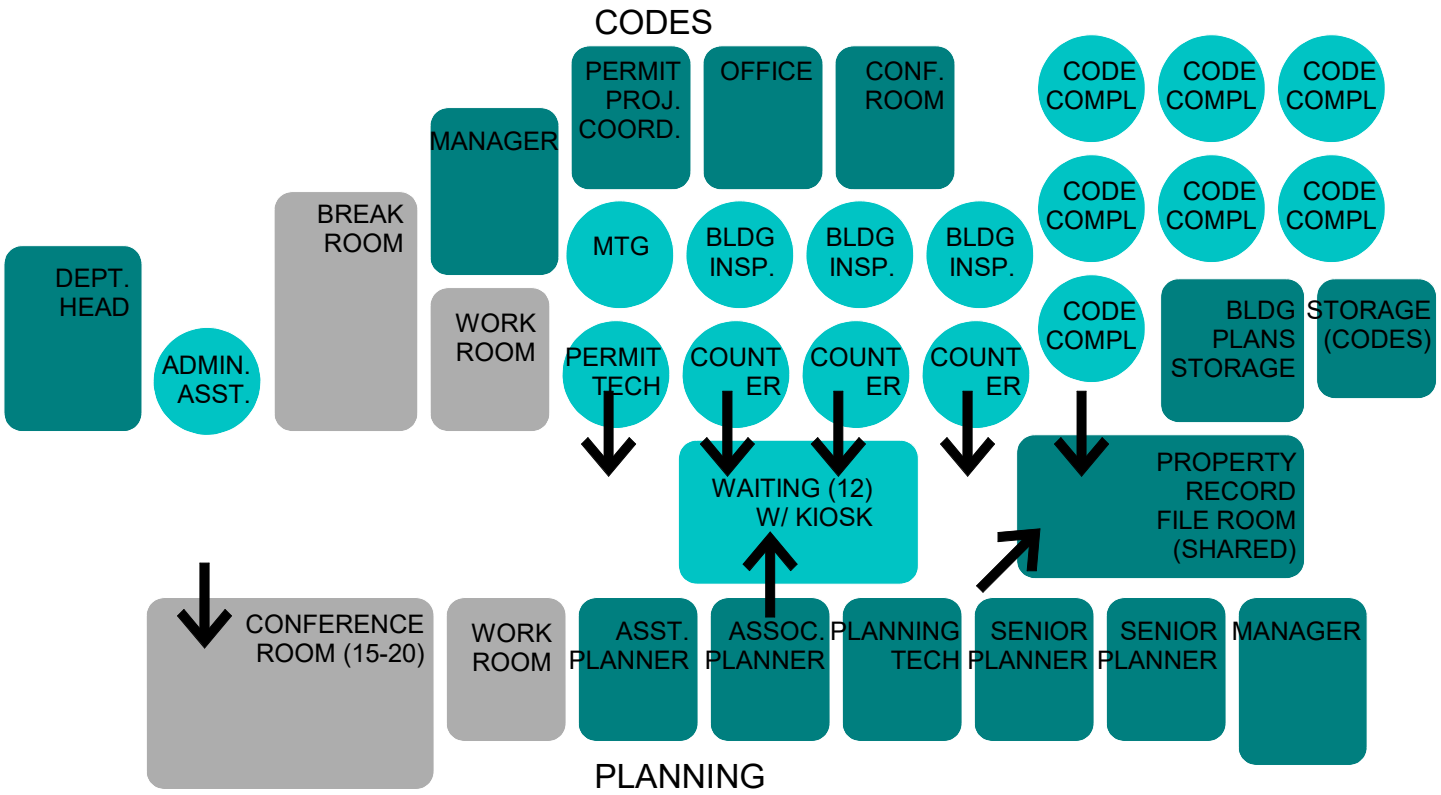


ONDS



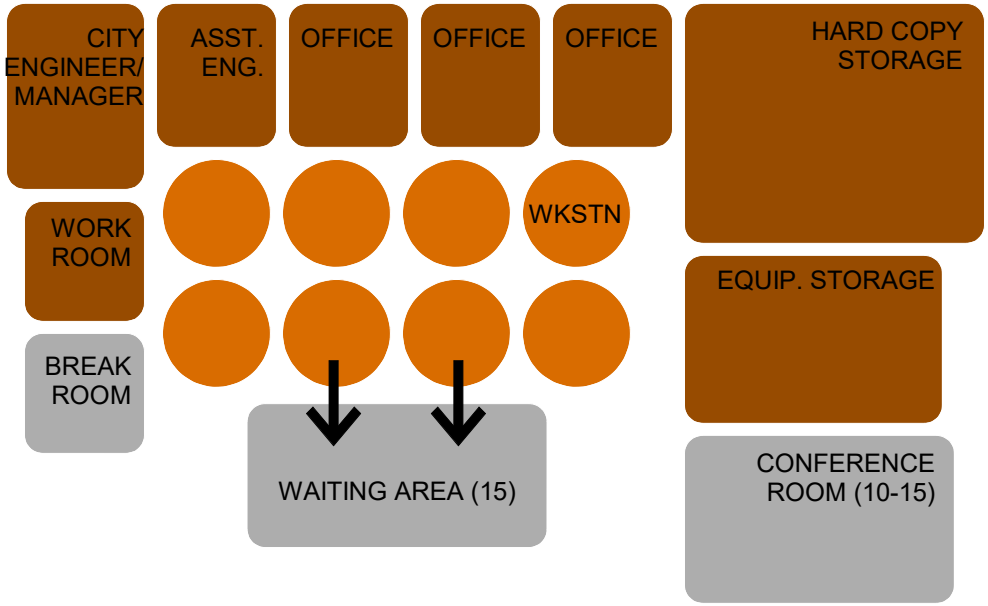
COMMUNITY DEVELOPMENT

ENGINEERING



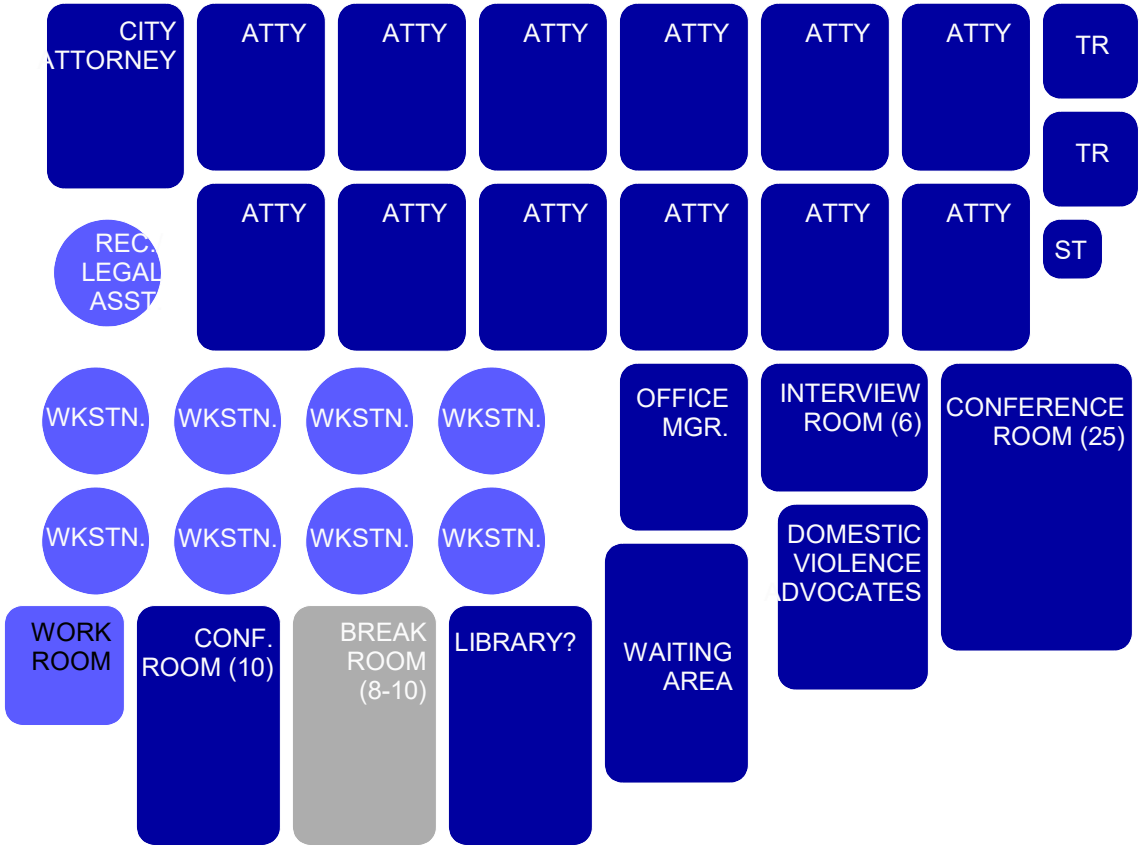
ENGINEERING

CODES, PLANNING, COMMUNITY DEVELOPMENT, FINANCE

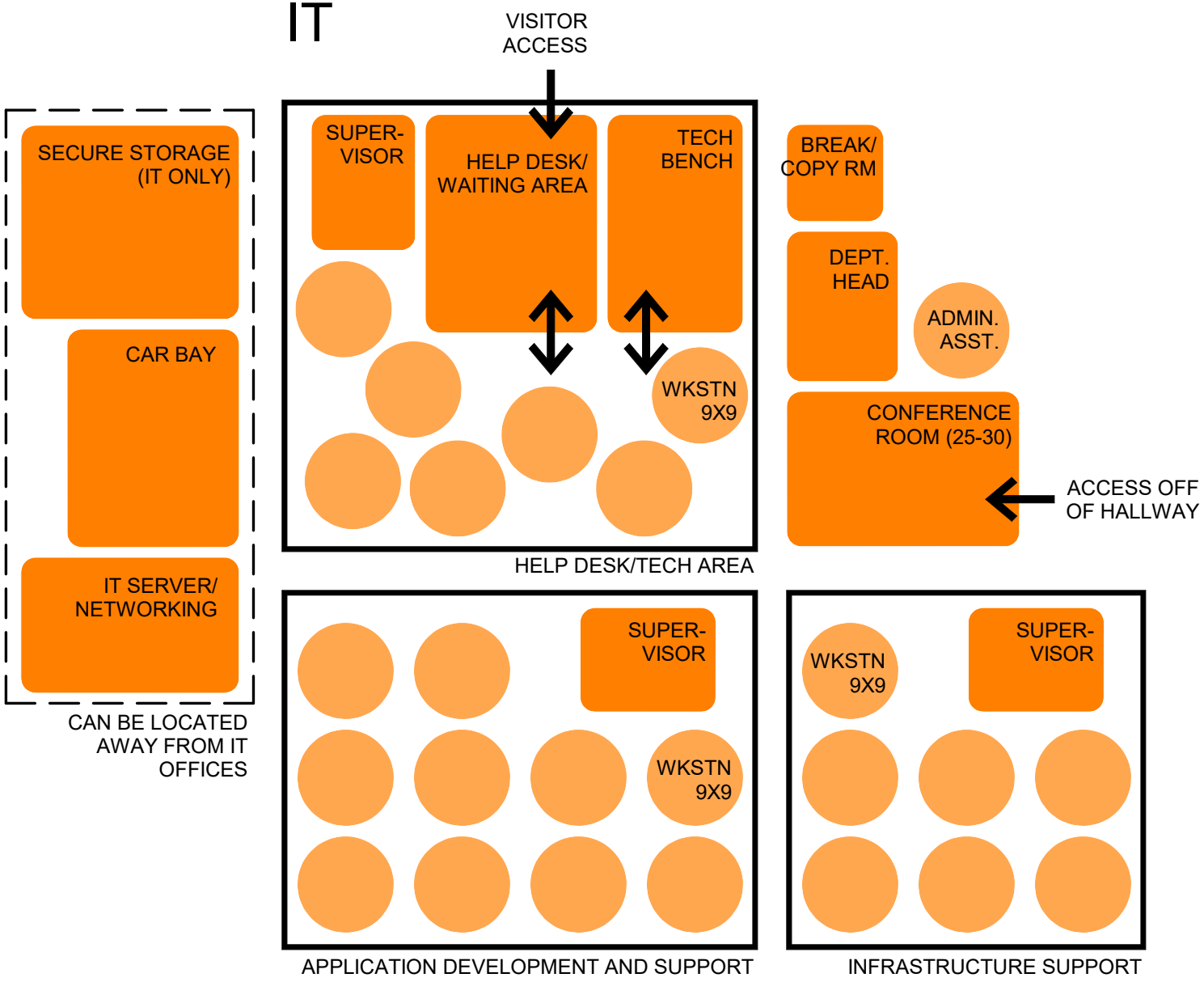


LEGAL

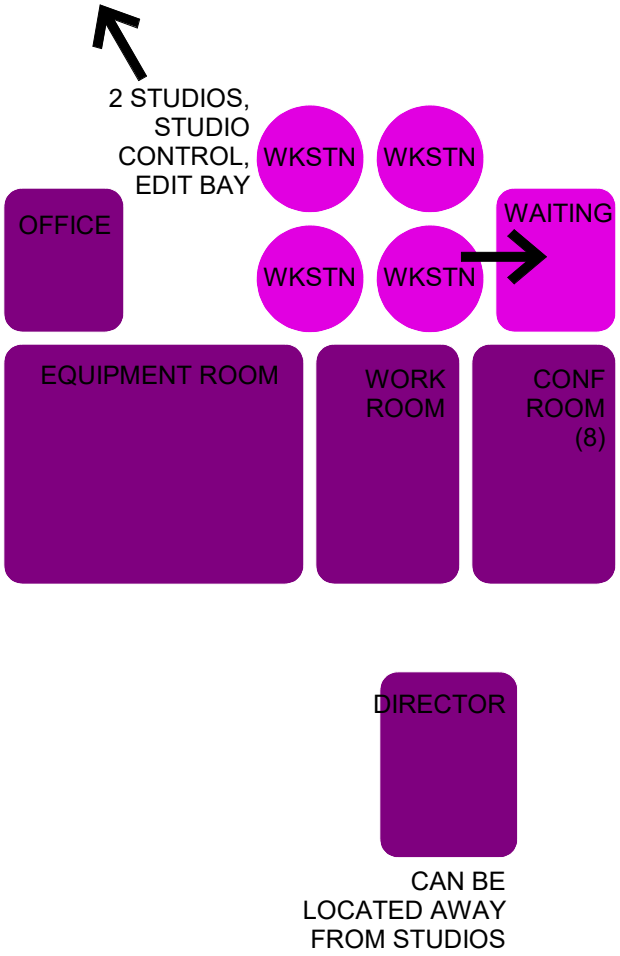
COURTS (FOR PROSECUTORS)



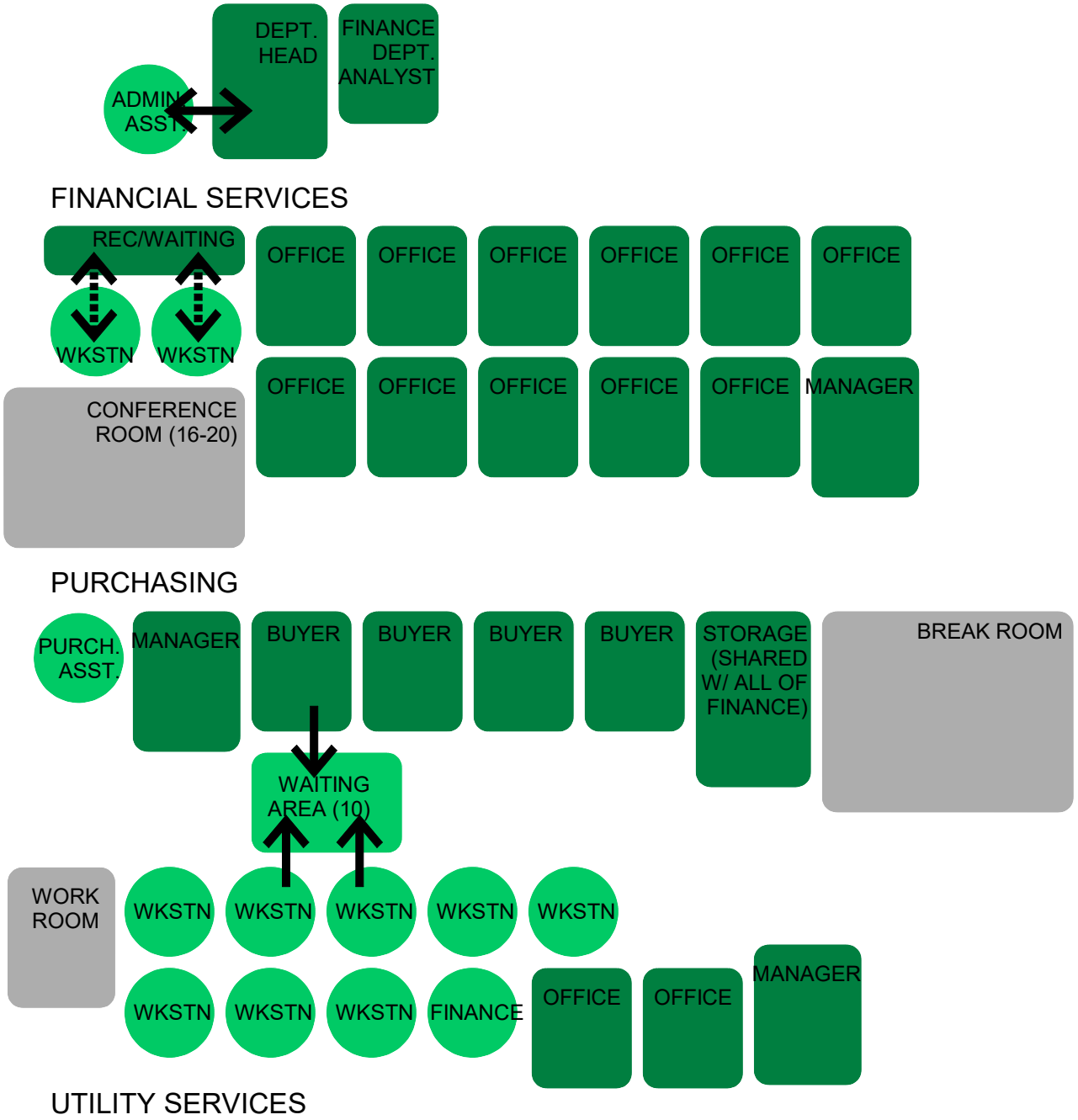
IT


VISITOR ACCESS
SECURE STORAGE (IT ONLY)
CAR BAY
IT SERVER/ NETWORKING
CAN BE LOCATED AWAY FROM IT OFFICES
SUPER-VISOR
HELP DESK/ WAITING AREA
TECH BENCH
WKSTN 9X9
HELP DESK/TECH AREA
BREAK/ COPY RM
DEPT. HEAD
ADMIN. ASST.
CONFERENCE ROOM (25-30)
ACCESS OFF OF HALLWAY
SUPER-VISOR
WKSTN 9X9
APPLICATION DEVELOPMENT AND SUPPORT
WKSTN 9X9
SUPER-VISOR
INFRASTRUCTURE SUPPORT

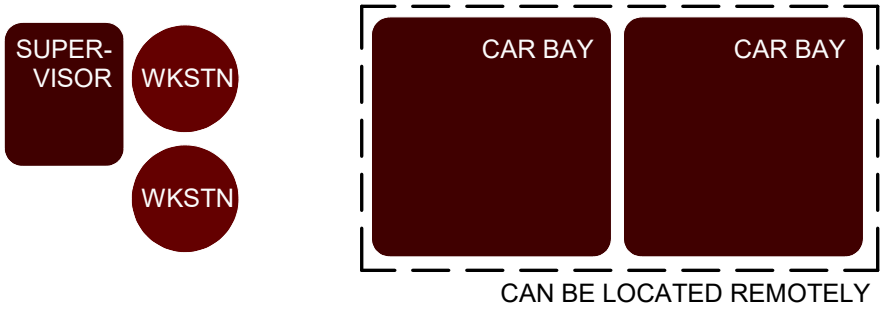
COMMUNICATIONS



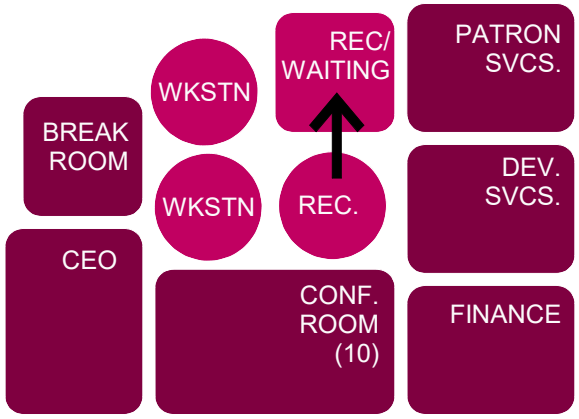
FINANCE


DEPT. HEAD
FINANCE DEPT. ANALYST
ADMIN ASST.
FINANCIAL SERVICES
REC/WAITING
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
WKSTN
WKSTN
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
MANAGER
CONFERENCE ROOM (16-20)
PURCHASING
PURCH. ASST.
MANAGER
BUYER
BUYER
BUYER
BUYER
STORAGE (SHARED W/ ALL OF FINANCE)
BREAK ROOM
WAITING AREA (10)
WORK ROOM
WKSTN
WKSTN
WKSTN
WKSTN
WKSTN
WKSTN
WKSTN
WKSTN
FINANCE
OFFICE
OFFICE
MANAGER
UTILITY SERVICES

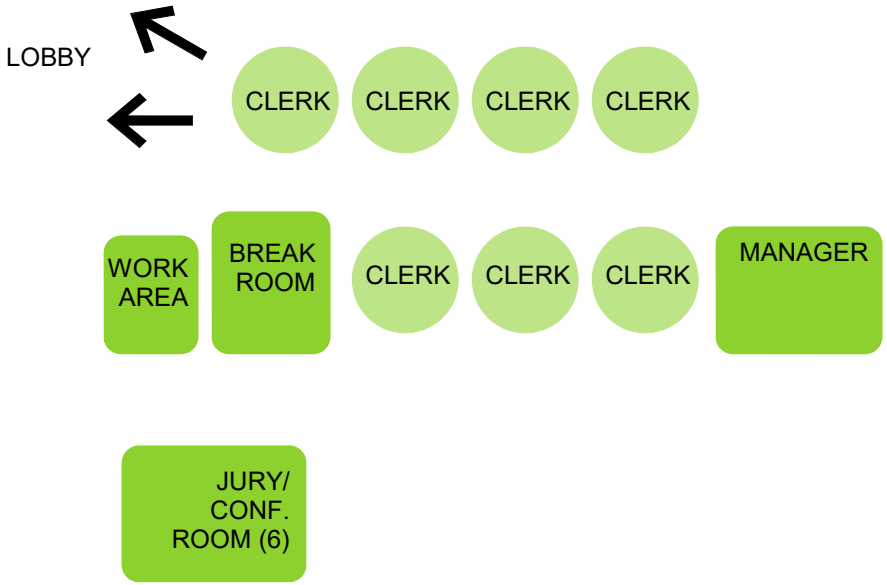
FACILITIES



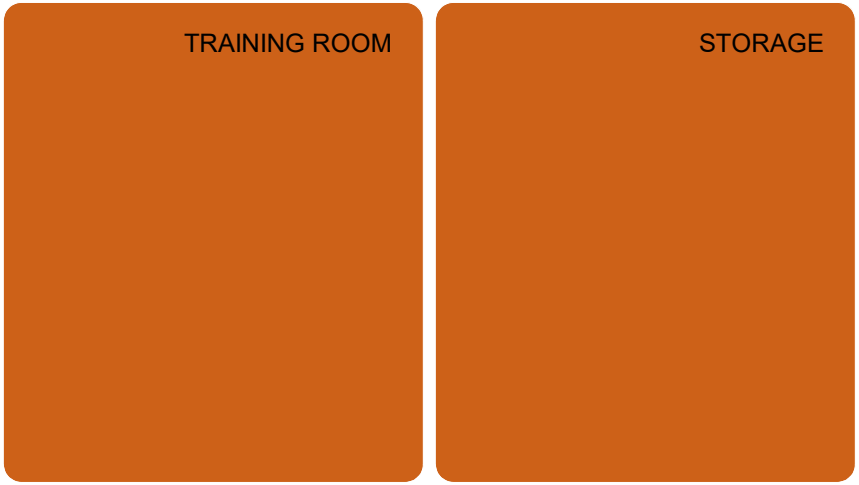
CAPITOL THEATER



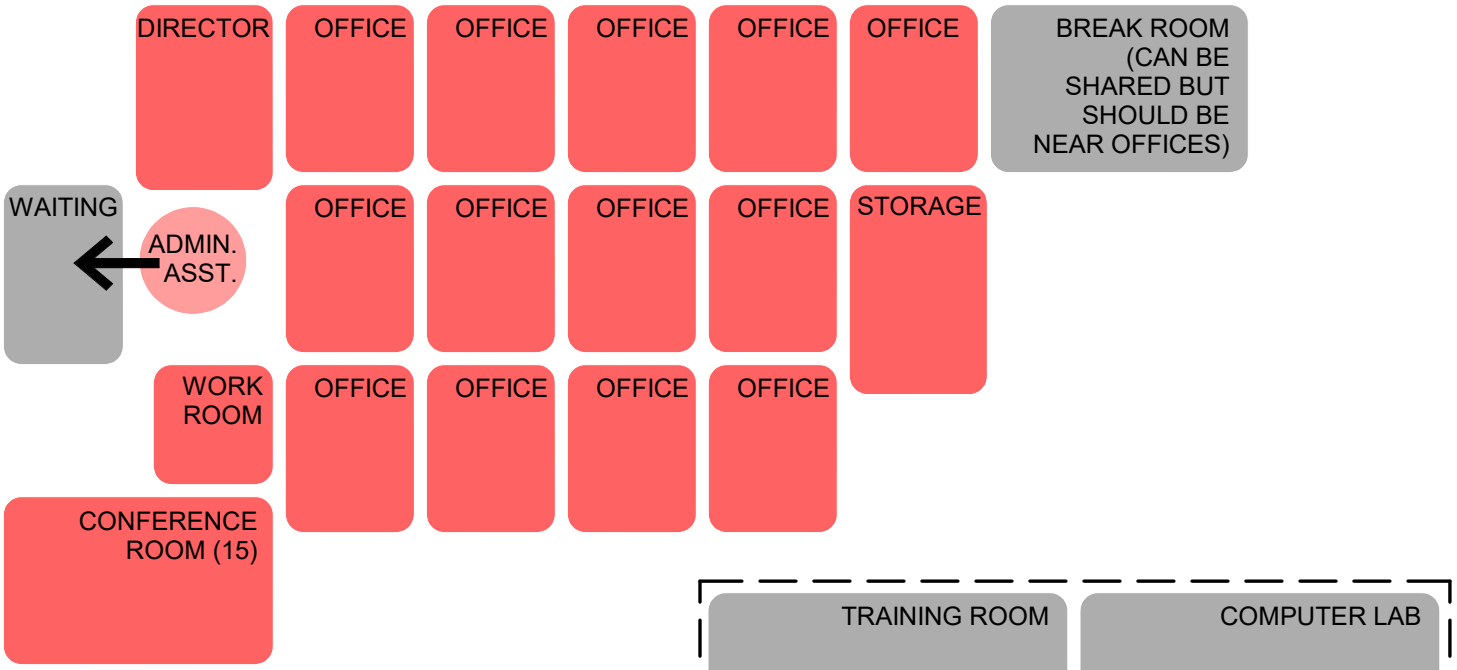
MUNICIPAL COURTS



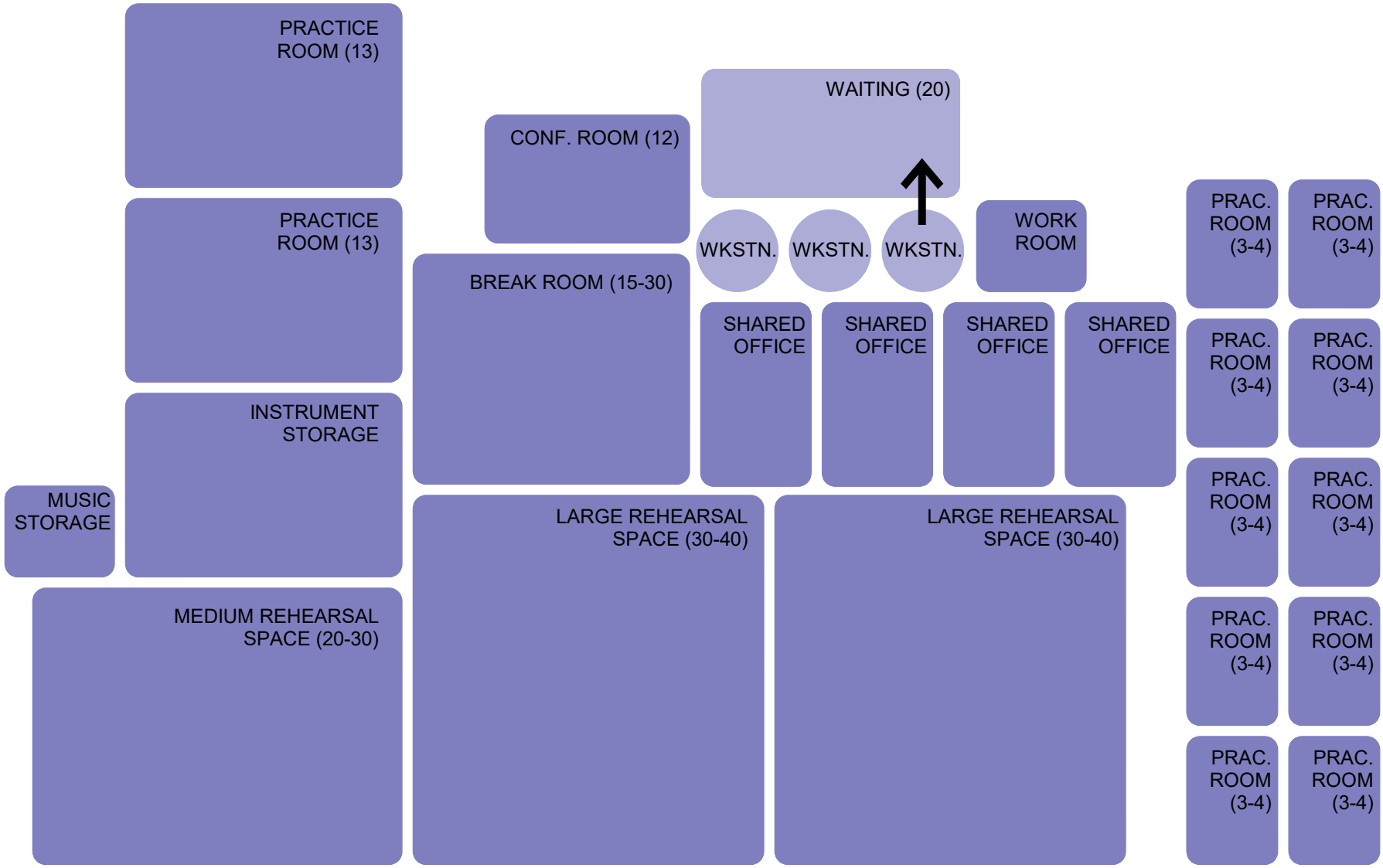
POLICE



HUMAN RESOURCES



YAMA


PRACTICE ROOM (13)
PRACTICE ROOM (13)
INSTRUMENT STORAGE
MUSIC STORAGE
MEDIUM REHEARSAL SPACE (20-30)
CONF. ROOM (12)
BREAK ROOM (15-30)
WAITING (20)
WKSTN.
WKSTN.
WKSTN.
WORK ROOM
SHARED OFFICE
SHARED OFFICE
SHARED OFFICE
SHARED OFFICE
LARGE REHEARSAL SPACE (30-40)
LARGE REHEARSAL SPACE (30-40)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)
PRAC. ROOM (3-4)

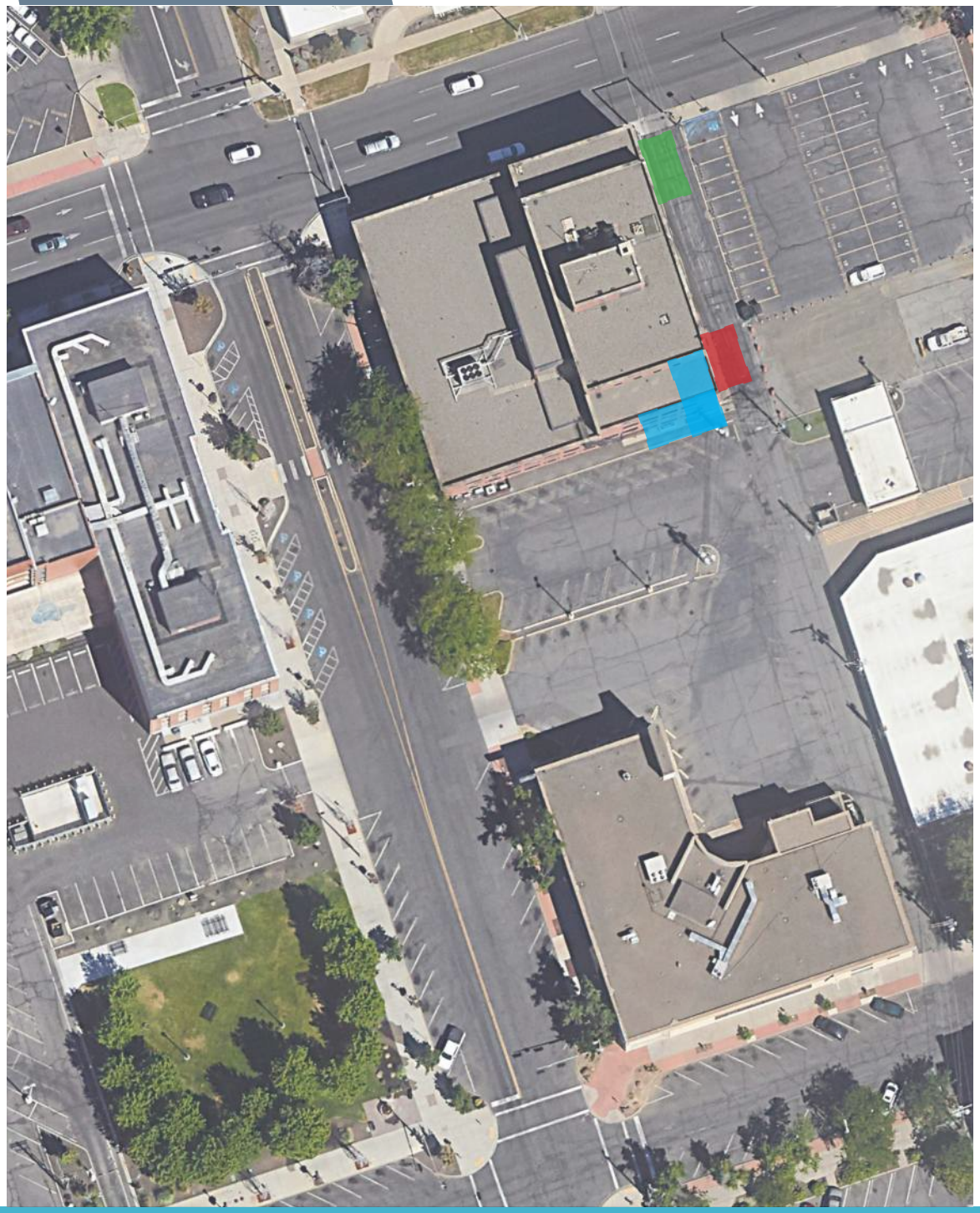
Toilet Fixture Count

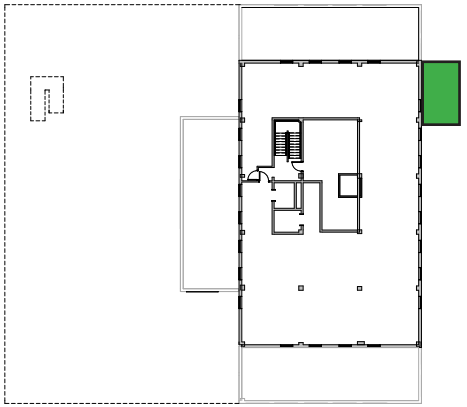
Yakima City Office

Floor	Existing	Code	ADA
Basement (113)	3	4	1
Level 1 (103)	9	4	2
Level 2 (110)	8	4	2
Level 3 (55)	0	4	
Level 4 (30)	0	2	

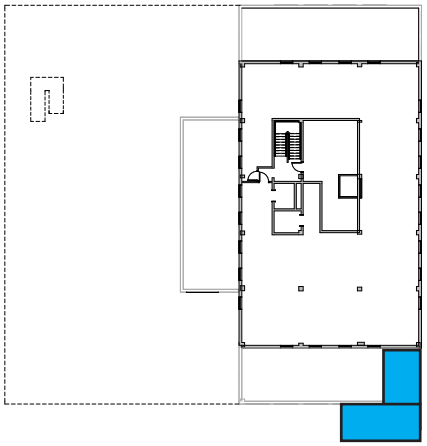
BoA Building

Floor	Existing	Code	ADA
Basement (52)	8	4	
Level 1 (57)	1	4	1
Mezzanine (19)	1	2	

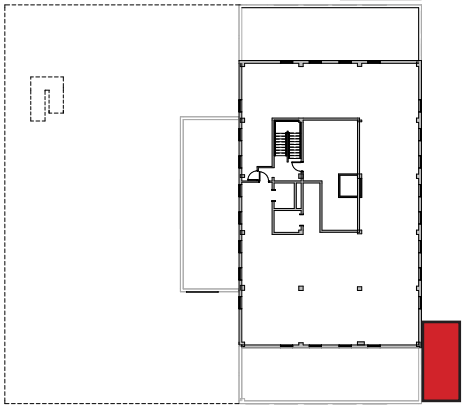




CONCERN:
-IN/NEAR DRIVE AISLE
-POWERLINES



CONCERN:
-ADDING WALLS ON 3RD STORY ROOF FOR ACCESS



CONCERN:
-IN/NEAR FIRST FLOOR GARAGES
-POWERLINES

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Project No.: 2022-040

Project Name: City of Yakima
Space Study

Subject: Meeting Minutes
Committee Meeting No. 3
April 18, 2023

By: Jodi Kittel

Attendees	**Representing**
Bob Harrison	City of Yakima
Rosylen Oglesby	City of Yakima
Sara Watkins	City of Yakima
Joan Davenport	City of Yakima
Jennifer Ferrer-Santa Ines	City of Yakima
Ira Cavin	City of Yakima
Kim Phelps	ALSC Architects
Jodi Kittel	ALSC Architects

This report is not intended to provide a transcript of proceedings, but rather to record the general content of the discussion that took place.

Action Item

I. General Comments:
- A. If the third and fourth floor are developed for City departments, they will consist mostly of workstations.
  - 1. Due to existing utilities and code distance requirements, it appears that the only area where a second stair could be built on the south face, west end of levels 3 and 4.
- B. ALSC will e-mail Kerry about getting a list of recent and upcoming mechanical equipment upgrades at the Law Center.
- C. The north mezzanine at the old Bank of America building is not usable for housing a City department as it is not ADA accessible.
- D. The Police Department training room does not need to have computers, as all officers will have laptops with them. Up to 40 people training at one time.

E. Ira will send space requirements for the SAU. The current location is fairly ideal, being close to but separate from the Police Department main building.

F. The Y-PAC building was discussed. Bob and Rosylen will talk with Randy about what spaces would need to be included if they were to move out of that building.

1. The only space within the City Hall building that might work for the studio is the car bay. The other spaces have relatively low floor to floor height.
2. The old Bank of America building has ceiling height for the studio, but access is less convenient. Also, depending on the option chosen, there may not be enough floor space available.
3. Y-PAC building could possibly be utilized / shared with the PD for the SAU department. The building is close to the PD, which is ideal.

G. Extra space after re-organization could be leased out (county previously has asked about leasing space in the building)

H. Interested in having solar panels wherever possible.

II. Layout options for each building were reviewed.

A. Richard A Zais Law & Justice Center:

1. The back-up dispatch center needs to stay on the second floor, infrastructure would be expensive to move.
2. Sara prefers Option 1, which leaves existing toilet rooms within the legal center. In order to keep dispatch on the second floor, the large conference room will move to the space behind the two attorney offices off of the domestic violence area.
3. New entrance/storefront will be placed near the elevator.

B. City Hall;

1. Option 1: Finance, Community Development, and Engineering on the first floor, IT, HR, and Capitol Theater on the second floor. No offices on the third and fourth floors. Storage, Break Room, Training Rooms, Server, and Facilities in the Basement.
   Moves the City Manager, Clerks, ONDS, and Council Chambers to the old Bank of America (BoA) building. Police Training and Storage would be in the basement. (BoA options 1, 2, 3, 4, and 5)
   a. ONDS and Economic Development need to be near Community Development and so should stay in the City Hall building. They can take the space where Capitol Theater was

shown, which can move to the BoA building.

b. Facilities would like to move out of the basement.

c. Jennifer would like her office, the finance admin assistant, and financial analyst to be near Financial Services rather than Utilities.

d. Within Community Development Codes Storage, Building Plan Storage, and the Property Files storage room can all move to the basement to make more room for offices and workstations.

2. Option 2: Finance, HR, Capitol Theater, and ONDS on the first floor; IT on the second floor. Storage, Break Room, Training Rooms, Server and Facilities in the basement. No offices on the third or fourth floors.
   Moves City Manager, Clerks, ONDS, Community Development, Engineering, and Council Chambers to BoA. (BoA Option 6)
   a. Economic Development needs to be included with ONDS.
3. Rosylen requested that the team explore an option that leaves the current Council Chambers intact.

C. Bank of America (BoA) Building:

1. Option 2: Included in the packet to show the option, but the chambers at the east end won't work due to head height under the mezzanine and interior columns.
2. Option 4:
   a. The City Council should have one office.
   b. City Council members should be able to enter an office or conference room prior to the chambers.
   c. City Council needs an exit near the dais that does not cross the public entrance.
   d. There should be a toilet room near the council office/conference room.
   e. Council office and conference room should be acoustically separate from the chambers.
   f. City Manager should be near the chambers.
   g. City Manager should be farther from public interface than clerks.
   h. The committee likes Capitol Theater at the east side, with their own entrance.
   i. The team will explore the addition of a second smaller meeting room for committee meetings.

3. Option 6:
   a. This option shows all of the departments that were assumed to move to the BoA building, however they do not all fit on the first floor/east mezzanine. It was agreed that no departments should go in the basement.
   b. It is assumed that the Community Development storage rooms can move to the basement here, similar to the City Hall option 1, but even so that will not leave enough room for Engineering.

III. Two Council Chamber layouts were discussed.

   A. As mentioned above, the City Council members need to be able to enter a room dedicated to them (office or conference room) prior to entering the chambers.
   B. The exit for the Council should not lead to a public exit, therefore Option 1 would be better, or Option 2 should be arranged so that they do not exit through the control room.
   C. Bob would like the team to explore the possibility of being able to divide the chambers into two, for smaller events.

IV. Preliminary costs were reviewed; they will be refined as plan options are developed. Costs did not include any exterior building envelope or site work.

V. Schedule

   A. Next meeting will be moved to May 9th at 10:30am.

If you have any additions or corrections to these minutes, please bring them to the attention of the editor within two weeks of the date of this meeting.

Distribution:	Bob Harrison	City of Yakima
	Rosylen Oglesby	City of Yakima
	Sara Watkins	City of Yakima
	Joan Davenport	City of Yakima
	Jennifer Ferrer-Santa Ines	City of Yakima
	Ira Cavin	City of Yakima
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Project No.: 2022-040

Project Name: City of Yakima
Space Study

Subject: Meeting Minutes
Committee Meeting No. 4
May 9, 2023

By: Jodi Kittel

Attendees	**Representing**
Rosylen Oglesby	Assistant City Manager, City of Yakima
Sara Watkins	City Attorney
Joan Davenport	Community Development Director, City of Yakima
Jennifer Ferrer-Santa Ines	Finance Director, City of Yakima
Ira Cavin	Yakima Police Department
Kim Phelps	ALSC Architects
Jodi Kittel	ALSC Architects

This report is not intended to provide a transcript of proceedings, but rather to record the general content of the discussion that took place.

Action Item

I. Building layout refinements for each building were reviewed.

A. Richard A Zais Law & Justice Center:

1. The Traffic and Crime Analyst units have been eliminated from level 2 and will need to be relocated.
2. The back-up dispatch center (2 terminals) may be able to move back to Fire Station 91, Ira will verify. It was previously located there and is a division of the fire department, so should still have the necessary infrastructure (IT Services can verify).
   a. If the dispatch can move, that room would be a good fit for the Crime Analysts.
3. Otherwise, the plan as presented was approved.

B. Police Annex:
   1. Design team did not tour the building on our previous tour with consultants. Will plan on visiting at the same time as the Y-PAC building investigation.
   2. Ira thinks the structure is in good shape, but needs work.
      a. Fire sprinklers need to be added. Asbestos flooring in places needs to be removed, etc.
      b. Roof is scheduled to be replaced.

C. Police Training Facility:
   1. According to Rosylen, that entire block will be going up for sale, so the existing building needs to be vacated.

D. City Hall;
   1. Option 2, which leaves the existing Council Chambers intact, is the preferred option for all floors.
   2. Add operable partition to separate the newly created large / small conference rooms in the existing chambers location.

E. Bank of America (BoA) Building:
   1. Option 2, which reorients the lobby space towards a new entry on the west side is the preferred option.
      a. The City Clerk's office should have a counter/window similar to what they have now so that the public does not need to enter their space.
      b. The City Manager's office would have an entry off of the lobby as well.
      c. Studio B, shown in the basement, will be removed and that space replaced with storage for the training room (tables and chairs, and mats).
      d. When renovating the basement gang toilet rooms, move entry to those so that it's from the adjacent hallway. An ADA stall will also need to be included.

II. Y-PAC existing building.

A. Police Departments to be moved include SAU, Internal Affairs, and Training/Recruitment. Ira has sent a list of what spaces are included in each. Crime Analysts will also be displaced by vacating the building at 207 S 3rd,

but he thinks they can find a space for them in the Justice Center

III. Site
- A. The committee likes the idea of vacating N. 2nd Street between City Hall and Yakima County building.
  - a. A cul de sac could be included at the north end of the street for ADA parking.
- B. Another option would be to create a park between the City Hall and Bank of America buildings (from west wing of BofA).
- C. Will need to locate ADA parking near entries to all three buildings.

IV. Cost estimates are still in progress. Unfortunately, the mechanical/electrical upgrades completed within the last 20 or so years don't lower the current MEP cost estimates. For example, although lighting was upgraded to LED bulbs in the City Hall, the entire system including new light fixtures would need to be replaced in a major renovation in order to bring the building up to current energy code requirements.

V. Schedule

- A. Next in-person meeting is scheduled for June 6th.
- B. A virtual meeting will likely be scheduled before June 6th, tentatively May 30th at 10:30am.

If you have any additions or corrections to these minutes, please bring them to the attention of the editor within two weeks of the date of this meeting.

Distribution:

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Rosylen Oglesby	City of Yakima
Sara Watkins	City of Yakima
Joan Davenport	City of Yakima
Jennifer Ferrer-Santa Ines	City of Yakima
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Project No.: 2022-040

Project Name: City of Yakima
Space Study

Subject: Meeting Minutes
Committee Meeting No. 5
June 6, 2023

By: Jodi Kittel

Attendees	**Representing**
Rosylen Oglesby	Assistant City Manager, City of Yakima
Jennifer Ferrer-Santa Ines	Finance Director, City of Yakima
Kim Phelps	ALSC Architects
Jodi Kittel	ALSC Architects

This report is not intended to provide a transcript of proceedings, but rather to record the general content of the discussion that took place.

Action Item

I. YPAC building.

A. Two options were presented for the new layout. The only difference between the two plans is the location of the Traffic and Crime Analyst units. The latest plan for the second floor of the Justice Center also included a space for the Crime Analyst unit, however that location was dependent on whether the backup dispatch center could be moved. If it cannot, there is room in this building for them.

B. During the site visit last week it was confirmed that the garage would be large enough for the motorcycle fleet.

C. Rosylen will review the options with Ira and let the team know if any adjustments need to be made.

II. Bank of America building (new City Hall)

A. Floor Plan Review
1. City Manager Suite:
   a. Rosylen requested that the City Council office move closer to the City Manager office suite.
   b. The suite should be rearranged so that the southwest corner houses an office. The area only needs one large conference room.
2. City Clerks Suite:
   a. The City Clerk and Communications director offices should flip with the conference room so that they have windows.
   b. The conference room only needs to seat 10.

B. Exterior Revisions
1. Of the options presented, Options 2 and 3 were preferred. Like eliminating the sloped soffit and the addition of a planter at the corner.
2. The committee would like to see a blending of 2 and 3, where the dark color replaces the brick.
3. Option 5 was dismissed, the existing street trees need to remain.
4. The team should plan on replacing the street trees along Pendleton.

III. Site

A. Two options were shown for street improvements that would not vacate the street but would instead curve the roadway similarly to the street in front of Cowiche, which would provide opportunities for pedestrian gathering spaces along the street.
1. Of the two Option A is preferred, as it would not alter the existing Performance Park.

IV. Cost estimates are still in progress, level of finish was reviewed.

A. For the Law and Justice Center two options will be included, one will address a full remodel of the second floor and upgrades to mechanical and electrical systems and the second will include only the costs of remodeling the new spaces.

B. Mechanical and Electrical engineers may get in touch with Kerry or Randy to review proposed new systems for City Hall and the Bank of America building.

V. Schedule

A. Next meeting is scheduled for June 27th at 10:30am.
B. Final report presentation moved to July 11th at 10:30am.

If you have any additions or corrections to these minutes, please bring them to the attention of the editor within two weeks of the date of this meeting.

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	Jennifer Ferrer-Santa Ines	City of Yakima
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Project No.: 2022-040

Project Name: City of Yakima
Space Study

Subject: Meeting Minutes
Committee Meeting No. 6
June 27, 2023

By: Jodi Kittel

Attendees	**Representing**
Rosylen Oglesby	Assistant City Manager, City of Yakima
Jennifer Ferrer-Santa Ines	Finance Director, City of Yakima
Sara Watkins	City Attorney, City of Yakima
Ira Cavin	Yakima Police Department
Kim Phelps	ALSC Architects
Jodi Kittel	ALSC Architects
Sydney Janecek	SCJ Alliance

This report is not intended to provide a transcript of proceedings, but rather to record the general content of the discussion that took place.

Action Item

I. Building layouts were reviewed with the following changes noted:

A. SAU (former YPAC) Building:
1. Add a second door from the Traffic Sergeant's office into the open office area.

B. Justice Center:
1. Sara has a meeting scheduled with the fire department to discuss relocation of the back-up dispatch center. For now, the team expects that it can be moved.

C. City Hall Annex (former City Hall):
1. Finance has been rearranged somewhat from previous versions, to improve workstation layout and add a small storage room within the

Financial Services/Purchasing area.
2. A door will be added between Economic Development/ONDS and IT.
3. Solar panels should be added to the roof, if possible.

D. City Hall (former Bank of America):
1. Interior spaces/offices in the City Manager suite will have glass into the lobby. It can either by clerestory or low glass with film, no sight lines from the lobby into the offices.
2. Taupe colored spaces (shown on the plan diagram) in the basement are mechanical/electrical/unassigned. There are a few rooms and vaults available for storage. One of which may be used by Capitol Theater, but this will not be designated in the program/floor plan diagram.
3. Solar panels should be added to the roof, if possible.

II. City Hall Exterior Revisions

A. Four new options were presented, each of which builds on the preferred option from the last meeting.
1. Option 1 shows metal panel accents with light and dark paint.
2. Option 2 uses wood (or wood composite) accents, with dark paint.
3. Option 3 has metal panel accents at the north end only, light paint for the body of the building and dark for the top fluted concrete.
4. Option 4 paints the entire building dark, no other material accents.

B. The committee strongly prefers Option 2, which will be included in the final report.

C. Screen wall options for the north end of the building were also presented.
1. Option 1 shows painted perforated metal panels
2. Option 2 shows a slatted wood screen wall.
3. Both options would have some transparency to keep people from hiding behind. They would also both need to have a gate at the top of the basement stairs.

D. The committee selected Option 1. There is great potential for engaging either local students or artists for creating the panel graphics.

E. Views of the parking lot side entry were also shared. It was noted by the committee that any built-in benches need to be clearly visible (slatted backs or no backs), and in a well lit area.

III. City Hall Interior Revisions

A. Two color palettes were shown in a rendering of the City Hall main lobby space.
   1. Option 1 has warm tones, Option 2 has cooler tones. Both were selected for their connection to the surrounding landscape.
   2. The committee unanimously chose Option 1.
   3. In reviewing the rendering a few changes need to be made:
      a. The customer service desk at the City Clerk's office should be flush with the wall so that it can be secured.
      b. As previously noted, the City Manager suite should have more glazing into it from the lobby.

IV. Site Designs for the City Hall/City Hall Annex were reviewed, three options were presented.

A. Option 1 vacates 2nd Street entirely, includes a lawn area between City Hall and the City Hall Annex, and revises parking.
B. Option 2 partially vacates 2nd Street and also includes a lawn area between City Hall and the City Hall Annex and revises parking.
C. Option 3 redesigns the street into an "S" with wider sidewalk areas in front of City Hall and the City Hall Annex. It also includes a lawn area between City Hall and the City Hall Annex and revises parking.
D. The committee unanimously chose Option 3.
   1. This option allows traffic to flow as it does now and loses fewer parking stalls on the street.
   2. This option also includes a shade structure/potential stage, which could be used both as a place for people to gather or performance space.
      a. There should be outdoor furniture available under the shade structure.
      b. No decision was made regarding whether the stage should be portable or a built platform.
      c. No work would be done at the county's park across the street, the future structure shown there will be removed.
E. Preliminary rough costs were shared and will be refined as the design is solidified. The estimate will be included in the final report.

V. Cost estimates are still in progress, level of finish was reviewed.

A. Detailed cost estimates for each building will be included in the final report, along with a list of assumptions.

VI. Schedule

A. Phasing schedule for the projects was reviewed and the order of projects agreed upon.
1. Phase 1: City Hall Remodel, Legal Center Remodel (could be done anytime)
2. Phase 2: City Hall Annex Remodel (Phased), SAU remodel.
3. Durations will be added for each phase in the report.

B. Draft Final report presentation will be July 11th at 10:00am.

If you have any additions or corrections to these minutes, please bring them to the attention of the editor within two weeks of the date of this meeting.

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9.6 DETAILED COST ESTIMATE

CITY HALL

CITY HALL ANNEX

LAW & JUSTICE CENTER, FULL REMODEL OF 2ND FLOOR

LAW & JUSTICE CENTER, LIMITED REMODEL OF 2ND FLOOR

LAW & JUSTICE CENTER, FULL REMODEL OF 2ND FLOOR, UPGRADE MECHANICAL AND ELECTRICAL FULL BUILDING

SAU BUILDING

POLICE DEPARTMENT STORAGE ANNEX

CITY HALL SITE ESTIMATES

Owner City of Yakima Date **7/13/23**
Project City Hall
Cost Estimate (Pre Design) ALSC Architects PS
Project Delivery Method
Project SF 28,000 sf

Division	Description	Labor	Material/Sub	Percent	$/SF
1	General Requirements	$275,000.00	$119,745.00	11.08%	$14.10
2	Site Work / Demolition	$74,842.40	$42.00	1.56%	$2.67
3	Concrete	$0.00	$0.00	0.00%	$0.00
4	Masonry	$0.00	$0.00	0.00%	$0.00
5	Metals	$20,528.20	$17,062.40	0.78%	$1.34
6	Wood, Plastics, and Composites	$13,750.00	$0.00	0.29%	$0.49
7	Thermal and Moisture Protection	$32,322.60	$93,014.35	2.61%	$4.48
8	Openings	$25,742.50	$193,270.00	4.56%	$7.82
9	Finishes	$131,193.38	$151,199.67	5.88%	$10.09
10	Specialties	$5,281.00	$12,334.00	0.37%	$0.63
11	Equipment	$0.00	$0.00	0.00%	$0.00
12	Furnishings	$0.00	$0.00	0.00%	$0.00
13	Special Construction	$0.00	$0.00	0.00%	$0.00
14	Conveying Equipment	$0.00	$0.00	0.00%	$0.00
21	Fire Suppression	$0.00	$154,000.00	3.21%	$5.50
22	Plumbing	$0.00	$616,000.00	12.82%	$22.00
23	HVAC	$0.00	$1,344,000.00	27.98%	$48.00
25	Integrated Automation	$0.00	$0.00	0.00%	$0.00
26	Electrical	$0.00	$1,022,683.50	21.29%	$36.52
27	Telecommunications/AV	$0.00	$211,975.00	4.41%	$7.57
28	Fire & Security	$0.00	$0.00	0.00%	$0.00
	Subtotal	$578,660.08	$3,935,325.92		$161.21

Summary

Labor Subtotal		$578,660.08	
Labor Mark-up	50%	$289,330.04	
Material/Sub Subtotal		$3,935,325.92	
Subtotal		$4,803,316.04	$171.55
Escalation to June 2024	7.00%	$336,232.12	
Overhead & Profit	10%	$513,954.82	
Bonds & Insurance	2.25%	$127,203.82	
Contingency	11%	$635,877.75	
Sales Tax	8.30%	$532,576.52	
	Current Grand Total	**$6,949,161.06**	$248.18

General Notes - Estimate based on certain following assumptions

1. All accoustical ceiling tile will be replaced
2. New doors at new locations and minimal replacement of existing doors in the basement
3. All door hardware to be new or replaced
4. All walls to be repainted and existing flooring to be replaced
5. No work done in basement mechanical rooms
6. No elevator replacement
7. Assumes replacing all storefront windows, but not skylights
8. Does not include asbestos remediation
9. Does not include any site work
10. Does not include any modifications to the covered parking area (old drive-thru)
11. Mechanical/Electrical design based on 2021 IBC and WSEC (adoption anticipated October 29,2023)
12. Furniture, Fixtures, and Equipment (FFE) not included
13. YPAC will bring over all of their equipment to the new space, none new provided
14. Council Chambers will have all of its current capabilities, with new equipment

Electrical Assumptions:
1. Service Equipment will be reused - housekeeping pads shall be provided under electrical equipment in basement
2. 800A panelboard will be provided on 3rd floor for Mechanical equipment to be added on 3rd floor roof.
3. Additional 225A 208V/120V branch panelboards will be provided on each floor to serve additional fan coil units and mechanical equipment
4. Egress lighting battery packs will be provided on all floors

5. New lighting and controls will be provided on all floors. Some offices will be reused on Basement, 1st and 2nd floors
6. New receptacles and branch devices will be provided on all floors. Some offices will be reused on Basement, 1st and 2nd floors
7. New fire alarm will be provided on all floors
8. Demolition numbers will be lower on 3rd and 4th floors as they are not built out.
9. Access control on basement, 1st and 2nd floors will remain in place
10. No modifications will be made to security system, cameras, headend.
11. Generator is existing to remain
12. Includes an allowance for solar panels, but structural capacity needs to be confirmed

Mechanical Assumptions:
1. Fire sprinklers added.
2. Full removal and replacement of existing mechanical and plumbing systems.
3. All HVAC equipemnt in compliance with 2021 WSEC, C403.1.4 (non-fossil fuel based)
4. Electrical service is large enough for new systems, no service upgrade required.
5. Water heater is heat pump based per 2021 WSEC, C404.2.1
6. Water heater is electric per 2021 WSEC, C404.2.1, exception 1
7. In-kind equipment replacement only, assume 90% of AHUs need replacement.
8. Complying with 2021 WSEC, C403.1.4 and C404.2.1 would trigger an electrical service upgrade, allowing in-kind replacement per C503.4.6, exception 6 and C503.5, exception 3
9. New controls required for all systems and a minimum of two bidders.

Owner City of Yakima
Project City Hall
Cost Estimate (Pre Design)

Date **7/13/2023**

ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
1.1	**GENERAL REQUIREMENTS**	1.0	LS	275,000.00	85,000.00	275,000.00	85,000.00
1.1	Project Schedule (Project Duration)	9.0	MO		300.00	-	2,700.00
1.1	Temp Utility Hookup (Project Duration)	1.0	LS		250.00	-	250.00
1.1	Temp Toilet, (?) EA (Project Duration)	9.0	MO		150.00	-	1,350.00
1.1	Temp Enclosures (Project Specific)	400.0	SF		3.00	-	1,200.00
1.1	Barricades and Barriers (Project Specific)	100.0	LF		3.00	-	300.00
1.1	Temp Fencing (Project Duration)	200.0	LF		4.00	-	800.00
1.1	Gates (Project Duration)	1.0	EA		250.00	-	250.00
1.1	Field Office Rental (Project Duration)	9.0	MO		850.00	-	7,650.00
1.1	Commissioning (Owner Provided?)	1.0	LS		2,000.00	-	2,000.00
1.1	Small Tools (Project Duration)	9.0	MO		200.00	-	1,800.00
1.1	Daily Cleanup (Project Duration)	100.0	HR		25.00	-	2,500.00
1.1	Final Cleanup (End of Project)	20,700.0	SF		0.35	-	7,245.00
1.1	Waste Management (Project Duration)	9.0	MO		300.00	-	2,700.00
1.1	Punch List (Project Closeout)	1.0	LS		4,000.00	-	4,000.00
2.11	Metal studs	3,000.0	CF	0.41		1,230.00	-
2.12	Frames	6.0	EA	43.00	2.00	258.00	12.00
2.12	Wood - single	15.0	EA	43.00	2.00	645.00	30.00
2.12	Alum. Storefront	9.0	EA	69.50		625.50	-
2.15	Gravel ballast	12,925.0	SF	0.78		10,081.50	
2.15	Built-up roof	12,925.0	SF	1.28		16,544.00	-
2.15	Coping removal	675.0	LF	0.64		432.00	
2.16	Ceramic tile	380.0	SF	1.08		410.40	-
2.16	V.C.T.	1,050.0	SF	0.73		766.50	-
2.16	Carpet	15,000.0	SF	0.36		5,400.00	-
2.16	Base cabinets	50.0	LF	31.50		1,575.00	-
2.16	O.H. cabinets	25.0	EA	22.50		562.50	-
2.17	A.C. tile/suspension	15,000.0	SF	0.61		9,150.00	-
2.17	Gyp. bd.	400.0	SF	0.96		384.00	-
2.18	Ceramic tile	900.0	SF	1.22		1,098.00	-
2.18	Gyp. bd.	12,000.0	SF	2.14		25,680.00	-
05 40 00	**COLD-FORMED METAL FRAMING**	1.0					
	Int. 6" (16" O.C.)	13,330.0	SF	1.54	1.28	20,528.20	17,062.40
06 40 23	Interior architectural woodwork	220.0	SF	62.50		13,750.00	-
	R-29, 4"	12,925.0	SF	0.62	2.66	8,013.50	34,380.50
	Tapered insul. crickets	1,000.0	SF	0.63	3.60	630.00	3,600.00
	Acoustic batt insulation - 3"	13,330.0	SF	0.32	2.17	4,265.60	28,926.10
07 46 23	Wood siding	2,000.0	SF	2.05	7.30	4,100.00	14,600.00
	TPO 60 mil mech. Fastened	12,925.0	SF	0.99	0.53	12,795.75	6,850.25
07 71 13	Manufact. copings	675.0	LF	3.73	6.90	2,517.75	4,657.50
08 11 00	**Metal doors and frames**	1.0					
	HM frame single	31.0	EA	56.50	216.00	1,751.50	6,696.00
08 14 00	**Wood doors**	1.0					
	S.C. wood flush (oak) (Replace 10 existing)	50.0	EA	53.00	201.00	2,650.00	10,050.00
	S.C. wood flush (oak) (New)	39.0	EA	53.00	201.00	2,067.00	7,839.00
08 41 13	Alum-framed ent. and storefronts	1,280.0	SF	5.80	100.00	7,424.00	128,000.00
08 71 00	**Door hardware**	1.0					
08 71 16	Hardware (passage etc.) (New)	40.0	EA	150.00	515.00	6,000.00	20,600.00
08 71 16	Hardware (passage etc.) (Replace exist)	39.0	EA	150.00	515.00	5,850.00	20,085.00
09 30 00	**Gypsum Board**	1.0				-	-
	GWB 5/8" - Basement	2,800.0	SF	0.97	0.36	2,716.00	1,008.00
	GWB 5/8" - 1st Floor	17,125.0	SF	0.97	0.36	16,611.25	6,165.00
	GWB 5/8" - Mezzanine	3,090.0	SF	0.97	0.36	2,997.30	1,112.40
09 30 00	**Tiling**	1.0					
09 30 16	Tiling	1,302.0	SF	7.25	4.83	9,439.50	6,288.66
09 51 23	Acoustical tile ceilings	1.0					
	Sus. acoust. tile 2x2 (w/grid-Basement)	1,830.0	SF	0.75	2.35	1,372.50	4,300.50
	Sus. acoust. tile 2x2 (w/grid-1st Floor)	11,821.0	SF	0.75	2.35	8,865.75	27,779.35

Owner City of Yakima
Project City Hall
Cost Estimate (Pre Design)

Date **7/13/2023**

ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
	Sus. acoust. tile 2x2 (w/grid-Mezzanine)	2,072.0	SF	0.75	2.35	1,554.00	4,869.20
09 65 00	**Resilient flooring**	1.0					
09 65 43	Linoleum flooring/sheet vinyl (Basement)	1,050.0	SF	1.23	4.07	1,291.50	4,273.50
09 65 43	Linoleum flooring/sheet vinyl (Ist floor)	1,290.0	SF	1.23	4.07	1,586.70	5,250.30
09 68 13	**Tile carpeting**	1.0					
09 68 13	Carpet base - Basement	1,100.0	LF	1.40	0.97	1,540.00	1,067.00
09 68 13	Carpet base - 1st Floor	4,000.0	LF	1.40	0.97	5,600.00	3,880.00
09 68 13	Carpet base - 2nd Floor	1,090.0	LF	1.40	0.97	1,526.00	1,057.30
09 68 13	Medium grade tile - Basement	4,435.0	SF	0.61	4.28	2,705.35	18,981.80
09 68 13	Medium grade tile - 1st Floor	8,854.0	SF	0.61	4.28	5,400.94	37,895.12
09 68 13	Medium grade tile - Mezzanine	1,788.0	SF	0.61	4.28	1,090.68	7,652.64
	Concrete	13,500.0	SF	2.55	0.13	34,425.00	1,755.00
09 91 23	Interior painting	1.0					
	GWB (new-Basement)	3,646.0	SF	1.22	0.44	4,448.12	1,604.24
	GWB (new-1st Floor)	15,412.5	SF	1.22	0.44	18,803.25	6,781.50
	GWB (new-Mezzanine)	2,781.0	SF	1.22	0.44	3,392.82	1,223.64
	GWB (Existing-Basement)	9,500.0	SF	0.24	0.34	2,280.00	3,230.00
	GWB (Existing-1st Floor)	13,090.0	SF	0.24	0.34	3,141.60	4,450.60
	GWB (Existing-2nd Floor)	1,688.0	SF	0.24	0.34	405.12	573.92
10 21 13.13	Toilet partitions powdercoat steel	10.0	EA	150.00	475.00	1,500.00	4,750.00
10 21 13.13	Urinal partitions powdercoat steel	2.0	EA	146.00	230.00	292.00	460.00
	Interior room signage	60.0	EA	18.75	28.00	1,125.00	1,680.00
10 26 13	Stainless Steel 2" wing	64.0	LF	5.65	26.00	-	1,664.00
10 44 13.13	F.E cabinet w/MP extinguisher	12.0	EA	197.00	315.00	2,364.00	3,780.00
21 10 00	General fire sprinkler system	1.0	LS		154,000.00	-	154,000.00
22 05 05	Selective demolition	1.0	LS		140,000.00	-	140,000.00
22 10 00	General plumbing	1.0	LS		476,000.00	-	476,000.00
23 10 00	General HVAC systems	1.0	LS		1,344,000.00	-	1,344,000.00
26 20 00	Power	1.0	LS		761,823.00	-	761,823.00
26 50 00	Lighting	1.0	LS		260,860.50	-	260,860.50
	Solar panels - roof	1.0	LS		275,000.00	-	275,000.00
27 05 05	AV, Council Chambers	1.0	LS		211,975.00	-	211,975.00
					Subtotals	$ 578,660.08	$4,436,774.70

Owner City of Yakima
Project City Hall Annex
Cost Estimate (Pre Design)
Project Delivery Method
Project SF 40,000 sf

Date **7/13/23**

ALSC Architects PS

Division	Description	Labor	Material/Sub	Percent	$/SF
1	General Requirements	$500,000.00	$229,745.00	11.07%	$18.24
2	Site Work / Demolition	$90,138.58	$174.00	1.02%	$2.26
3	Concrete	$0.00	$0.00	0.00%	$0.00
4	Masonry	$0.00	$0.00	0.00%	$0.00
5	Metals	$12,387.05	$23,069.00	0.40%	$0.89
6	Wood, Plastics, and Composites	$13,750.00	$0.00	0.16%	$0.34
7	Thermal and Moisture Protection	$34,808.55	$87,847.95	1.39%	$3.07
8	Openings	$56,365.50	$495,933.00	6.24%	$13.81
9	Finishes	$161,116.99	$302,500.32	5.24%	$11.59
10	Specialties	$5,731.00	$14,740.00	0.23%	$0.51
11	Equipment	$0.00	$0.00	0.00%	$0.00
12	Furnishings	$0.00	$0.00	0.00%	$0.00
13	Special Construction	$0.00	$0.00	0.00%	$0.00
14	Conveying Equipment	$0.00	$0.00	0.00%	$0.00
21	Fire Suppression	$0.00	$240,165.00	2.71%	$6.00
22	Plumbing	$0.00	$1,440,990.00	16.28%	$36.02
23	HVAC	$0.00	$2,561,760.00	28.94%	$64.04
25	Integrated Automation	$0.00	$0.00	0.00%	$0.00
26	Electrical	$0.00	$2,142,950.00	24.21%	$53.57
27	Telecommunications	$0.00	$0.00	0.00%	$0.00
28	Fire & Security	$0.00	$0.00	0.00%	$0.00
	Subtotal	$874,297.67	$7,539,874.27		$210.35

Summary

Labor Subtotal		$874,297.67	
Labor Mark-up	50%	$437,148.84	
Material/Sub Subtotal		$7,539,874.27	
Subtotal		$8,851,320.78	$221.28
Escalation to June 2024	7.00%	$619,592.45	
Overhead & Profit	7%	$662,963.93	
Bonds & Insurance	2.25%	$228,012.24	
Contingency	11%	$1,139,807.83	
Sales Tax	8.30%	$954,640.87	
	Current Grand Total	**$12,456,338.09**	$311.41

General Notes - Estimate based on certain following assumptions

1. Assuming all accoustical ceiling tile will be replaced
2. New doors at new locations and 50% replacement of existing doors
3. All door hardware to be new or replaced
4. All walls to be repainted and existing flooring to be replaced
5. No work done on the 3rd and 4th floors
6. New stair to 3rd/4th floors not included
7. Assumes replacing storefront windows on the 1st and 2nd floors only
8. Does not include asbestos remediation
9. Does not include any site work
10. Does not include any modifications to the covered parking area (old drive-thru)
11. Mechanical/Electrical design based on 2021 IBC and WSEC (adoption anticipated October 29,2023)
12. Furniture, Fixtures, and Equipment (FFE) not included

Electrical Assumptions:
1. Service Equipment will be reused - housekeeping pads shall be provided under electrical equipment in basement
2. 800A panelboard will be provided on 3rd floor for Mechanical equipment to be added on 3rd floor roof.
3. Additional 225A 208V/120V branch panelboards will be provided on each floor to serve additional fan coil units and mechanical equipment
4. Egress lighting battery packs will be provided on all floors
5. New lighting and controls will be provided on all floors. Some offices will be reused on Basement, 1st and 2nd floors
6. New receptacles and branch devices will be provided on all floors. Some offices will be reused on Basement, 1st and 2nd floors
7. New fire alarm will be provided on all floors
8. Demolition numbers will be lower on 3rd and 4th floors as they are not built out.
9. Access control on basement, 1st and 2nd floors will remain in place
10. No modifications will be made to security system, cameras, headend.
11. Generator is existing to remain
12. Includes an allowance for solar panels

Mechanical Assumptions:
1. Fire sprinklers added to floors 1 through 3, basement sprinklers re-used.
2. Full removal and replacement of existing mechanical and plumbing systems.
3. All HVAC equipemnt in compliance with 2021 WSEC, C403.1.4 (non-fossil fuel based)
4. Electrical service is large enough for new systems, no service upgrade required.
5. Water heater is heat pump based per 2021 WSEC, C404.2.1
6. Water heater is electric per 2021 WSEC, C404.2.1, exception 1
7. In-kind equipment replacement only, assume 90% of AHUs need replacement.
8. Complying with 2021 WSEC, C403.1.4 and C404.2.1 would trigger an electrical service upgrade, allowing in-kind replacement per C503.4.6, exception 6 and C503.5, exception 3
9. New controls required for all systems and a minimum of two bidders.

Owner City of Yakima
Project City Hall Annex
Cost Estimate (Pre Design)

Date **7/13/2023**

ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
1.1	**GENERAL REQUIREMENTS**	1.0	LS	500,000.00	195,000.00	500,000.00	195,000.00
1.1	Project Schedule (Project Duration)	9.0	MO		300.00	-	2,700.00
1.1	Temp Utility Hookup (Project Duration)	1.0	LS		250.00	-	250.00
1.1	Temp Toilet, (?) EA (Project Duration)	9.0	MO		150.00	-	1,350.00
1.1	Temp Enclosures (Project Specific)	400.0	SF		3.00	-	1,200.00
1.1	Barricades and Barriers (Project Specific)	100.0	LF		3.00	-	300.00
1.1	Temp Fencing (Project Duration)	200.0	LF		4.00	-	800.00
1.1	Gates (Project Duration)	1.0	EA		250.00	-	250.00
1.1	Field Office Rental (Project Duration)	9.0	MO		850.00	-	7,650.00
1.1	Commissioning (Owner Provided?)	1.0	LS		2,000.00	-	2,000.00
1.1	Small Tools (Project Duration)	9.0	MO		200.00	-	1,800.00
1.1	Daily Cleanup (Project Duration)	100.0	HR		25.00	-	2,500.00
1.1	Final Cleanup (End of Project)	20,700.0	SF		0.35	-	7,245.00
1.1	Waste Management (Project Duration)	9.0	MO		300.00	-	2,700.00
1.1	Punch List (Project Closeout)	1.0	LS		4,000.00	-	4,000.00
2.11	Metal studs	3,000.0	CF	0.41		1,230.00	-
2.12	Frames	87.0	EA	43.00	2.00	3,741.00	174.00
2.12	Alum. Storefront	3.0	EA	69.50		208.50	-
2.15	Built-up roof	17,305.0	SF	1.28		22,150.40	-
2.15	Coping removal	750.0	LF	0.64		480.00	
2.16	Ceramic tile	752.0	SF	1.08		812.16	-
2.16	V.C.T.	3,000.0	SF	0.73		2,190.00	-
2.16	Carpet	25,082.0	SF	0.36		9,029.52	-
2.16	Base cabinets	50.0	LF	31.50		1,575.00	-
2.16	O.H. cabinets	50.0	EA	22.50		1,125.00	-
2.17	A.C. tile/suspension	33,500.0	SF	0.61		20,435.00	-
2.17	Gyp. bd.	400.0	SF	0.96		384.00	-
2.18	Ceramic tile	900.0	SF	1.22		1,098.00	-
2.18	Gyp. bd.	12,000.0	SF	2.14		25,680.00	-
05 40 00	**COLD-FORMED METAL FRAMING**	1.0					
	Int. 3 5/8" (16" O.C.) - Basement	165.0	LF	12.35	23.00	2,037.75	3,795.00
	Int. 3 5/8" (16" O.C.) - 1st Floor	410.0	LF	12.35	23.00	5,063.50	9,430.00
	Int. 3 5/8" (16" O.C.) - 2nd Floor	428.0	LF	12.35	23.00	5,285.80	9,844.00
06 40 23	Interior architectural woodwork	220.0	SF	62.50		13,750.00	-
	R-29, 4"	17,305.0	SF	0.62	2.66	10,729.10	46,031.30
	Tapered insul. crickets	1,000.0	SF	0.63	3.60	630.00	3,600.00
	Acoustic batt insulation - 3"	11,000.0	SF	0.32	2.17	3,520.00	23,870.00
	TPO 60 mil mech. Fastened	17,305.0	SF	0.99	0.53	17,131.95	9,171.65
07 71 13	Manufact. copings	750.0	LF	3.73	6.90	2,797.50	5,175.00
08 11 00	**Metal doors and frames**	1.0					
	HM frame single	39.0	EA	56.50	216.00	2,203.50	8,424.00
08 14 00	**Wood doors**	1.0					
	S.C. wood flush (oak) (50% Replacement)	105.0	EA	53.00	201.00	5,565.00	21,105.00
	S.C. wood flush (oak) (New)	39.0	EA	53.00	201.00	2,067.00	7,839.00
	Operable wall	17.5	LF		600.00	-	10,500.00
08 41 13	Alum-framed ent. and storefronts	3,600.0	SF	5.80	100.00	20,880.00	360,000.00
08 71 00	**Door hardware**	1.0					
08 71 16	Hardware (passage etc.) (New)	39.0	EA	150.00	515.00	5,850.00	20,085.00
08 71 16	Hardware (passage etc.) (Replace exist)	132.0	EA	150.00	515.00	19,800.00	67,980.00
09 30 00	**Gypsum Board**	1.0				-	-
	GWB 5/8" - Basement	2,000.0	SF	0.97	0.36	1,940.00	720.00
	GWB 5/8" - 1st Floor	9,635.0	SF	0.97	0.36	9,345.95	3,468.60
	GWB 5/8" - 2nd Floor	10,058.0	SF	0.97	0.36	9,756.26	3,620.88
09 30 00	**Tiling**	1.0					
09 30 16	Tiling	752.0	SF	7.25	4.83	5,452.00	3,632.16
09 51 23	Acoustical tile ceilings	1.0					
	Sus. acoust. tile 2x2 (w/grid-Basement)	1,760.0	SF	0.75	2.35	1,320.00	4,136.00
	Sus. acoust. tile 2x2 (w/grid-1st Floor)	15,037.0	SF	0.75	2.35	11,277.75	35,336.95

Owner City of Yakima
Project City Hall Annex
Cost Estimate (Pre Design)

Date **7/13/2023**

ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
	Sus. acoust. tile 2x2 (w/grid-2nd Floor)	17,104.0	SF	0.75	2.35	12,828.00	40,194.40
09 65 00	**Resilient flooring**	1.0					
09 65 43	Linoleum flooring/sheet vinyl (Basement)	2,175.0	SF	1.23	4.07	2,675.25	8,852.25
09 65 43	Linoleum flooring/sheet vinyl (2nd Floor)	1,662.0	SF	1.23	4.07	2,044.26	6,764.34
09 68 13	**Tile carpeting**	1.0					
09 68 13	Carpet base - Basement	1,870.0	LF	1.40	0.97	2,618.00	1,813.90
09 68 13	Carpet base - 1st Floor	11,354.0	LF	1.40	0.97	15,895.60	11,013.38
09 68 13	Carpet base - 2nd Floor	11,858.0	LF	1.40	0.97	16,601.20	11,502.26
09 68 13	Medium grade tile - Basement	1,136.0	SF	0.61	4.28	692.96	4,862.08
09 68 13	Medium grade tile - 1st Floor	14,661.0	SF	0.61	4.28	8,943.21	62,749.08
09 68 13	Medium grade tile - 2nd Floor	13,809.0	SF	0.61	4.28	8,423.49	59,102.52
09 91 23	Interior painting	1.0					
	GWB (new-Basement)	2,000.0	SF	1.22	0.44	2,440.00	880.00
	GWB (new-1st Floor)	9,635.0	SF	1.22	0.44	11,754.70	4,239.40
	GWB (new-2nd Floor)	10,058.0	SF	1.22	0.44	12,270.76	4,425.52
	GWB (Existing-Basement)	15,330.0	SF	0.24	0.34	3,679.20	5,212.20
	GWB (Existing-1st Floor)	39,700.0	SF	0.24	0.34	9,528.00	13,498.00
	GWB (Existing-2nd Floor)	48,460.0	SF	0.24	0.34	11,630.40	16,476.40
10 21 13.13	Toilet partitions powdercoat steel	8.0	EA	150.00	475.00	1,200.00	3,800.00
10 21 13.13	Urinal partitions powdercoat steel	2.0	EA	146.00	230.00	292.00	460.00
	Interior room signage	100.0	EA	18.75	28.00	1,875.00	2,800.00
10 26 13	Stainless Steel 2" wing	150.0	LF	5.65	26.00	-	3,900.00
10 44 13.13	F.E cabinet w/MP extinguisher	12.0	EA	197.00	315.00	2,364.00	3,780.00
21 10 00	General fire sprinkler system	1.0	LS		240,165.00	-	240,165.00
22 05 05	Selective demolition	1.0	LS		266,850.00	-	266,850.00
22 10 00	General plumbing	1.0	LS		1,174,140.00	-	1,174,140.00
23 10 00	General HVAC systems	1.0	LS		2,561,760.00	-	2,561,760.00
26 20 00	Power	1.0	LS		1,307,565.00	-	1,307,565.00
26 50 00	Lighting	1.0	LS		560,385.00	-	560,385.00
	Solar panels - roof	1.0	LS		275,000.00	-	275,000.00
					Subtotals	$ 874,297.67	$7,861,316.77

Owner City of Yakima Date **7/13/23**
Project Law & Justice Center - Full Remodel
Cost Estimate (Pre Design) ALSC Architects PS
Project Delivery Method
Project SF 9,800 sf Full Building SF 56,600sf

Division	Description	Labor	Material/Sub	Percent	$/SF
1	General Requirements	$30,000.00	$27,905.00	11.01%	$5.91
2	Site Work / Demolition	$6,493.64	$4.00	0.98%	$0.66
3	Concrete	$0.00	$0.00	0.00%	$0.00
4	Masonry	$0.00	$0.00	0.00%	$0.00
5	Metals	$1,424.50	$1,184.00	0.39%	$0.27
6	Wood, Plastics, and Composites	$3,750.00	$0.00	0.57%	$0.38
7	Thermal and Moisture Protection	$1,298.24	$8,803.69	1.53%	$1.03
8	Openings	$1,214.00	$4,033.50	0.79%	$0.54
9	Finishes	$22,442.98	$57,179.27	12.03%	$8.12
10	Specialties	$1,247.25	$3,693.00	0.75%	$0.50
11	Equipment	$0.00	$0.00	0.00%	$0.00
12	Furnishings	$0.00	$0.00	0.00%	$0.00
13	Special Construction	$0.00	$0.00	0.00%	$0.00
14	Conveying Equipment	$0.00	$0.00	0.00%	$0.00
21	Fire Suppression	$0.00	$0.00	0.00%	$0.00
22	Plumbing	$0.00	$58,625.00	8.86%	$5.98
23	HVAC	$0.00	$252,850.00	38.20%	$25.80
25	Integrated Automation	$0.00	$0.00	0.00%	$0.00
26	Electrical	$0.00	$145,875.00	22.04%	$14.89
27	Telecommunications	$0.00	$0.00	0.00%	$0.00
28	Fire & Security	$0.00	$0.00	0.00%	$0.00
	Subtotal	$67,870.61	$560,152.46		$64.08

Summary

Labor Subtotal		$67,870.61	
Labor Mark-up	50%	$33,935.31	
Material/Sub Subtotal		$560,152.46	
Subtotal		$661,958.38	$67.55
Escalation to June 2024	7.00%	$46,337.09	
Overhead & Profit	10%	$70,829.55	
Bonds & Insurance	2.25%	$17,530.31	
Contingency	11%	$87,632.09	
Sales Tax	8.30%	$73,395.85	
	Current Grand Total	**$957,683.26**	$97.72

General Notes - Estimate based on certain following assumptions

1. All accoustical ceiling tile will be replaced
2. New doors at new locations and no replacement of existing doors
3. Blanket insulation added above ceilings at office areas to minimize sound transfer
4. All walls to be repainted and existing flooring to be replaced
5. Does not include asbestos remediation
6. Does not include any site work
7. Assumes existing toilet rooms will remain as they are
8. No exterior window replacement
9. Mechanical/Electrical estimates are based on the entire building, no architectural work on the first floor
10. Mechanical/Electrical design based on 2021 IBC and WSEC (adoption anticipated October 29,2023)
11. Roofing replacement not included
12. No door hardware replacement
13. Furniture, Fixtures, and Equipment (FFE) not included

Electrical Assumptions:
1. Lighting updates and power/data additions only within area of work
2. Branch circuit modifications and improvements to life safety equipment
3. Mechanical equipment is planned to be swapped like for like, so branch connections are included for updated mechanical equipment
4. Egress lighting batter packs will be provided
5. Fire alarm devices will be provided

Mechanical Assumptions:
1. In-kind equipment replacement only
2. Assumes new controls required only for new systems

Owner City of Yakima
Project Law & Justice Center - Full Remodel
Cost Estimate (Pre Design)

Date **7/13/2023**

ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
1.1	**GENERAL REQUIREMENTS**	1.0	LS	30,000.00	3,000.00	30,000.00	3,000.00
1.1	Project Schedule (Project Duration)	6.0	MO		300.00	-	1,800.00
1.1	Temp Toilet, (?) EA (Project Duration)	6.0	MO		150.00	-	900.00
1.1	Temp Enclosures (Project Specific)	300.0	SF		3.00	-	900.00
1.1	Barricades and Barriers (Project Specific)	75.0	LF		3.00	-	225.00
1.1	Temp Fencing (Project Duration)	200.0	LF		4.00	-	800.00
1.1	Gates (Project Duration)	1.0	EA		250.00	-	250.00
1.1	Field Office Rental (Project Duration)	6.0	MO		850.00	-	5,100.00
1.1	Commissioning (Owner Provided?)	1.0	LS		2,000.00	-	2,000.00
1.1	Small Tools (Project Duration)	6.0	MO		200.00	-	1,200.00
1.1	Daily Cleanup (Project Duration)	100.0	HR		25.00	-	2,500.00
1.1	Final Cleanup (End of Project)	9,800.0	SF		0.35	-	3,430.00
1.1	Waste Management (Project Duration)	6.0	MO		300.00	-	1,800.00
1.1	Punch List (Project Closeout)	1.0	LS		4,000.00	-	4,000.00
2.11	Metal studs	500.0	CF	0.41		205.00	-
2.12	Wood - single	2.0	EA	43.00	2.00	86.00	4.00
2.16	V.C.T.	900.0	SF	0.73		657.00	-
2.16	Carpet	6,505.0	SF	0.36		2,341.80	-
2.16	Base cabinets	8.0	LF	31.50		252.00	-
2.16	O.H. cabinets	8.0	EA	22.50		180.00	-
2.17	A.C. tile/suspension	4,544.0	SF	0.61		2,771.84	-
05 40 00	**COLD-FORMED METAL FRAMING**	1.0					
	Int. 6" (16" O.C.)	925.0	SF	1.54	1.28	1,424.50	1,184.00
06 40 23	Interior architectural woodwork	60.0	SF	62.50		3,750.00	-
	Acoustic batt insulation - 3"	4,057.0	SF	0.32	2.17	1,298.24	8,803.69
08 11 00	**Metal doors and frames**	1.0					
08 13 16	Aluminum doors	1.0	EA				
08 13 16.13	Alum-storefront door 3x7	1.0	EA	495.00	1,125.00	495.00	1,125.00
08 14 16	Flush wood doors	1.0					
	S.C. wood flush (oak) (New)	1.0	EA	53.00	201.00	53.00	201.00
08 41 00	**Entrances and storefronts**	1.0					
08 41 13	Alum-framed ent. and storefronts	61.0	SF	6.00	27.50	366.00	1,677.50
08 71 00	**Door hardware**	1.0					
08 71 16	Hardware (passage etc.) (New)	2.0	EA	150.00	515.00	300.00	1,030.00
09 30 00	**Gypsum Board**	1.0				-	-
	GWB 5/8"	925.0	SF	0.97	0.36	897.25	333.00
09 51 23	Acoustical tile ceilings	1.0					
	Sus. acoust. tile 2x2 (w/grid)	7,327.0	SF	0.75	2.35	5,495.25	17,218.45
09 65 00	**Resilient flooring**	1.0					
09 65 13	Rubber base	1,716.0	LF	1.35	1.39	2,316.60	2,385.24
09 65 19	**Resilient tile flooring**	1.0					
09 65 43	Linoleum flooring/sheet vinyl	518.0	SF	1.23	4.07	637.14	2,108.26
09 68 13	**Tile carpeting**	1.0					
09 68 13	Medium grade tile	6,714.0	SF	0.61	4.28	4,095.54	28,735.92
09 91 00	**Painting**	1.0					
09 91 23	Interior painting	1.0					
	GWB (new)	1,860.0	SF	1.22	0.44	2,269.20	818.40
	GWB (Existing)	15,300.0	SF	0.24	0.34	3,672.00	5,202.00
	Doors and frames (3x7, 2 sides)	40.0	EA	76.50	9.45	3,060.00	378.00
	Interior room signage	35.0	EA	18.75	28.00	656.25	980.00
10 26 13	Stainless Steel 2" wing	68.0	LF	5.65	26.00	-	1,768.00
10 44 13.13	F.E cabinet w/MP extinguisher	3.0	EA	197.00	315.00	591.00	945.00
21 10 00	General fire sprinkler system	1.0	LS			-	-
22 05 05	Selective demolition	1.0	LS		48,625.00	-	48,625.00
22 10 00	General plumbing	1.0	LS		10,000.00	-	10,000.00
23 10 00	General HVAC systems	1.0	LS		252,850.00	-	252,850.00
26 20 00	Power	1.0	LS		106,975.00	-	106,975.00
26 50 00	Lighting	1.0	LS		38,900.00	-	38,900.00
					Subtotals	$ 67,870.61	$ 582,033.71

Owner City of Yakima Date **7/13/2023**
Project Law & Justice Center - Full Remodel
Cost Estimate (Pre Design) ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt

Owner City of Yakima
Project Law & Justice Center - Partial Remodel
Cost Estimate (Pre Design)
Project Delivery Method
Project SF 3,850 sf

Date **7/13/23**

ALSC Architects PS

Division	Description	Labor	Material/Sub	Percent	$/SF
1	General Requirements	$12,750.00	$13,818.75	11.05%	$6.90
2	Site Work / Demolition	$3,692.77	$4.00	1.24%	$0.96
3	Concrete	$0.00	$0.00	0.00%	$0.00
4	Masonry	$0.00	$0.00	0.00%	$0.00
5	Metals	$1,424.50	$1,184.00	0.87%	$0.68
6	Wood, Plastics, and Composites	$3,750.00	$0.00	1.26%	$0.97
7	Thermal and Moisture Protection	$1,298.24	$8,803.69	3.39%	$2.62
8	Openings	$998.80	$7,740.00	2.93%	$2.27
9	Finishes	$10,875.14	$29,607.71	13.58%	$10.52
10	Specialties	$0.00	$0.00	0.00%	$0.00
11	Equipment	$0.00	$0.00	0.00%	$0.00
12	Furnishings	$0.00	$0.00	0.00%	$0.00
13	Special Construction	$0.00	$0.00	0.00%	$0.00
14	Conveying Equipment	$0.00	$0.00	0.00%	$0.00
21	Fire Suppression	$0.00	$0.00	0.00%	$0.00
22	Plumbing	$0.00	$26,950.00	9.04%	$7.00
23	HVAC	$0.00	$100,100.00	33.57%	$26.00
25	Integrated Automation	$0.00	$0.00	0.00%	$0.00
26	Electrical	$0.00	$57,750.00	19.37%	$15.00
27	Telecommunications	$0.00	$0.00	0.00%	$0.00
28	Fire & Security	$0.00	$0.00	0.00%	$0.00
	Subtotal	$34,789.45	$245,958.15		$72.92

Summary

Labor Subtotal		$34,789.45	
Labor Mark-up	50%	$17,394.73	
Material/Sub Subtotal		$245,958.15	
Subtotal		$298,142.33	$77.44
Escalation to June 2024	7.00%	$20,869.96	
Overhead & Profit	10%	$31,901.23	
Bonds & Insurance	2.25%	$7,895.55	
Contingency	11%	$39,469.00	
Sales Tax	8.30%	$33,057.08	
	Current Grand Total	**$431,335.15**	$112.04

General Notes - Estimate based on certain following assumptions

1. Accoustical ceiling tile only replaced at remodel area
2. New doors at new locations and no replacement of existing doors
3. Blanket insulation added above ceilings at office areas to minimize sound transfer
4. New flooring and painting of walls only at remodel area
5. Does not include asbestos remediation
6. Does not include any site work
7. Assumes existing toilet rooms will remain as they are
8. No exterior window replacement
9. Mechanical/Electrical design based on 2021 IBC and WSEC (adoption anticipated October 29,2023)
10. Roofing replacement not included
11. No door hardware replacement
12. Furniture, Fixtures, and Equipment (FFE) not included
13. Work only at limited area of 2nd floor, no new finishes except in work area

Electrical Assumptions:
1. Lighting updates and power/data additions only within area of work
2. Branch circuit modifications and improvements to life safety equipment
3. Mechanical equipment is planned to be swapped like for like, so branch connections are included for updated mechanical equipment
4. Egress lighting batter packs will be provided
5. Fire alarm devices will be provided

Mechanical Assumptions:
1. In-kind equipment replacement only
2. Assumes new controls required only for new systems

Owner City of Yakima
Project Law & Justice Center - Partial Remodel
Cost Estimate (Pre Design)

Date **7/13/2023**

ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
1.1	**GENERAL REQUIREMENTS**	1.0	LS	12,750.00		12,750.00	-
1.1	Project Schedule (Project Duration)	4.0	MO		300.00	-	1,200.00
1.1	Temp Enclosures (Project Specific)	100.0	SF		3.00	-	300.00
1.1	Barricades and Barriers (Project Specific)	50.0	LF		3.00	-	150.00
1.1	Field Office Rental (Project Duration)	4.0	MO		850.00	-	3,400.00
1.1	Commissioning (Owner Provided?)	1.0	LS		2,000.00	-	2,000.00
1.1	Small Tools (Project Duration)	4.0	MO		200.00	-	800.00
1.1	Daily Cleanup (Project Duration)	60.0	HR		25.00	-	1,500.00
1.1	Final Cleanup (End of Project)	3,625.0	SF		0.35	-	1,268.75
1.1	Waste Management (Project Duration)	4.0	MO		300.00	-	1,200.00
1.1	Punch List (Project Closeout)	1.0	LS		2,000.00	-	2,000.00
2.11	Metal studs	500.0	CF	0.41		205.00	-
2.12	Wood - single	2.0	EA	43.00	2.00	86.00	4.00
2.16	Carpet	3,850.0	SF	0.36		1,386.00	-
2.16	Base cabinets	22.0	LF	31.50		693.00	-
2.16	O.H. cabinets	22.0	EA	22.50		495.00	-
2.17	A.C. tile/suspension	1,357.0	SF	0.61		827.77	-
05 40 00	**COLD-FORMED METAL FRAMING**	1.0					
	Int. 6" (16" O.C.)	925.0	SF	1.54	1.28	1,424.50	1,184.00
06 40 23	Interior architectural woodwork	60.0	SF	62.50		3,750.00	-
	Acoustic batt insulation - 3"	4,057.0	SF	0.32	2.17	1,298.24	8,803.69
08 11 00	**Metal doors and frames**	1.0					
08 13 16	Aluminum doors	1.0	EA				
08 13 16.13	Alum-storefront door 3x7	1.0	EA	495.00	1,125.00	495.00	1,125.00
08 41 13	Alum-framed ent. and storefronts	61.0	SF	5.80	100.00	353.80	6,100.00
08 71 00	**Door hardware**	1.0					
08 71 16	Hardware (passage etc.) (New)	1.0	EA	150.00	515.00	150.00	515.00
09 30 00	**Gypsum Board**	1.0				-	-
	GWB 5/8"	925.0	SF	0.97	0.36	897.25	333.00
09 51 23	Acoustical tile ceilings	1.0					
	Sus. acoust. tile 2x2 (w/grid)	3,814.0	SF	0.75	2.35	2,860.50	8,962.90
09 65 00	**Resilient flooring**	1.0					
09 65 13	Rubber base	771.0	LF	1.35	1.39	1,040.85	1,071.69
09 68 13	**Tile carpeting**	1.0					
09 68 13	Medium grade tile	3,814.0	SF	0.61	4.28	2,326.54	16,323.92
09 91 23	Interior painting	1.0					
	GWB (new)	1,860.0	SF	1.22	0.44	2,269.20	818.40
	GWB (Existing)	6,170.0	SF	0.24	0.34	1,480.80	2,097.80
22 05 05	Selective demolition	1.0	LS		19,250.00	-	19,250.00
22 10 00	General plumbing	1.0	LS		7,700.00	-	7,700.00
23 10 00	General HVAC systems	1.0	LS		100,100.00	-	100,100.00
26 20 00	Power	1.0	LS		42,350.00	-	42,350.00
26 50 00	Lighting	1.0	LS		15,400.00	-	15,400.00
					Subtotals	$ 34,789.45	$ 254,620.65

Owner City of Yakima Date **7/11/23**
Project Law & Justice Center - Full 2nd floor remodel, full building MEP
Cost Estimate (Pre Design) ALSC Architects PS
Project Delivery Method
Project SF 9,800 sf Full Building SF 56,600sf

Division	Description	Labor	Material/Sub	Percent	$/SF
1	General Requirements	$225,000.00	$139,905.00	10.97%	$37.24
2	Site Work / Demolition	$6,493.64	$4.00	0.15%	$0.66
3	Concrete	$0.00	$0.00	0.00%	$0.00
4	Masonry	$0.00	$0.00	0.00%	$0.00
5	Metals	$1,424.50	$1,184.00	0.06%	$0.27
6	Wood, Plastics, and Composites	$3,750.00	$0.00	0.09%	$0.38
7	Thermal and Moisture Protection	$1,298.24	$8,803.69	0.23%	$1.03
8	Openings	$1,214.00	$4,033.50	0.12%	$0.54
9	Finishes	$22,442.98	$57,179.27	1.83%	$8.12
10	Specialties	$1,247.25	$3,693.00	0.11%	$0.50
11	Equipment	$0.00	$0.00	0.00%	$0.00
12	Furnishings	$0.00	$0.00	0.00%	$0.00
13	Special Construction	$0.00	$0.00	0.00%	$0.00
14	Conveying Equipment	$0.00	$0.00	0.00%	$0.00
21	Fire Suppression	$0.00	$0.00	0.00%	$0.00
22	Plumbing	$0.00	$385,315.00	8.85%	$39.32
23	HVAC	$0.00	$2,532,070.00	58.18%	$258.37
25	Integrated Automation	$0.00	$0.00	0.00%	$0.00
26	Electrical	$0.00	$825,675.00	18.97%	$84.25
27	Telecommunications	$0.00	$0.00	0.00%	$0.00
28	Fire & Security	$0.00	$0.00	0.00%	$0.00
	Subtotal	$262,870.61	$3,957,862.46		NA

Summary

Labor Subtotal		$262,870.61	
Labor Mark-up	50%	$131,435.31	
Material/Sub Subtotal		$3,957,862.46	
Subtotal		$4,352,168.38	NA
Escalation to June 2024	7.00%	$304,651.79	
Overhead & Profit	10%	$465,682.02	
Bonds & Insurance	2.25%	$115,256.30	
Contingency	11%	$576,153.43	
Sales Tax	8.30%	$482,554.69	
	Current Grand Total	**$6,296,466.60**	NA

General Notes - Estimate based on certain following assumptions

1. Architectural estimate includes 2nd floor only
2. New doors at new locations and no replacement of existing doors
3. Blanket insulation added above ceilings at office areas to minimize sound transfer
4. All accoustical ceiling tile on will be replaced. All walls to be repainted and existing flooring to be replaced (2nd floor)
5. Does not include asbestos remediation
6. Does not include any site work
7. Assumes existing toilet rooms will remain as they are
8. No exterior window replacement
9. Mechanical/Electrical estimates are based on the entire building, no architectural work on the first floor
10. Mechanical/Electrical design based on 2021 IBC and WSEC (adoption anticipated October 29,2023)
11. Roofing replacement not included

12. No door hardware replacement
13. Furniture, Fixtures, and Equipment (FFE) not included

Electrical Assumptions:
1. No major architectural work planned for this building, so no distribution equipment changes are expected. Branch circuits changes only
2. Mechanical equipment is planned to be swapped like for like, so branch connections are included for updated mechanical equipment
3. Egress lighting battery packs will be provided
4. Fire alarm devices will be provided

Mechanical Assumptions:
1. Estimate is based on in-kind replacement only for end of life equipment
2. Full removal and replacement of existing mechanical and plumbing systems.
3. All HVAC equipment in compliance with 2021 WSEC, C403.1.4 (non-fossil fuel based)
4. Electrical service is large enough for new systems, no service upgrade required.
5. Water heater is electric per 2021 WSEC, C404.2.1, exception 1
6. Water heater is heat pump based per 2021 WSEC, C404.2.1
7. Assumes complying with 2021 WSEC, C403.1.4 & C404.2.1 would trigger an electric service upgrade, allowing in-kind replacement per C502.4.6, exception 6 and C503.3, exception 3
8. New controls required for all systems and a minimum of two bidders

Owner City of Yakima Date **7/11/2023**
Project Law & Justice Center - Full 2nd floor remodel, full building MEP
Cost Estimate (Pre Design) ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
1.1	**GENERAL REQUIREMENTS**	1.0	LS	225,000.00	115,000.00	225,000.00	115,000.00
1.1	Project Schedule (Project Duration)	6.0	MO		300.00	-	1,800.00
1.1	Temp Toilet, (?) EA (Project Duration)	6.0	MO		150.00	-	900.00
1.1	Temp Enclosures (Project Specific)	300.0	SF		3.00	-	900.00
1.1	Barricades and Barriers (Project Specific)	75.0	LF		3.00	-	225.00
1.1	Temp Fencing (Project Duration)	200.0	LF		4.00	-	800.00
1.1	Gates (Project Duration)	1.0	EA		250.00	-	250.00
1.1	Field Office Rental (Project Duration)	6.0	MO		850.00	-	5,100.00
1.1	Commissioning (Owner Provided?)	1.0	LS		2,000.00	-	2,000.00
1.1	Small Tools (Project Duration)	6.0	MO		200.00	-	1,200.00
1.1	Daily Cleanup (Project Duration)	100.0	HR		25.00	-	2,500.00
1.1	Final Cleanup (End of Project)	9,800.0	SF		0.35	-	3,430.00
1.1	Waste Management (Project Duration)	6.0	MO		300.00	-	1,800.00
1.1	Punch List (Project Closeout)	1.0	LS		4,000.00	-	4,000.00
2.11	Metal studs	500.0	CF	0.41		205.00	-
2.12	Wood - single	2.0	EA	43.00	2.00	86.00	4.00
2.16	V.C.T.	900.0	SF	0.73		657.00	-
2.16	Carpet	6,505.0	SF	0.36		2,341.80	-
2.16	Base cabinets	8.0	LF	31.50		252.00	-
2.16	O.H. cabinets	8.0	EA	22.50		180.00	-
2.17	A.C. tile/suspension	4,544.0	SF	0.61		2,771.84	-
05 40 00	**COLD-FORMED METAL FRAMING**	1.0					
	Int. 6" (16" O.C.)	925.0	SF	1.54	1.28	1,424.50	1,184.00
06 40 23	Interior architectural woodwork	60.0	SF	62.50		3,750.00	-
	Acoustic batt insulation - 3"	4,057.0	SF	0.32	2.17	1,298.24	8,803.69
08 11 00	**Metal doors and frames**	1.0					
08 13 16	Aluminum doors	1.0	EA				
08 13 16.13	Alum-storefront door 3x7	1.0	EA	495.00	1,125.00	495.00	1,125.00
08 14 16	Flush wood doors	1.0					
	S.C. wood flush (oak) (New)	1.0	EA	53.00	201.00	53.00	201.00
08 41 00	**Entrances and storefronts**	1.0					
08 41 13	Alum-framed ent. and storefronts	61.0	SF	6.00	27.50	366.00	1,677.50
08 71 00	**Door hardware**	1.0					
08 71 16	Hardware (passage etc.) (New)	2.0	EA	150.00	515.00	300.00	1,030.00
09 30 00	**Gypsum Board**	1.0				-	-
	GWB 5/8"	925.0	SF	0.97	0.36	897.25	333.00
09 51 23	Acoustical tile ceilings	1.0					
	Sus. acoust. tile 2x2 (w/grid)	7,327.0	SF	0.75	2.35	5,495.25	17,218.45
09 65 00	**Resilient flooring**	1.0					
09 65 13	Rubber base	1,716.0	LF	1.35	1.39	2,316.60	2,385.24
09 65 19	**Resilient tile flooring**	1.0					
09 65 43	Linoleum flooring/sheet vinyl	518.0	SF	1.23	4.07	637.14	2,108.26
09 68 13	**Tile carpeting**	1.0					
09 68 13	Medium grade tile	6,714.0	SF	0.61	4.28	4,095.54	28,735.92
09 91 00	**Painting**	1.0					
09 91 23	Interior painting	1.0					
	GWB (new)	1,860.0	SF	1.22	0.44	2,269.20	818.40
	GWB (Existing)	15,300.0	SF	0.24	0.34	3,672.00	5,202.00
	Doors and frames (3x7, 2 sides)	40.0	EA	76.50	9.45	3,060.00	378.00
	Interior room signage	35.0	EA	18.75	28.00	656.25	980.00
10 26 13	Stainless Steel 2" wing	68.0	LF	5.65	26.00	-	1,768.00
10 44 13.13	F.E cabinet w/MP extinguisher	3.0	EA	197.00	315.00	591.00	945.00
21 10 00	General fire sprinkler system	1.0	LS			-	-
22 05 05	Selective demolition	1.0	LS		275,225.00	-	275,225.00
22 10 00	General plumbing	1.0	LS		110,090.00	-	110,090.00
23 10 00	General HVAC systems	1.0	LS		2,532,070.00	-	2,532,070.00
26 20 00	Power	1.0	LS		605,495.00	-	605,495.00
26 50 00	Lighting	1.0	LS		220,180.00	-	220,180.00

Owner City of Yakima Date **7/11/2023**
Project Law & Justice Center - Full 2nd floor remodel, full building MEP
Cost Estimate (Pre Design) ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
					Subtotals	$ 262,870.61	$4,081,713.71

Owner City of Yakima Date **7/13/23**
Project SAU
Cost Estimate (Pre Design) ALSC Architects PS
Project Delivery Method
Project SF 5,790 sf

Division	Description	Labor	Material/Sub	Percent	$/SF
1	General Requirements	$45,000.00	$25,126.50	11.02%	$12.11
2	Site Work / Demolition	$5,851.68	$28.00	0.70%	$1.02
3	Concrete	$0.00	$0.00	0.00%	$0.00
4	Masonry	$0.00	$0.00	0.00%	$0.00
5	Metals	$3,542.00	$2,944.00	0.77%	$1.12
6	Wood, Plastics, and Composites	$0.00	$0.00	0.00%	$0.00
7	Thermal and Moisture Protection	$700.80	$4,752.30	0.65%	$0.94
8	Openings	$5,214.00	$18,394.00	2.81%	$4.08
9	Finishes	$22,098.24	$38,153.33	7.17%	$10.41
10	Specialties	$1,003.50	$3,225.00	0.50%	$0.73
11	Equipment	$0.00	$0.00	0.00%	$0.00
12	Furnishings	$0.00	$0.00	0.00%	$0.00
13	Special Construction	$0.00	$0.00	0.00%	$0.00
14	Conveying Equipment	$0.00	$0.00	0.00%	$0.00
21	Fire Suppression	$0.00	$31,845.00	3.79%	$5.50
22	Plumbing	$0.00	$127,380.00	15.16%	$22.00
23	HVAC	$0.00	$220,020.00	26.19%	$38.00
25	Integrated Automation	$0.00	$0.00	0.00%	$0.00
26	Electrical	$0.00	$243,180.00	28.94%	$42.00
27	Telecommunications	$0.00	$0.00	0.00%	$0.00
28	Fire & Security	$0.00	$0.00	0.00%	$0.00
	Subtotal	$83,410.22	$715,048.13		$137.90

Summary

Labor Subtotal		$83,410.22	
Labor Mark-up	50%	$41,705.11	
Material/Sub Subtotal		$715,048.13	
Subtotal		$840,163.46	$145.11
Escalation to June 2024	7.00%	$58,811.44	
Overhead & Profit	10%	$89,897.49	
Bonds & Insurance	2.25%	$22,249.63	
Contingency	11%	$111,223.42	
Sales Tax	8.30%	$93,154.67	
	Current Grand Total	**$1,215,500.12**	$209.93

General Notes - Estimate based on certain following assumptions

1. All accoustical ceiling tile will be replaced
2. New doors at new locations and no replacement of existing doors
3. All door hardware to be new or replaced
4. All walls to be repainted and existing flooring to be replaced
5. Does not include asbestos remediation
6. Does not include any site work
7. Assumes existing toilet rooms will remain as they are
8. No exterior window replacement
9. Mechanical/Electrical design based on 2021 IBC and WSEC (adoption anticipated October 29,2023)
10. Roofing replacement not included
11. Furniture, Fixtures, and Equipment (FFE) not included

Electrical Assumptions:
1. Service Equipment will be replaced, all distribution will be replaced
2. Egress lighting battery packs will be provided
3. New lighting and controls will be provided
4. New receptacles and branch panels will be provided
5. New fire alarm branch devices will be provided
6. No modifications will be made to security system, cameras, headend

Mechanical Assumptions:
1. Fire sprinklers added.
2. Full removal and replacement of existing mechanical and plumbing systems.
3. All HVAC equipment in compliance with 2021 WSEC, C403.1.4 (non-fossil fuel based)
4. Electrical service is large enough for new systems, no service upgrade required.
5. Water heater is electric per 2021 WSEC, C404.2.1, exception 1
6. New controls required for all systems and a minimum of two bidders
7. Estimate is based on a split system heat pump with dedicated outside air

Owner City of Yakima
Project SAU
Cost Estimate (Pre Design)

Date **7/13/2023**

ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
1.1	**GENERAL REQUIREMENTS**	1.0	LS	45,000.00	1,000.00	45,000.00	1,000.00
1.1	Project Schedule (Project Duration)	6.0	MO		300.00	-	1,800.00
1.1	Temp Utility Hookup (Project Duration)	1.0	LS		250.00	-	250.00
1.1	Temp Toilet, (?) EA (Project Duration)	6.0	MO		150.00	-	900.00
1.1	Temp Enclosures (Project Specific)	400.0	SF		3.00	-	1,200.00
1.1	Barricades and Barriers (Project Specific)	100.0	LF		3.00	-	300.00
1.1	Temp Fencing (Project Duration)	200.0	LF		4.00	-	800.00
1.1	Gates (Project Duration)	1.0	EA		250.00	-	250.00
1.1	Field Office Rental (Project Duration)	6.0	MO		850.00	-	5,100.00
1.1	Commissioning (Owner Provided?)	1.0	LS		2,000.00	-	2,000.00
1.1	Small Tools (Project Duration)	6.0	MO		200.00	-	1,200.00
1.1	Daily Cleanup (Project Duration)	100.0	HR		25.00	-	2,500.00
1.1	Final Cleanup (End of Project)	5,790.0	SF		0.35	-	2,026.50
1.1	Waste Management (Project Duration)	6.0	MO		300.00	-	1,800.00
1.1	Punch List (Project Closeout)	1.0	LS		4,000.00	-	4,000.00
2.11	Metal studs	1,000.0	CF	0.41		410.00	-
2.12	Wood - single	14.0	EA	43.00	2.00	602.00	28.00
2.16	Carpet	4,544.0	SF	0.36		1,635.84	-
2.16	Base cabinets	8.0	LF	31.50		252.00	-
2.16	O.H. cabinets	8.0	EA	22.50		180.00	-
2.17	A.C. tile/suspension	4,544.0	SF	0.61		2,771.84	-
05 40 00	**COLD-FORMED METAL FRAMING**	1.0					
	Int. 6" (16" O.C.)	2,300.0	SF	1.54	1.28	3,542.00	2,944.00
	Acoustic batt insulation - 3"	2,190.0	SF	0.32	2.17	700.80	4,752.30
08 11 00	**Metal doors and frames**	1.0					
	HM frame single	12.0	EA	56.50	216.00	678.00	2,592.00
08 14 00	**Wood doors**	1.0					
	S.C. wood flush (oak) (New)	12.0	EA	53.00	201.00	636.00	2,412.00
08 71 00	**Door hardware**	1.0					
08 71 16	Hardware (passage etc.) (New)	12.0	EA	150.00	515.00	1,800.00	6,180.00
08 71 16	Hardware (passage etc.) (Replace exist)	14.0	EA	150.00	515.00	2,100.00	7,210.00
09 30 00	**Gypsum Board**	1.0				-	-
	GWB 5/8"	4,600.0	SF	0.97	0.36	4,462.00	1,656.00
09 51 23	Acoustical tile ceilings	1.0					
	Sus. acoust. tile 2x2 (w/grid)	4,544.0	SF	0.75	2.35	3,408.00	10,678.40
09 68 13	**Tile carpeting**	1.0					
09 68 13	Carpet base	1,343.0	LF	1.40	0.97	1,880.20	1,302.71
09 68 13	Medium grade tile	4,544.0	SF	0.61	4.28	2,771.84	19,448.32
09 91 23	Interior painting	1.0					
	GWB (new)	4,600.0	SF	1.22	0.44	5,612.00	2,024.00
	GWB (Existing)	8,230.0	SF	0.24	0.34	1,975.20	2,798.20
	Doors and frames (3x7, 2 sides)	26.0	EA	76.50	9.45	1,989.00	245.70
	Interior room signage	22.0	EA	18.75	28.00	412.50	616.00
10 26 13	Stainless Steel 2" wing	64.0	LF	5.65	26.00	-	1,664.00
10 44 13.13	F.E cabinet w/MP extinguisher	3.0	EA	197.00	315.00	591.00	945.00
21 10 00	General fire sprinkler system	1.0	LS		31,845.00	-	31,845.00
22 05 05	Selective demolition	1.0	LS		28,950.00	-	28,950.00
22 10 00	General plumbing	1.0	LS		98,430.00	-	98,430.00
23 10 00	General HVAC systems	1.0	LS		220,020.00	-	220,020.00
26 20 00	Power	1.0	LS		176,595.00	-	176,595.00
26 50 00	Lighting	1.0	LS		66,585.00	-	66,585.00
					Subtotals	$ 83,410.22	$ 751,525.13

Owner City of Yakima Date **7/13/23**
Project PD Storage Annex
Cost Estimate (Pre Design) ALSC Architects PS
Project Delivery Method
Project SF 13,625 sf

Division	Description	Labor	Material/Sub	Percent	$/SF
1	General Requirements	$35,000.00	$25,518.75	10.99%	$4.44
2	Site Work / Demolition	$18,494.50	$0.00	2.60%	$1.36
3	Concrete	$0.00	$0.00	0.00%	$0.00
4	Masonry	$0.00	$0.00	0.00%	$0.00
5	Metals	$0.00	$0.00	0.00%	$0.00
6	Wood, Plastics, and Composites	$0.00	$0.00	0.00%	$0.00
7	Thermal and Moisture Protection	$24,244.75	$50,168.75	10.48%	$5.46
8	Openings	$0.00	$0.00	0.00%	$0.00
9	Finishes	$0.00	$0.00	0.00%	$0.00
10	Specialties	$0.00	$0.00	0.00%	$0.00
11	Equipment	$0.00	$0.00	0.00%	$0.00
12	Furnishings	$0.00	$0.00	0.00%	$0.00
13	Special Construction	$0.00	$0.00	0.00%	$0.00
14	Conveying Equipment	$0.00	$0.00	0.00%	$0.00
21	Fire Suppression	$0.00	$74,938.00	10.55%	$5.50
22	Plumbing	$0.00	$34,063.00	4.80%	$2.50
23	HVAC	$0.00	$313,375.00	44.13%	$23.00
25	Integrated Automation	$0.00	$0.00	0.00%	$0.00
26	Electrical	$0.00	$95,375.00	13.43%	$7.00
27	Telecommunications/AV	$0.00	$0.00	0.00%	$0.00
28	Fire & Security	$0.00	$0.00	0.00%	$0.00
	Subtotal	$77,739.25	$593,438.50		$49.26

Summary

Labor Subtotal		$77,739.25	
Labor Mark-up	50%	$38,869.63	
Material/Sub Subtotal		$593,438.50	
Subtotal		$710,047.38	$52.11
Escalation to June 2024	7.00%	$49,703.32	
Overhead & Profit	10%	$75,975.07	
Bonds & Insurance	2.25%	$18,803.83	
Contingency	11%	$93,998.25	
Sales Tax	8.30%	$78,727.81	
	Current Grand Total	**$1,027,255.66**	$75.39

General Notes - Estimate based on certain following assumptions
1. Architectural scope includes only roofing replacement
2. Hazardous Material Remediation not included

Electrical Assumptions:
1. No Architectural work planned for this building, so no distribution equipment changes or major branch device changes are expected
2. Egress lighting battery packs will be provided
3. Fire alarm devices will be provided

Mechanical Assumptions:
1. Fire sprinklers added.
2. Full removal and replacement of existing mechanical and plumbing systems.
3. All HVAC equipemnt in compliance with 2021 WSEC, C403.1.4 (non-fossil fuel based)
4. Electrical service is large enough for new systems, no service upgrade required.
5. Water heater is heat pump based per 2021 WSEC, C404.2.1
6. Estimate based on replacement in kind for the unit heaters in the warehouse area and a packaged rooftop heat pump unit over the file storage area
7. New controls required for all systems and a minimum of two bidders.

Owner City of Yakima
Project PD Storage Annex
Cost Estimate (Pre Design)

Date **7/13/2023**

ALSC Architects PS

SubDiv	Description	Quantity	Unit	LaborUP	MatlSubUP	LaborExt	MatlSubExt
1.1	**GENERAL REQUIREMENTS**	1.0	LS	35,000.00	2,000.00	35,000.00	2,000.00
1.1	Project Schedule (Project Duration)	4.0	MO		300.00	-	1,200.00
1.1	Temp Utility Hookup (Project Duration)	1.0	LS		250.00	-	250.00
1.1	Temp Toilet, (?) EA (Project Duration)	4.0	MO		150.00	-	600.00
1.1	Temp Enclosures (Project Specific)	400.0	SF		3.00	-	1,200.00
1.1	Barricades and Barriers (Project Specific)	100.0	LF		3.00	-	300.00
1.1	Temp Fencing (Project Duration)	200.0	LF		4.00	-	800.00
1.1	Gates (Project Duration)	1.0	EA		250.00	-	250.00
1.1	Field Office Rental (Project Duration)	4.0	MO		850.00	-	3,400.00
1.1	Commissioning (Owner Provided?)	1.0	LS		2,000.00	-	2,000.00
1.1	Small Tools (Project Duration)	4.0	MO		200.00	-	800.00
1.1	Daily Cleanup (Project Duration)	50.0	HR		25.00	-	1,250.00
1.1	Final Cleanup (End of Project)	13,625.0	SF		0.35	-	4,768.75
1.1	Waste Management (Project Duration)	9.0	MO		300.00	-	2,700.00
1.1	Punch List (Project Closeout)	1.0	LS		4,000.00	-	4,000.00
2.1	**DEMOLITION - SELECTIVE**	1.0		.			
2.15	Single-ply	13,625.0	SF	1.28		17,440.00	-
2.15	Coping removal	450.0	LF	0.64		288.00	
2.16	V.C.T.	1,050.0	SF	0.73		766.50	-
07 21 00	**Thermal insulation**	1.0					
07 21 13.19	Rigid (Poly Iso/Pheno)	1.0					
	R-29, 4"	13,625.0	SF	0.62	2.66	8,447.50	36,242.50
	Tapered insul. crickets	1,000.0	SF	0.63	3.60	630.00	3,600.00
07 54 23	TPO roofing	1.0					
	TPO 60 mil mech. Fastened	13,625.0	SF	0.99	0.53	13,488.75	7,221.25
07 71 13	Manufact. copings	450.0	LF	3.73	6.90	1,678.50	3,105.00
21 10 00	General fire sprinkler system	1.0	LS		74,938.00	-	74,938.00
22 05 05	Selective demolition	1.0	LS		34,063.00	-	34,063.00
22 10 00	General plumbing	1.0	LS			-	-
23 10 00	General HVAC systems	1.0	LS		313,375.00	-	313,375.00
26 20 00	Power	1.0	LS		40,875.00	-	40,875.00
26 50 00	Lighting	1.0	LS		54,500.00	-	54,500.00
					Subtotals	$ 77,739.25	$ 607,744.75

	QTY	PER	UNIT COST	TOTAL
FULL STREET VACATE				
SITE				
PLAZA SPACE (CONCRETE)	4500	SF	15	67500
ASPHALT PAVING	42000	SF	6	252000
GREEN/OPEN SPACE	14000	SF	9	126000
			SEMI	445500
STREET				
PLAZA SPACE (CONCRETE)	17000	SF	15	255000
ASPHALT PAVING	760	SF	6	4560
GREEN/OPEN SPACE	16000	SF	9	144000
			SEMI	403560
GRADING & DRAINAGE	1	LS	80000	80000
SITE FURNISHING ALLOWANCE	1	LS	75000	75000
BIKE, TRASH, BENCHES, DINING				
TREES	55	EA	500	27500
20x30 COVERED STAGE PAVILION	1	LS	150000	150000
ILLUMINATION	1	LS	130000	130000
BUS SHELTER	1	LS	5000	5000
			SUB TOTAL	**2,165,620**
DESIGN/ SOFT COST (25%)				**541,405**
CONTINGENCY (20%)				**433,124**
TAXES (8%)				**173,250**
HARD COST/CONSTR. (8%)				**173,250**
			TOTAL	**3,486,648**
			site	**13%**
			street	**12%**

	QTY	PER	UNIT COST	TOTAL
HALF STREET VACATE (turnaround)				
SITE				
PLAZA SPACE (CONCRETE)	3500	SF	15	52500
ASPHALT PAVING	42000	SF	6	252000
GREEN/OPEN SPACE	11000	SF	9	99000
			SEMI	403500
STREET				
PLAZA SPACE (CONCRETE)	23000	SF	15	345000
ASPHALT PAVING	5000	SF	6	30000
GREEN/OPEN SPACE	5500	SF	9	49500
			SEMI	424500
GRADING & DRAINAGE	1	LS	70000	70000
SITE FURNISHING ALLOWANCE	1	LS	68000	68000
BIKE, TRASH, BENCHES, DINING				
TREES	50	EA	500	25000
20x30 STAGE	1	LS	20000	20000
ILLUMINATION	1	LS	120000	120000
BUS SHELTER	1	LS	5000	5000
			TOTAL	**1,964,000**
DESIGN/ SOFT COST (25%)				**491,000**
CONTINGENCY (20%)				**392,800**
TAXES (8%)				**157,120**
HARD COST/CONSTR. (8%)				**157,120**
			TOTAL	**3,162,040**

*Preferred Option

	QTY	PER	UNIT COST	TOTAL
CURVED STREET				
SITE				
PLAZA SPACE (CONCRETE)	3000	SF	15	45000
ASPHALT PAVING	34000	SF	6	204000
GREEN/OPEN SPACE	22000	SF	9	198000
			SEMI	447000
STREET				
PLAZA SPACE (CONCRETE)	16000	SF	15	240000
ASPHALT PAVING	19500	SF	6	117000
GREEN/OPEN SPACE	3000	SF	9	27000
			SEMI	384000
GRADING & DRAINAGE	1	LS	70000	70000
SITE FURNISHING ALLOWANCE	1	LS	68000	68000
BIKE, TRASH, BENCHES, DINING				
TREES	40	EA	500	20000
PAVILION/COVERED STAGE	1	LS	300000	300000
ILLUMINATION	1	LS	150000	150000
BUS SHELTER	1	LS	50000	50000
			TOTAL	**2,320,000**
DESIGN/ SOFT COST (25%)				**580,000**
CONTINGENCY (20%)				**464,000**
TAXES (8%)				**185,600**
HARD COST/CONSTR. (8%)				**185,600**
			TOTAL	**3,735,200**
			site	**12%**
			street	**10%**

RANGE: 3.2 - 3.7 million

NOTES

NEED MORE ALLOWANCE FOR SITE FURNISHINGS WITH LARGER PLAZA SPACES

SITE FURNISHING: ASSUME 2 BIKE RACKS (2K), 4 TRASH (6K), 15 BENCHES (30K), 10 DINING (30K),

GREEN/OPEN SPACE COULD BE ANYTHING FROM A PLAIN AREA OF TURF TO A FULLY-PLANTED ISLAND WITH DECORATIVE MULCH, SO AN AVERAGE WAS USED.

CONSIDERED THE CARRYING CAPACITY OF THE AREA - HOW MANY PEOPLE WILL THE SPACE SERVE AT MAX USE??

RECOMMENDATION:

INCREASE GREEN SPACE TO ENHANCE USER EXPERIENCE, REDUCE HEAT ISLAND EFFECT, AND REDUCE UP FRONT COST.

ASPHALT AND GRASS ARE THE MOST COST EFFECTIVE PER SF CONPARED TO CONCRETE PLAZA.

CONSIDER LONG-TERM MAINTENANCE AND PLAN AHEAD FOR MAINTENANCE (ESPECIALLY GREEN SPACE)

City of Yakima
Space Study

ALSC ARCHITECTS

Guiding Principles

SERVICE FIRST — Efficient, friendly, interpersonal treatment

APPROACHABLE — Serve unique population needs of all citizens

CATALYST — Stimulate redevelopment, public use in Second Street vicinity

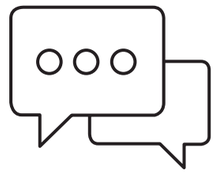
MAXIMIZE EXISTING ASSETS — Creative, effective re-use of existing spaces

EMBRACE DEI — Serve Staff needs of diversity, equity, inclusion

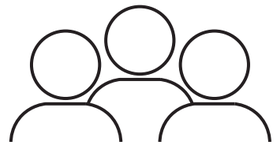
Process

1. Questionnaire

2. Interviews

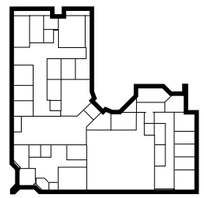


3. Facility Tours

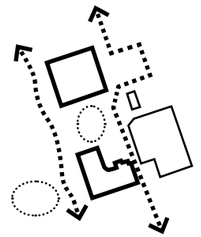


4. Adjacency Diagrams

5. Building Plans



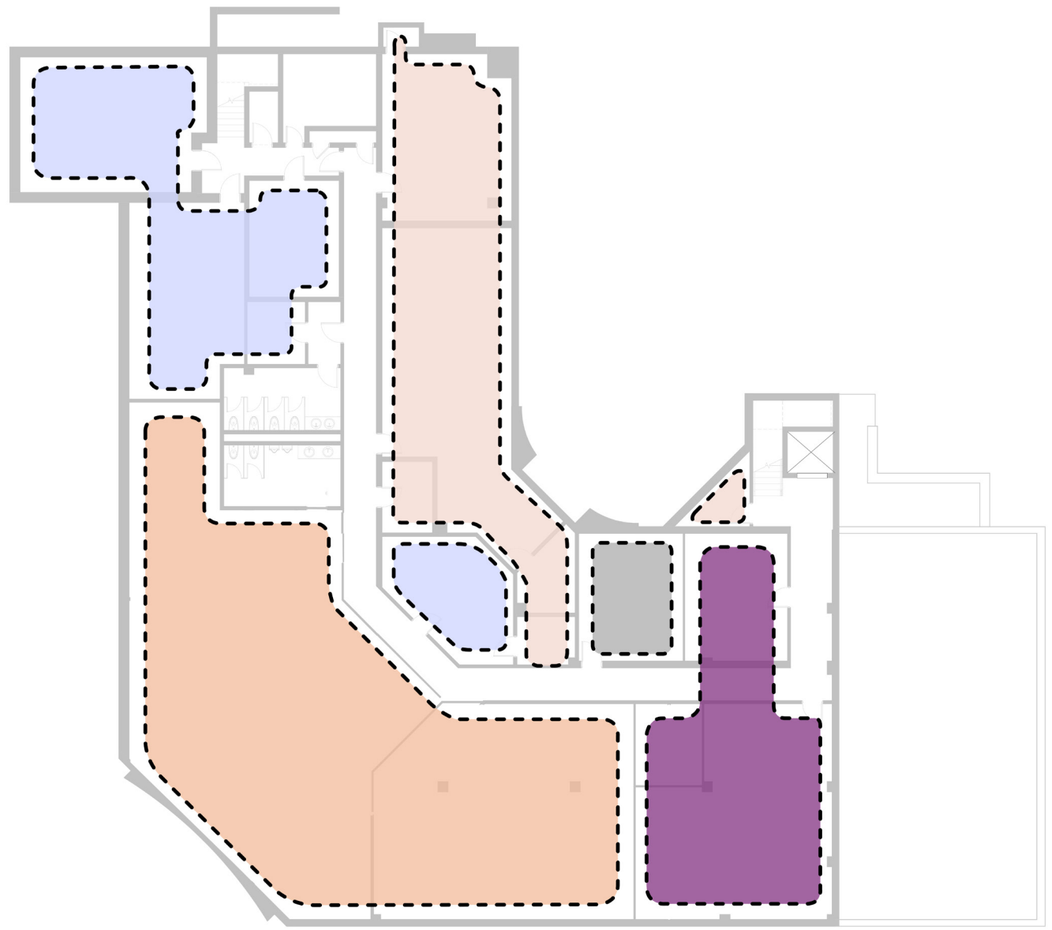
6. Masterplan



City Hall *(Former Bank of America)* - Basement

Existing

New



YPD

Communications

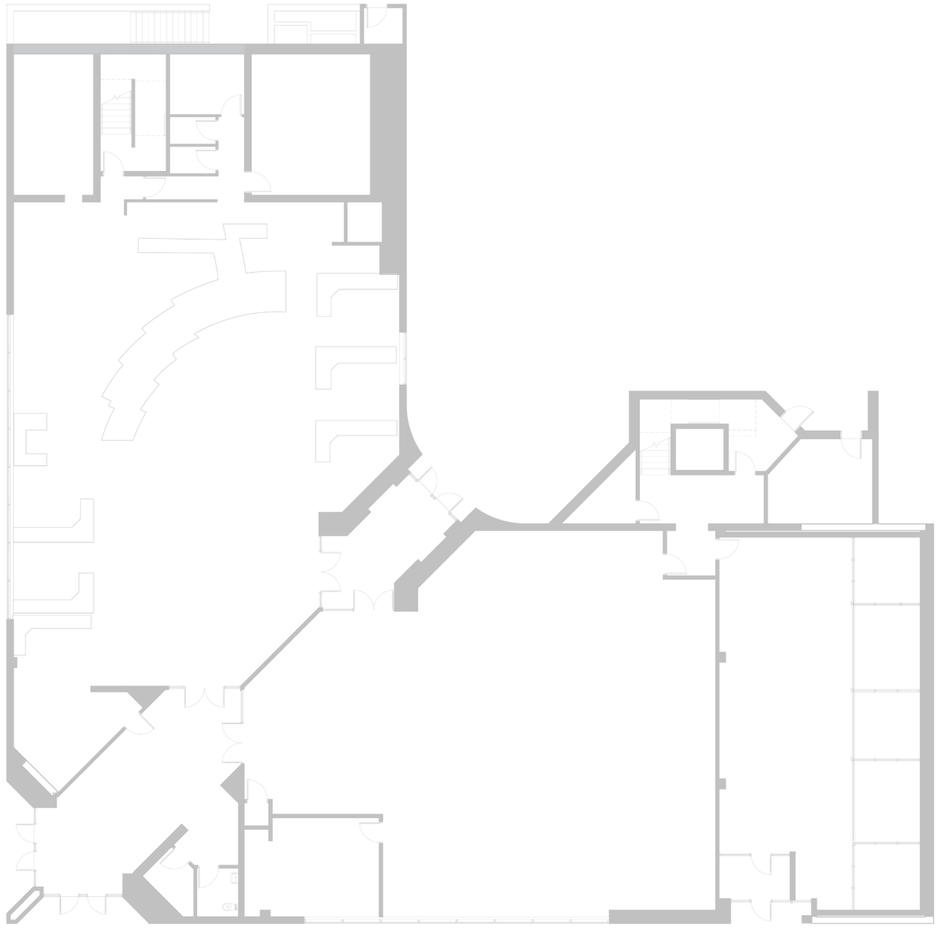
Mech / Elec

Unassigned

Support

City Hall *(Former Bank of America)* - Level 1

Existing



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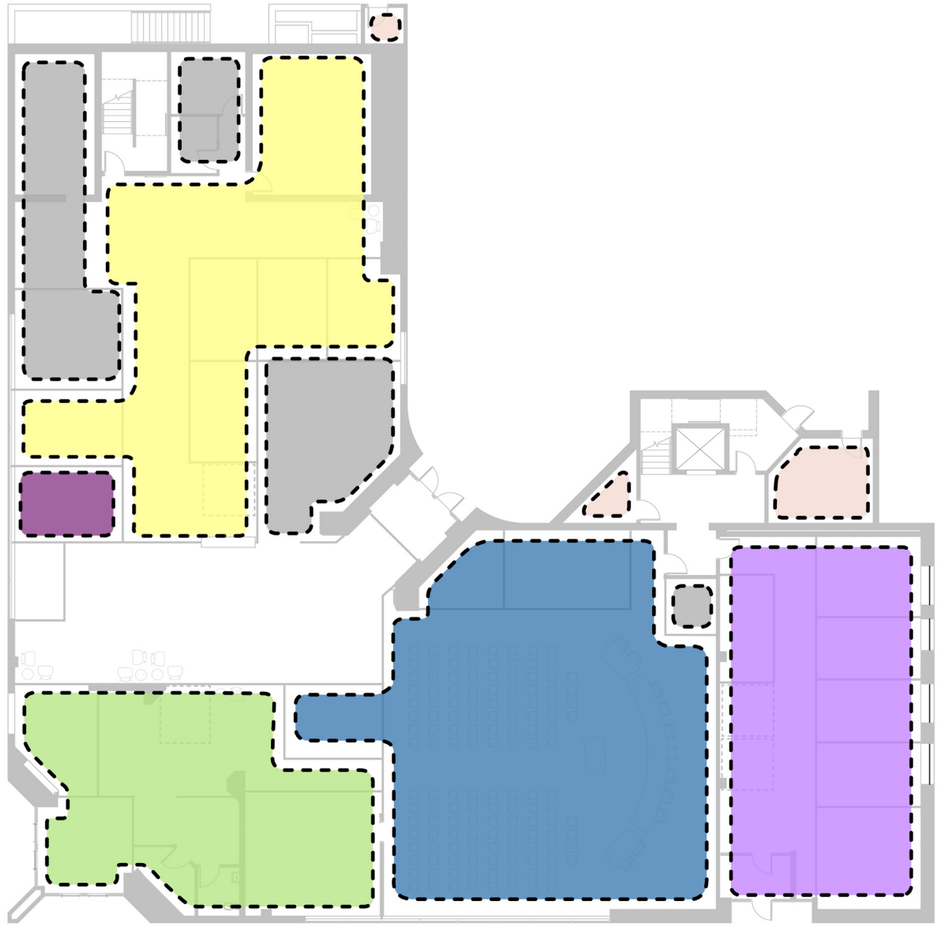


City Clerks

City Manager

Communications

City Council

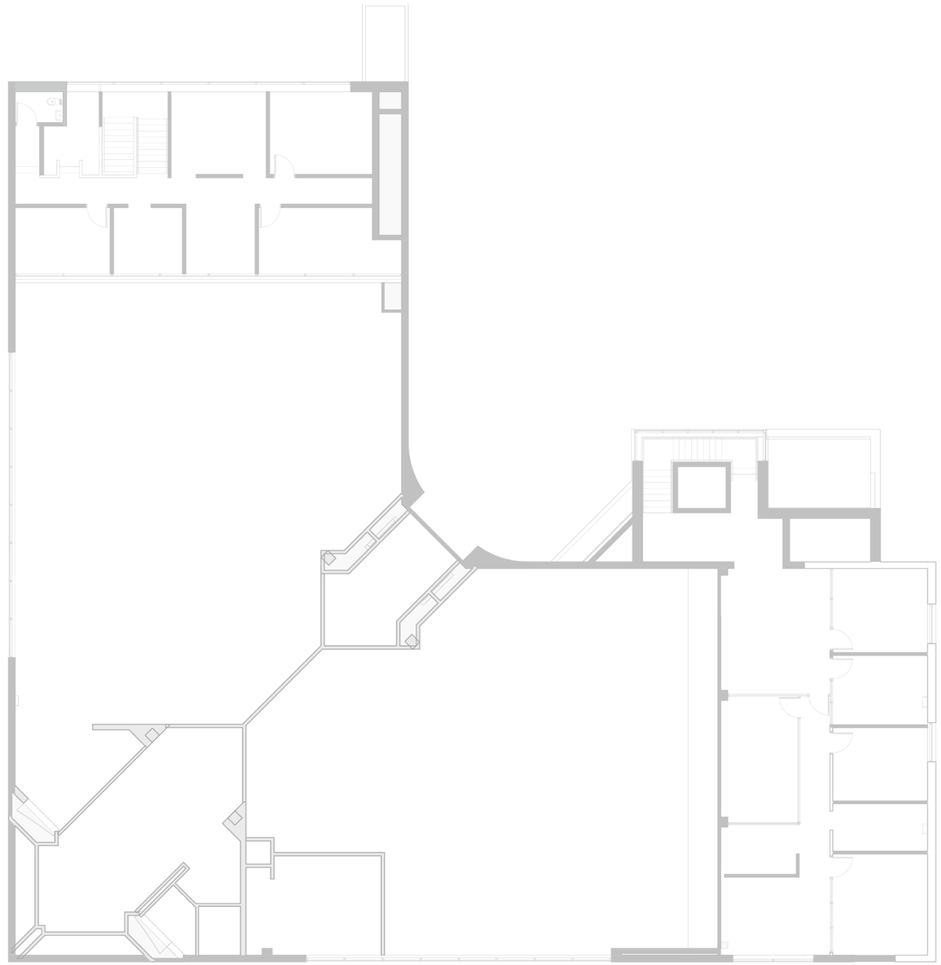
Capitol Theater

Mech / Elec

Support

City Hall *(Former Bank of America)* - Mezzanine

Existing



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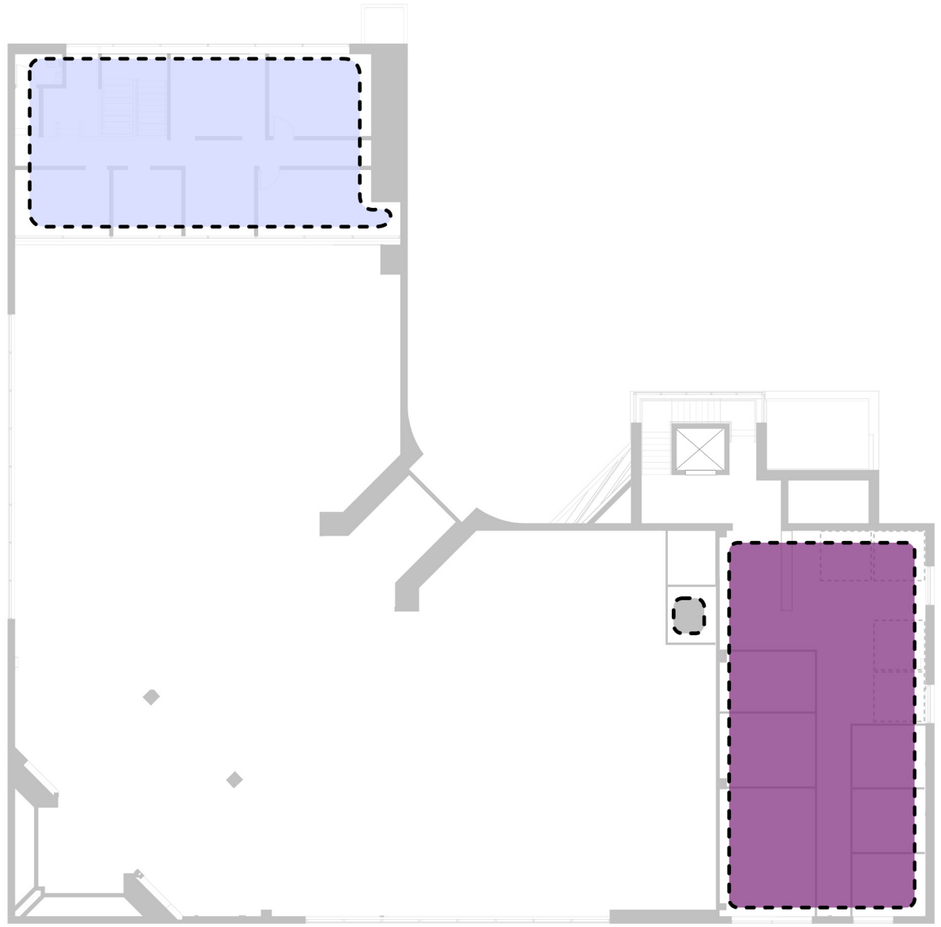


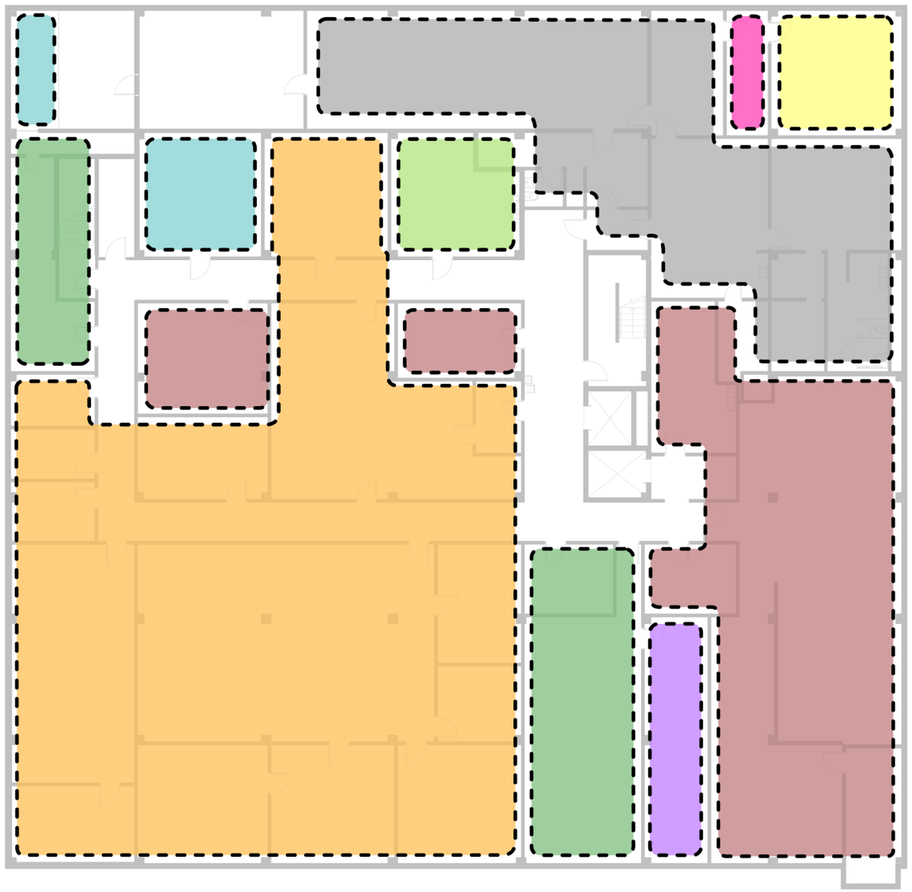
Communications

Unassigned

Support

City Hall Annex *(Former City Hall)* - Basement

Existing



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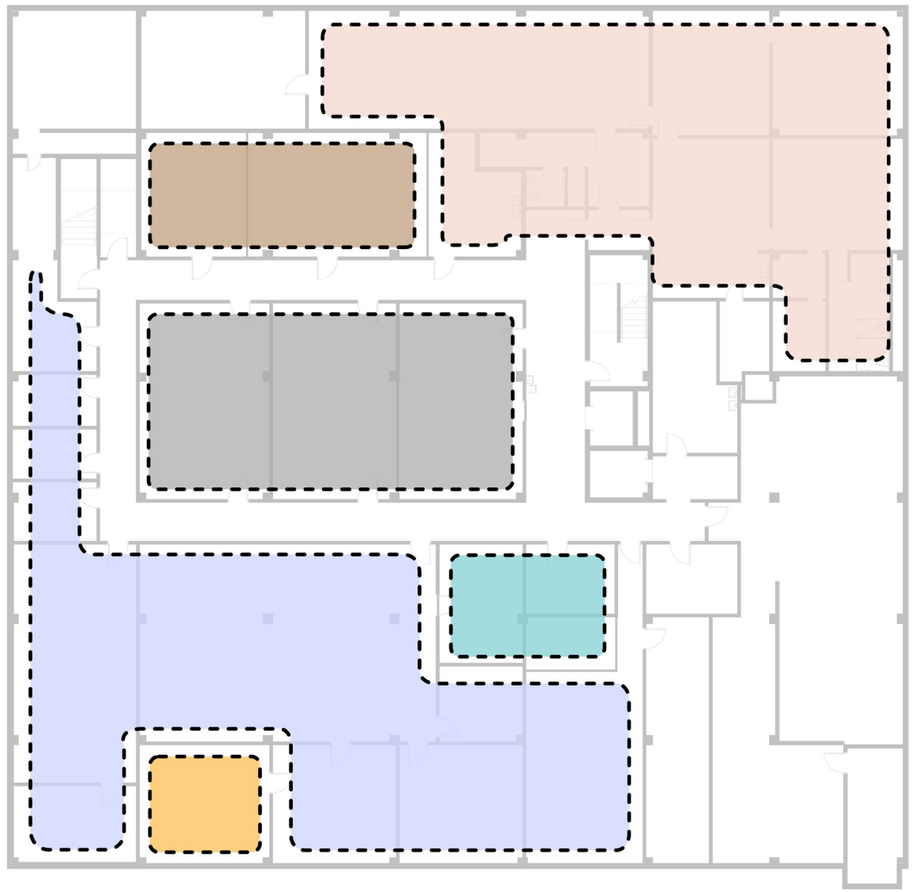
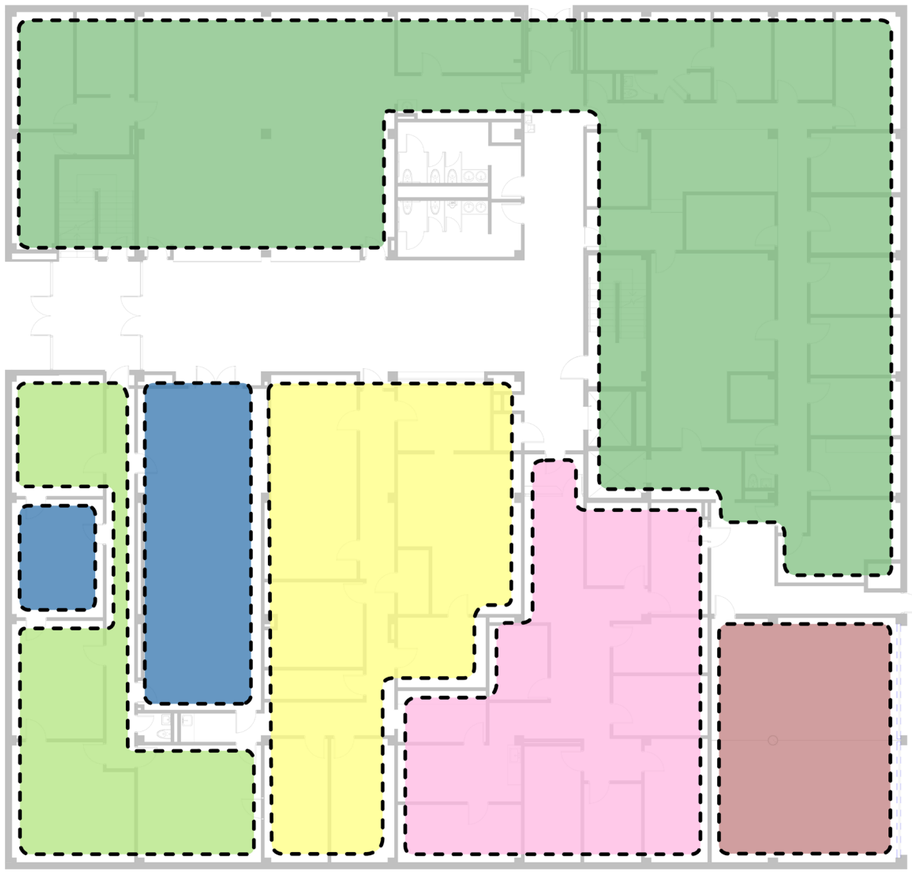


- Codes
- Economic Dev
- City Clerks
- Finance
- IT
- Engineering
- City Manager
- Capitol Theater
- Facilities
- Unassigned
- Mech / Elec
- Support

City Hall Annex *(Former City Hall)* - Level 1

Existing



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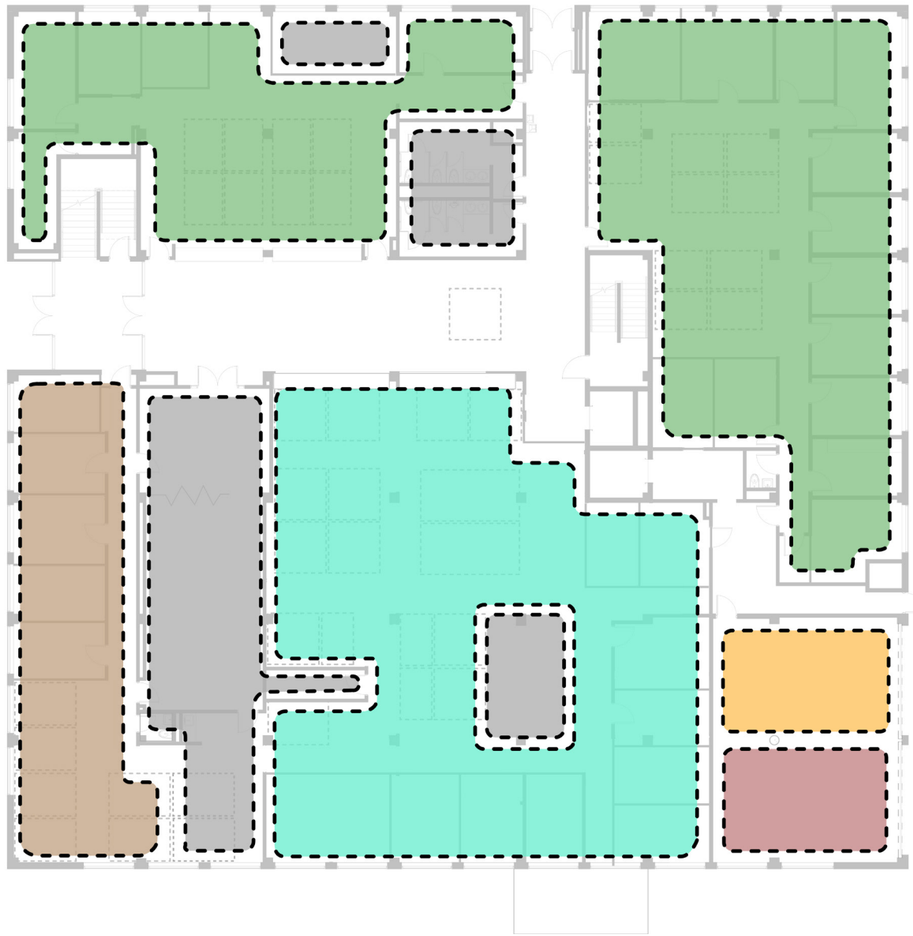


Finance

City Council

HR

Community Dev

IT

City Manager

City Clerks

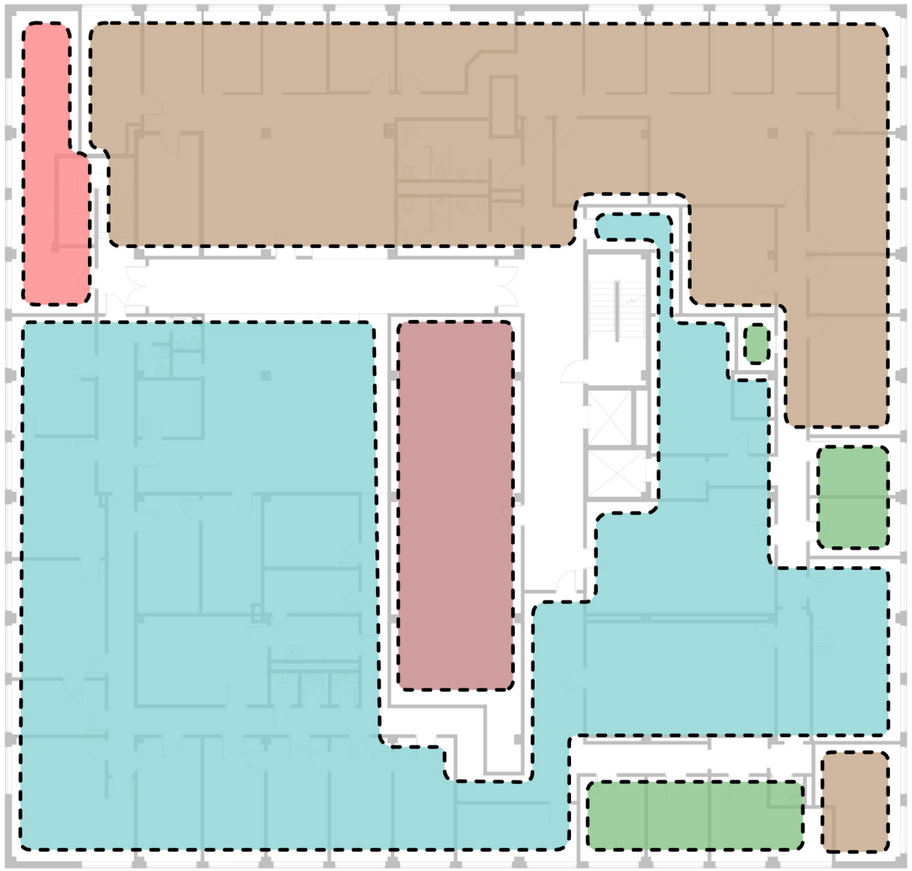
Facilities

Engineering

Support

City Hall Annex *(Former City Hall)* - Level 2

Existing



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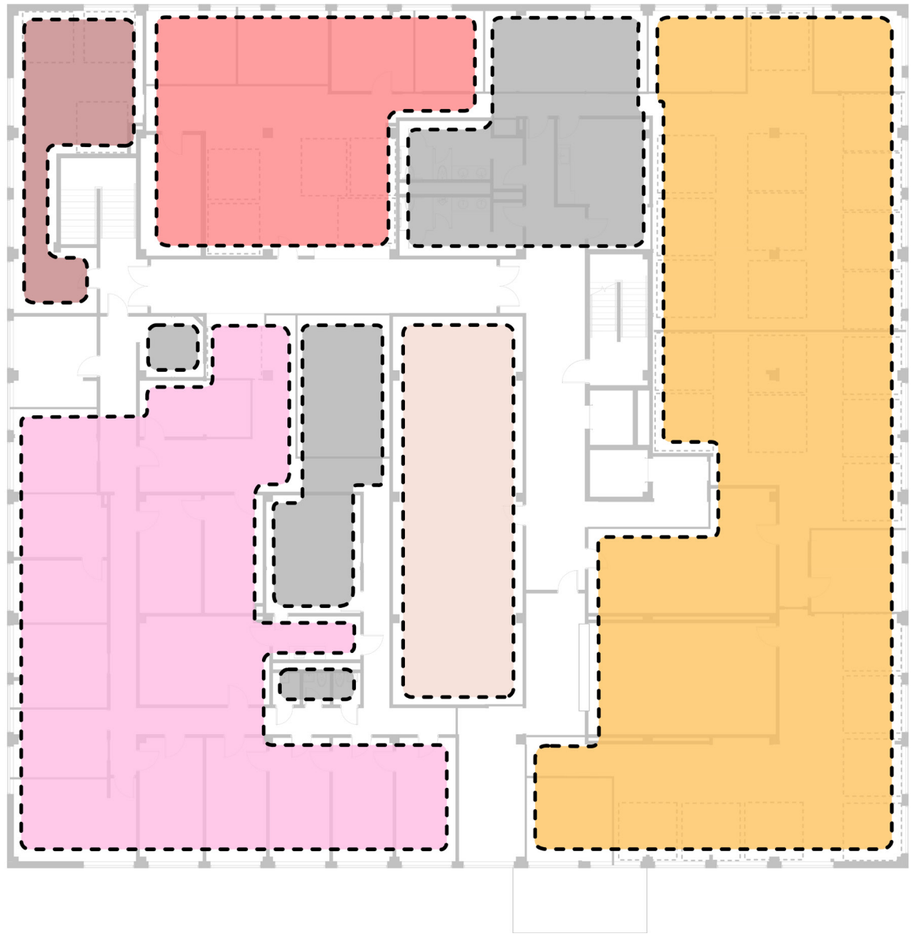


ONDS

Codes

Facilities

IT

Engineering

Finance

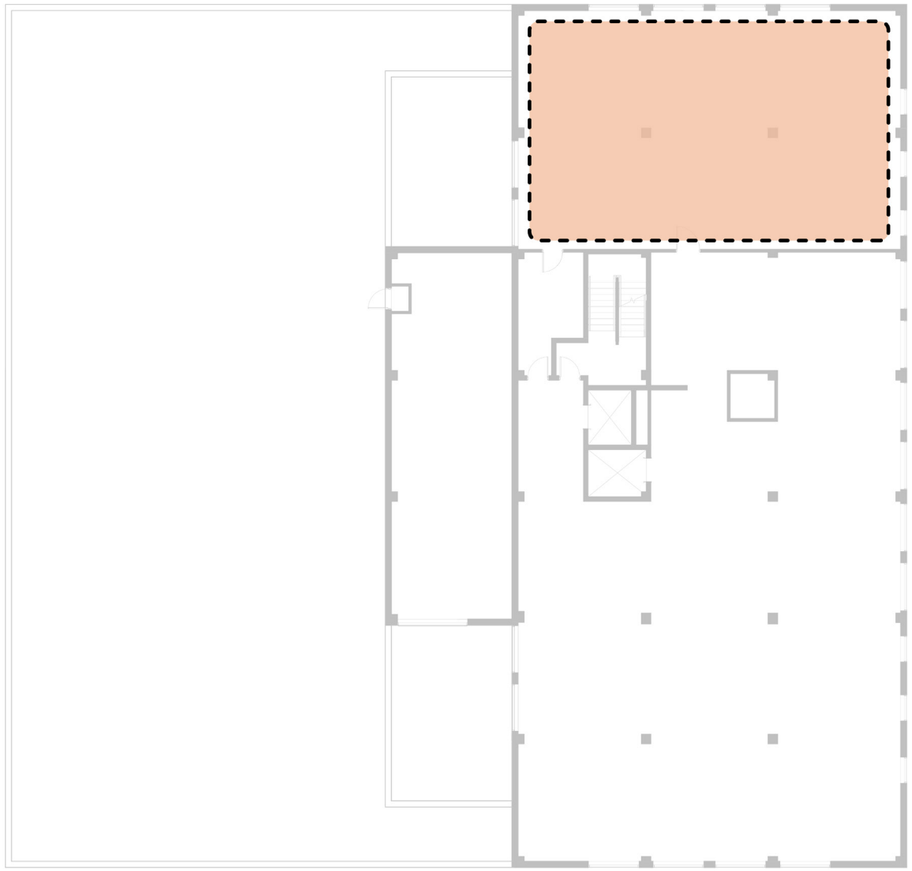
HR

Mech / Elec

Support

City Hall Annex *(Former City Hall)* - Level 3

Existing



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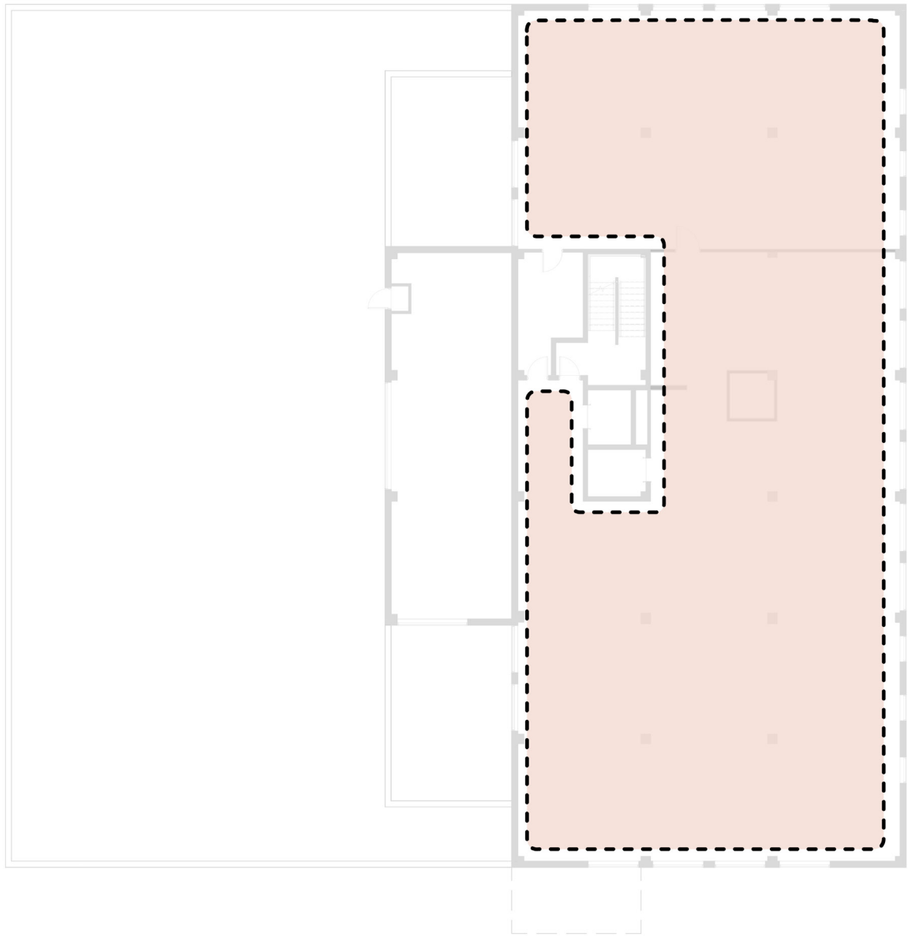
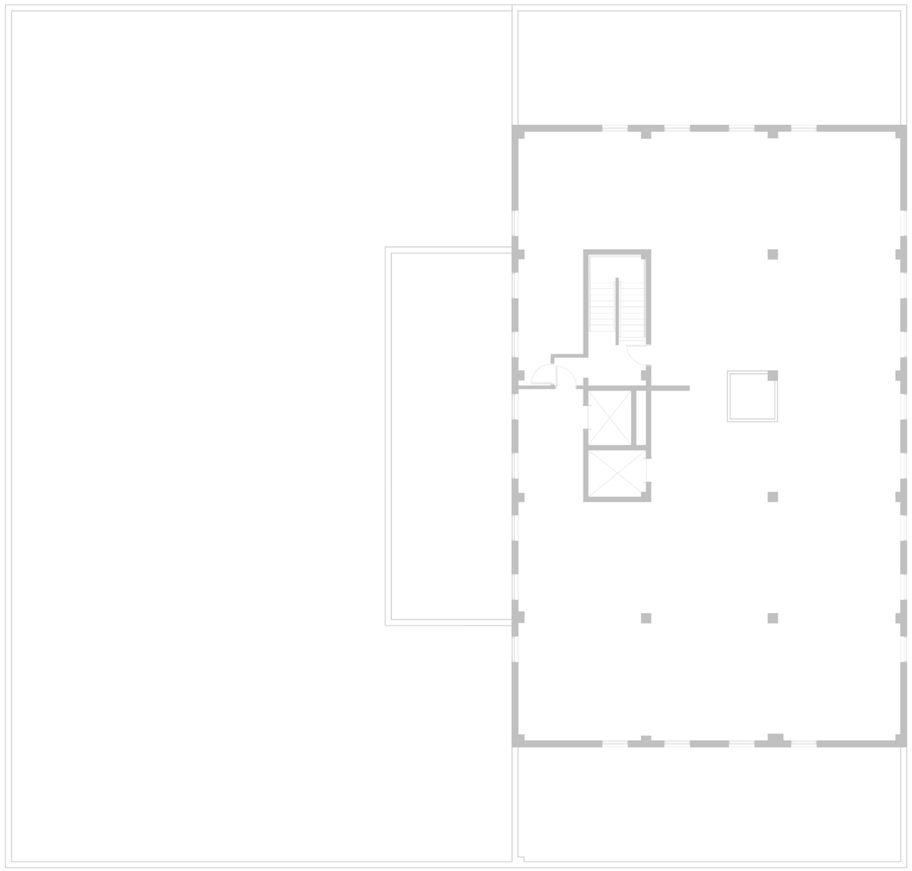


YPD (Storage)

Mech / Elec

City Hall Annex *(Former City Hall)* - Level 4

Existing



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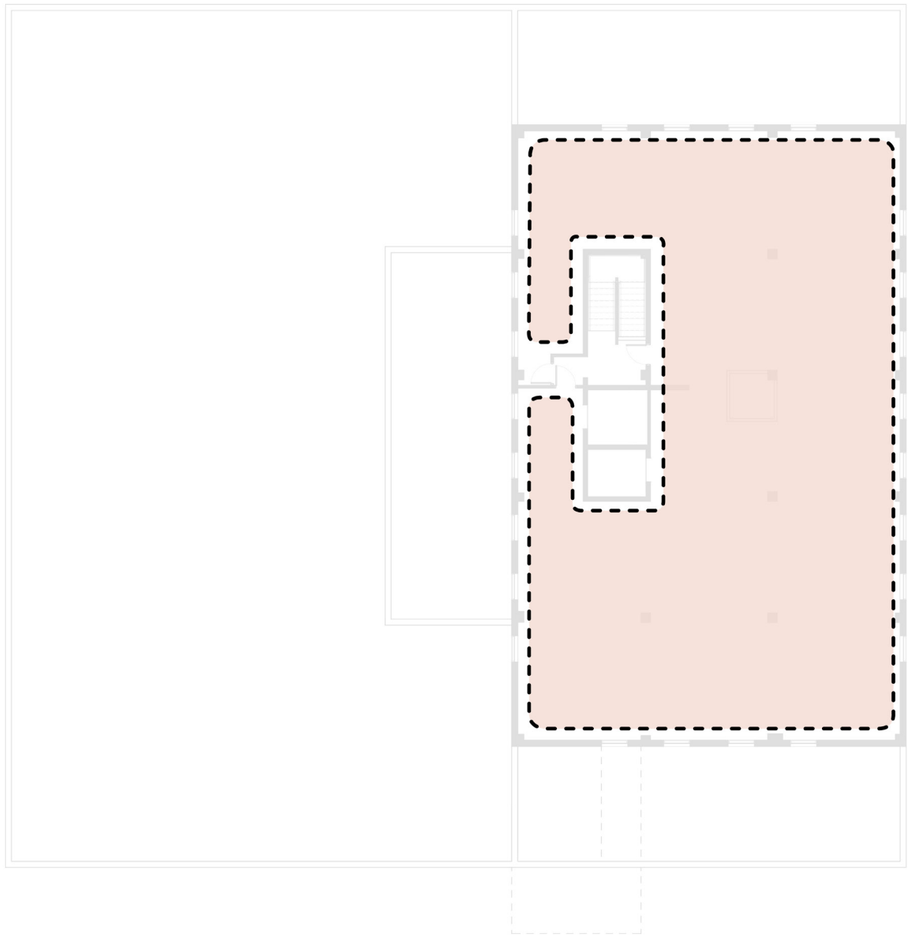
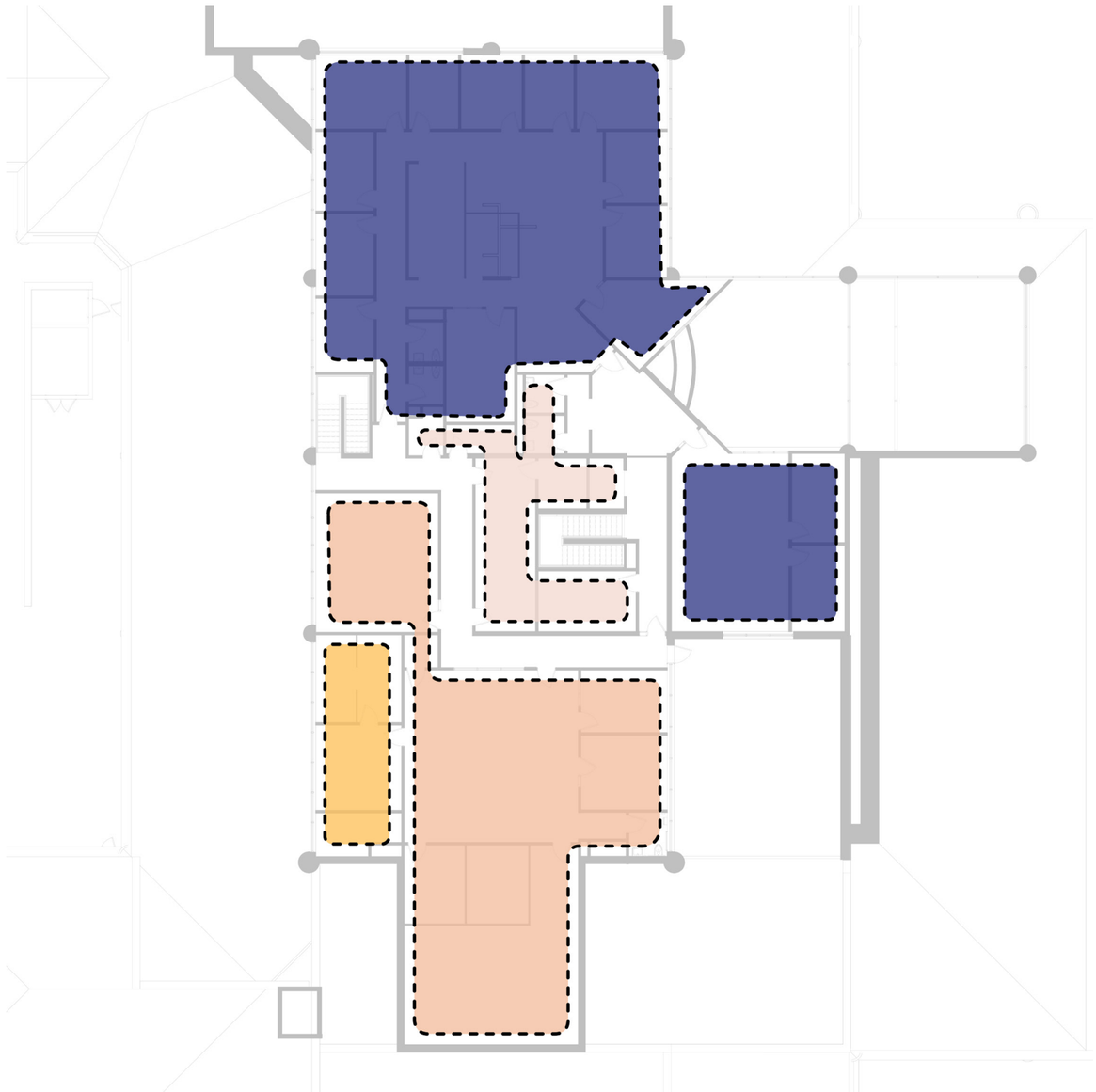


Mech / Elec

Richard A. Zais Jr. Center for Law and Justice - Level 2

Existing



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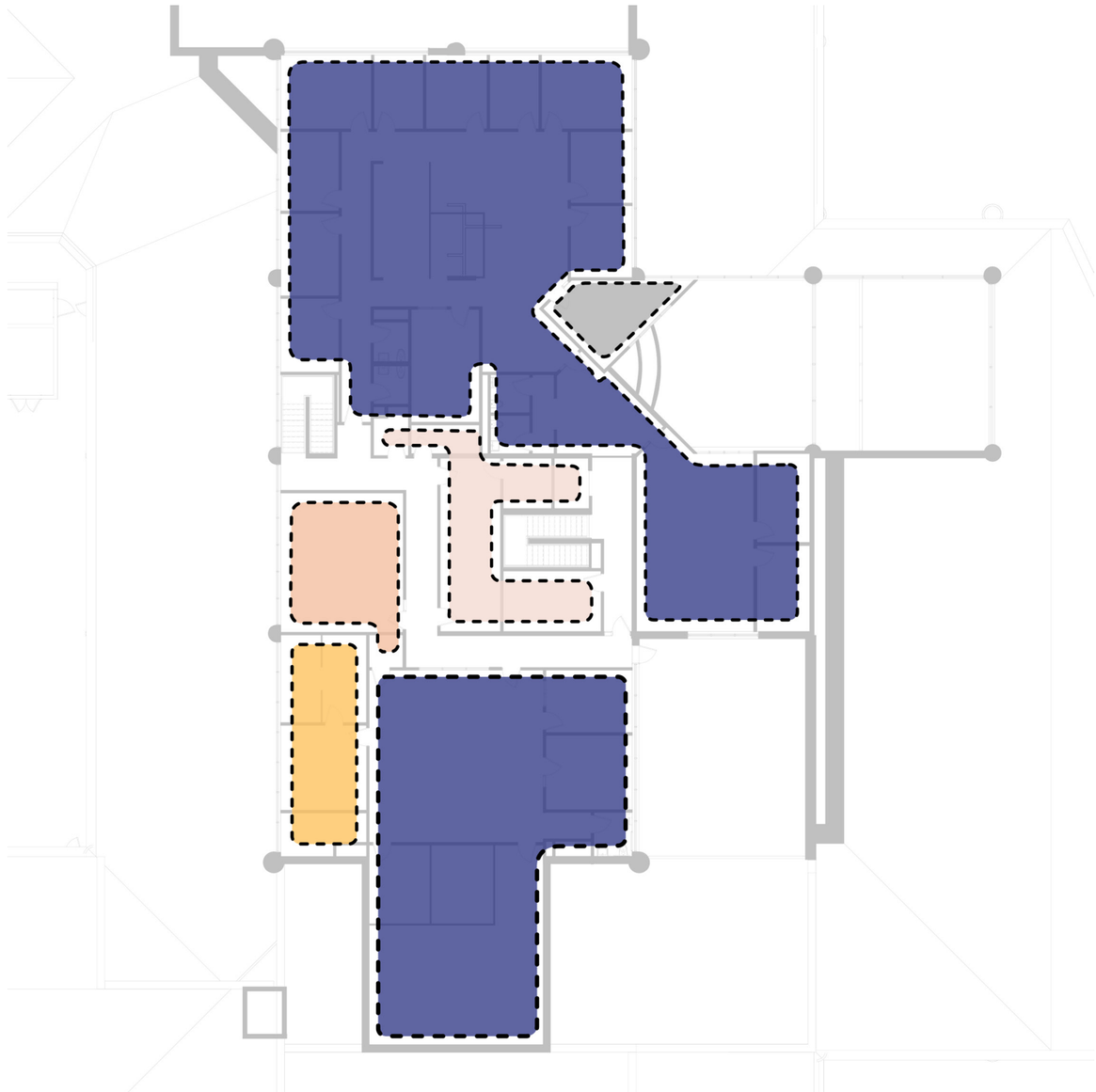


Legal

YPD

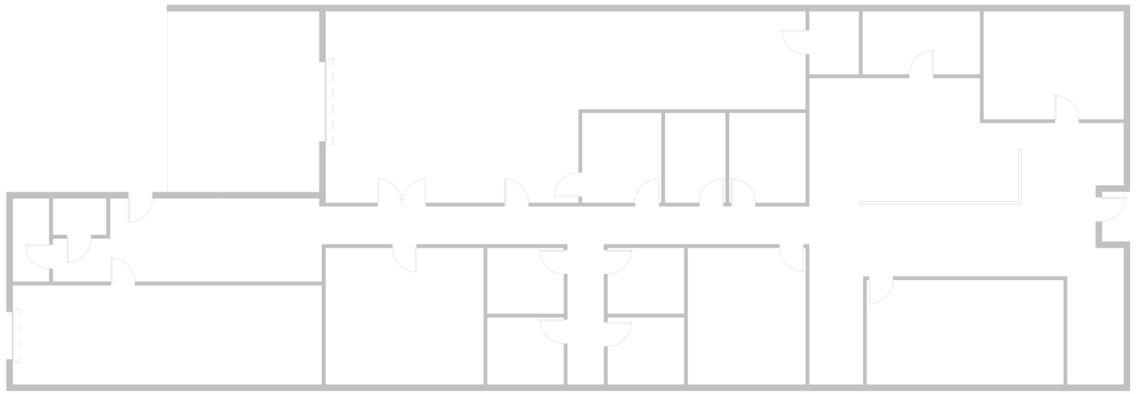
IT

Mech / Elec

Support

SAU - *(Former Y-PAC)* Level 1

Existing



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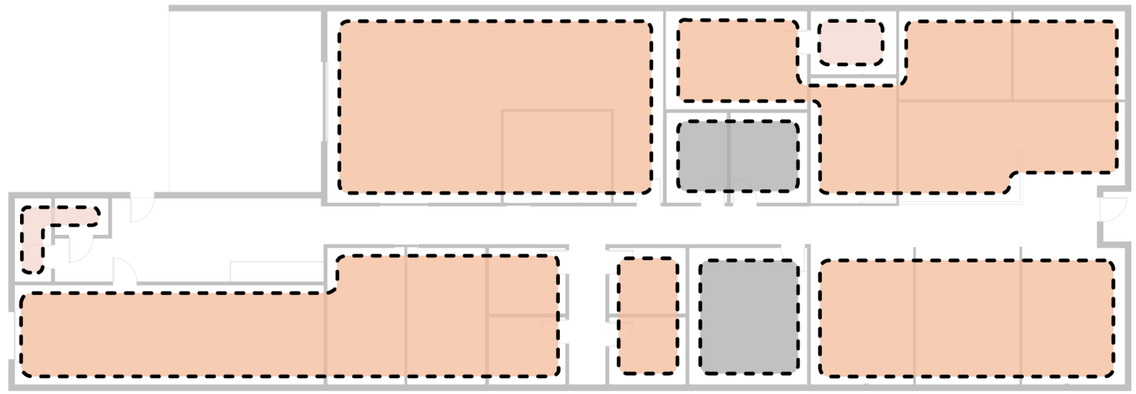
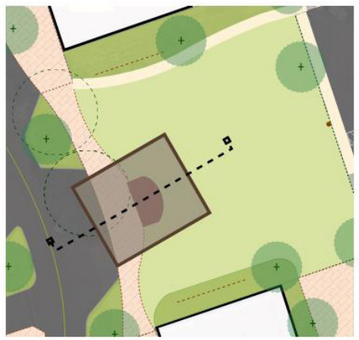


YPD

Mech / Elec

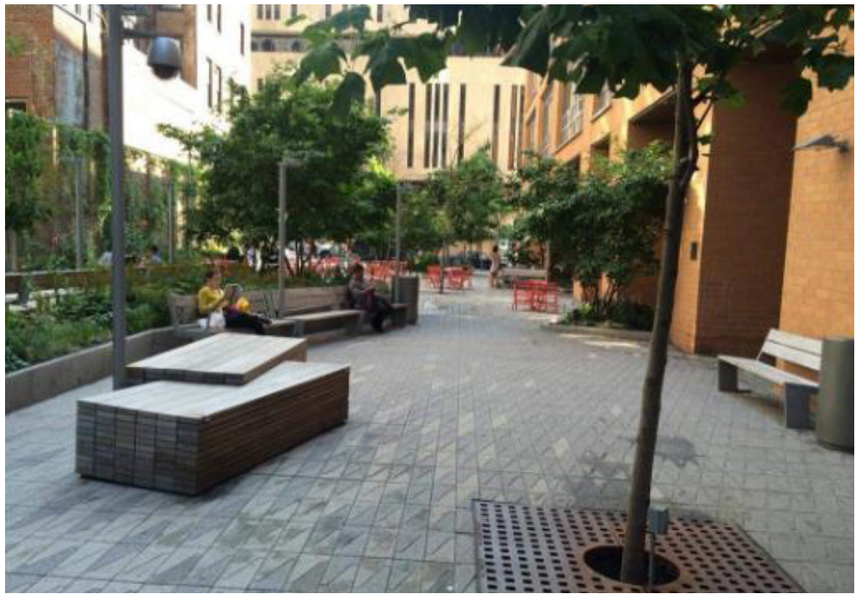
Support

Site Plan + Examples



Art Wall

Pedestrian Street



Civic Art

Exterior Renderings - City Hall

Interior Renderings - City Hall Lobby

Interior Renderings - City Hall Council Chambers

Schedule

Phase 1 Schedule

Remodel City Hall
Former Bank of America

DESIGN - 8 MONTHS ● ● ● ***PERMIT*** ***CONSTRUCTION - 9 MONTHS***

Capitol Theatre Move ✱
YPD Training Room Move ✱
Vacate YPAC Building ✱

Phase 2 Schedule

Remodel City Hall Annex
Former City Hall

DESIGN - 9 MONTHS ● ● ● ***PERMIT*** ***CONSTRUCTION - 12 MONTHS***

Vacate ONDS Building ✱

2nd Avenue Revisions
City Hall Site Renovation

DESIGN - 6 MONTHS ● ● ***PERMIT*** ***CONSTRUCTION - 7 MONTHS***

Remodel SAU
Former YPAC

DESIGN - 4 MONTHS ● ***PERMIT*** ***CONSTRUCTION - 6 MONTHS***

Vacate Police Special Services Building ✱

Phase 3 Schedule

Remodel Legal Center

DESIGN - 4 MONTHS ● ***PERMIT*** ***CONSTRUCTION - 6 MONTHS***

Move Back-Up Dispatch ✱

● *Owner Review/Estimate* ✱ *Move*

Cost Estimate

The following cost estimates are based on "ideal" layouts as shown in the diagrams in the Conceptual Design section and include all new finishes in occupied spaces unless noted otherwise in the detailed estimate.

City Hall *(Former Bank of America)*
$6,949,161

City Hall Annex *(Former City Hall)*
$12,456,338

City Hall/City Hall Annex
Site Work $3,735,200

SAU *(Former Y-PAC)*
$1,215,500

Law and Justice Center
2nd Floor Full Remodel $957,683
2nd Floor Partial Remodel $431,335

Police Department Storage Annex
$1,027,256

BUSINESS OF THE CITY COUNCIL
YAKIMA, WASHINGTON
AGENDA STATEMENT

Item No. 5.
For Meeting of: February 27, 2024

ITEM TITLE: Update on 40th Ave & Chestnut Traffic Analysis

SUBMITTED BY: Scott Schafer, Director of Public Works
*Bill Preston, City Engineer

SUMMARY EXPLANATION:

City Council was presented with an analysis of the subject intersection in October of 2023. As a result of the report and subsequent deliberations, Council directed that staff further explore the possibility of additional traffic controls at the location to enhance bike/ped awareness, and improve overall operation, including the possible installation of a High Intensity Activated Crosswalk (HAWK).

In following up on Council's direction, the City subsequently entered into an agreement with Transportation Engineering Northwest LLC (TENW) to provide a more detailed Traffic Analysis for the intersection.

Enclosed for City Council review is the TENW Analysis, a scope of work and cost estimate for a HAWK system, as well as alternative low-cost enhancements that would bring increased awareness to the crossing. Staff will discuss advantages and disadvantages of the various options discussed in the report.

ITEM BUDGETED: NA

STRATEGIC PRIORITY: Public Trust and Accountability

APPROVED FOR SUBMITTAL BY THE CITY MANAGER

RECOMMENDATION:

Council to receive and discuss the study findings, HAWK, and other incremental options presented by staff and provide direction to staff on a preferred path forward. Staff is recommending an incremental, low cost, approach to enhancing bike/ped awareness at the intersection.

ATTACHMENTS:

Description	Upload Date	Type

Backup material	2/16/2024	Backup Material
TENW analysis	2/16/2024	Backup Material

40th Avenue and Chestnut Avenue Intersection Response for City Council Request for Enhancements February 16, 2024

Background

Since the intersection improvements were installed in 2017, the city had continued to receive complaints about this intersection. As a result, in September of 2022, the city requested proposals from firms to perform a traffic study. This study evaluated vehicle and pedestrian/bicycle volumes and movements at this intersection and within a defined surrounding area. The consultant firm TENW was chosen for this work and they provided their final report in June 2023. The conclusions of the report were that the existing conditions are adequate based on data-driven findings as the 2017 improvements significantly reduced crashes and improved the intersection operations.

In October 2023, the findings of the TENW report were presented to the Council. Council directed city staff to explore what it would take to install a High-Intensity Activated Crosswalk (HAWK) system at this intersection and to present back to Council with a cost for the system. What follows is the analysis of installing a HAWK system and the cost for installation.

HAWK System

Per Federal Highway Administration guide "Pedestrian Hybrid Beacons 508", also known as a HAWK system, is intended to increase a motorists' awareness of pedestrian crossings at uncontrolled marked crosswalk locations.

Here are some of the Pros and Cons of installing a HAWK system at this intersection.

Pros:

1. HAWK systems work well at reducing pedestrian/vehicles crashes on high-speed, high-volume, multi-lane streets like 40th Avenue.
2. More effective than the existing RRFB system at getting vehicles to stop for bikes and pedestrians as the overhead beacons are more visible and the flashing beacon pattern catches driver's attention.
3. Completely stops all traffic, so on a multi-lane street is helps prevent the drivers in an adjacent lane from passing the vehicle that is stopped for a pedestrian or a cyclist.
4. Can provide up to an 8% reduction in pedestrian crashes over an RRFB system.

Cons:

1. Cost. The cost for a HAWK system, while less than a full signal system, is still more costly than other possible alternatives.
2. Right of Way Needs. Property would need to be purchased from adjacent property owners to provide room to install the poles.
3. Will not improve the current operation of the intersection.
4. Since improvement were made in 2017, there has been 6 crashes. None involved pedestrians or cyclists.
5. Downhill grade is not a preferred for signal (stopping) location.
6. City Maintenance has identified HAWK's as "riskier" when performing maintenance.

The estimated cost to install a HAWK system at the intersection of 40th Avenue and Chestnut Avenue is $367k, which includes the right of way acquisition.

Other Lower-Cost Enhancements

Along with exploring the HAWK system, the following lower-cost enhancements were looked at and estimated costs were developed for each.

1. Enhanced Lighting
    a. Add an additional street light in the NE corner of the intersection to provide better lighting for the north crosswalk.
    Cost: $6,400
    b. Replace the existing crosswalk signs in the RRFB poles with LED Edged Lighted Crosswalk signs that activate with the RRFB beacons.
    Cost: $10,000

2. Advanced Lighting
    a. Install additional RRFB pedestrian flashers in advance of the intersection that are linked to existing RRFB system. Location would be approximately 250'-300' prior to intersection based on stopping sight distance for the 35 mph speed limit.
    Cost: $36,300

3. Reduce Speed Limit
    a. Install speed limit signs to create a lower speed zone around the intersection.
    Cost: Minimal. Normal signing work of city sign crews.

Low cost enhancements are relatively inexpensive compared to a HAWK and could be installed much sooner. The enhancements would provide additional awareness of the crossing.

An official website of the United States government Here's how you know

Proven Safety Countermeasures

Search Safety Proven Countermeasures

Resources

Related Links

- For More Info download the Rectangular Rapid Flashing Beacon Tech Sheet

Rectangular Rapid Flashing Beacons (RRFB)

U.S. Department of Transportation
Federal Highway Administration
FHWA-SA-21-053

RRFB_508.pdf (PDF, 262.91 KB)

A marked crosswalk or pedestrian warning sign can improve safety for pedestrians crossing the road, but at times may not be sufficient for drivers to visibly locate crossing locations and yield to pedestrians. To enhance pedestrian conspicuity and increase driver awareness at uncontrolled, marked crosswalks, transportation agencies can install a pedestrian actuated Rectangular Rapid Flashing Beacon (RRFB) to accompany a pedestrian warning sign. RRFBs consist of two, rectangular- shaped yellow indications, each with a light-emitting diode (LED)-array-based light source.[1] RRFBs flash with an alternating high frequency when activated to enhance conspicuity of pedestrians at the crossing to drivers.

Transportation agencies should refer to the *Manual on Uniform Traffic Control Devices (MUTCD)* for information on the application of RRFBs.[1]

Applications

The RRFB is applicable to many types of pedestrian crossings but is particularly effective at multilane crossings with speed limits less than 40 miles per hour.[2] Research suggests RRFBs can result in motorist yielding rates as high at 98 percent at marked crosswalks, but varies depending on the location, posted speed limit, pedestrian crossing distance, one- versus two-way road, and the number of travel lanes.[3] RRFBs can also accompany school or trail crossing warning signs.

RRFBs are placed on both sides of a crosswalk below the pedestrian crossing sign and above the diagonal downward arrow plaque pointing at the crossing.[1] The flashing pattern can be activated with pushbuttons or passive (e.g., video or infrared) pedestrian detection, and should be unlit when not activated.

Considerations

Agencies should:[2]

Safety Benefits:

RRFBs can reduce crashes up to:

47%

for pedestrian crashes.[4]

RRFBs can increase motorist yielding rates up to:

98%

(varies by speed limit, number of lanes, crossing distance, and time of day).[3]

- Install RRFBs in the median rather than the far-side of the roadway if there is a pedestrian refuge or other type of median.
- Use solar-power panels to eliminate the need for a power source.
- Reserve the use of RRFBs for locations with significant pedestrian safety issues, as over-use of RRFB treatments may diminish their effectiveness.

RRFBs used at a trail crossing. Source: LJB

Agencies shall not:[2]

- Use RRFBs without the presence of a pedestrian, school or trail crossing warning sign.
- Use RRFBs for crosswalks across approaches controlled by YIELD signs, STOP signs, traffic control signals, or pedestrian hybrid beacons, except for the approach or egress from a roundabout.

Sources

1. Manual on Uniform Traffic Control Devices (MUTCD), Chapter 4L. FHWA, (2023).

2. "Rectangular Rapid Flash Beacon" in PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System. FHWA, (2013).

3. Fitzpatrick et al. "Will You Stop for Me? Roadway Design and Traffic Control Device Influences on Drivers Yielding to Pedestrians in a Crosswalk with a Rectangular Rapid-Flashing Beacon." Report No. TTI-CTS-0010. Texas A&M Transportation Institute, (2016).

4. (CMF ID: 9024) NCHRP Research Report 841 Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments, (2017).

An official website of the United States government Here's how you know
United States Department of Transportation

Proven Safety Countermeasures

Search Safety Proven Countermeasures

Resources

Related Links

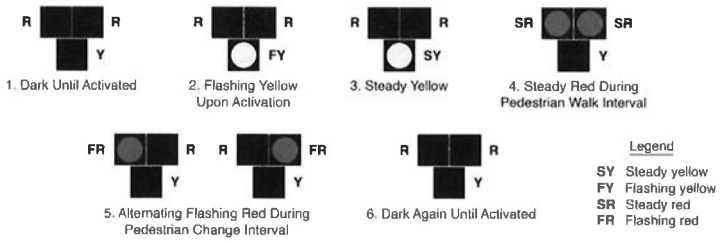
- For More Info View the Office of Safety's Pedestrian Hybrid Beacon technical sh...

Pedestrian Hybrid Beacons

U.S. Department of Transportation
Federal Highway Administration
FHWA-SA-21-045

Pedestrian Hybrid Beacons_508.pdf (PDF, 364.69 KB)

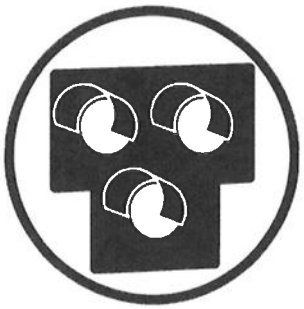
The pedestrian hybrid beacon (PHB) is a traffic control device designed to help pedestrians safely cross higher-speed roadways at midblock crossings and uncontrolled intersections. The beacon head consists of two red lenses above a single yellow lens. The lenses remain "dark" until a pedestrian desiring to cross the street pushes the call button to activate the beacon, which then initiates a yellow to red lighting sequence consisting of flashing and steady lights that directs motorists to slow and come to a stop, and provides the right-of-way to the pedestrian to safely cross the roadway before going dark again.



Sequence for a PHB. Source: MUTCD 2023 Edition, Chapter 4J, FHWA

Nearly 74 percent of pedestrian fatalities occur at non-intersection locations, and vehicle speeds are often a major contributing factor.[1] As a safety strategy to address this pedestrian crash risk, the PHB is an intermediate option between a flashing beacon and a full pedestrian signal because it assigns right of way and provides positive stop control. It also allows motorists to proceed once the pedestrian has cleared their side of the travel lane(s), reducing vehicle delay.

Transportation agencies should refer to the *Manual on Uniform Traffic Control Devices* (MUTCD) for information on the application of PHBs.[2]



Safety Benefits:

55%
reduction in pedestrian crashes.[3]

29%
reduction in total crashes.[4]

15%
reduction in serious injury and fatal crashes.[4]

In general, PHBs are used where it is difficult for pedestrians to cross a roadway, such as when gaps in traffic are not sufficient or speed limits exceed 35 miles per hour. They are very effective at locations where three or more lanes will be crossed or traffic volumes are above 9,000 annual average daily traffic. Installation of a PHB must also include a marked crosswalk and pedestrian countdown signal. If PHBs are not already familiar to a community, agencies should conduct appropriate education and outreach as part of implementation.

Example of PHBs mounted on a mast arm. Source: FHWA

Sources

1. National Center for Statistics and Analysis. (2020, March). Pedestrians: 2018 data (Traffic Safety Facts. Report No. DOT HS 812 850). National Highway Traffic Safety Administration

2. Manual on Uniform Traffic Control Devices, Chapter 4J. FHWA, (2023).

3. (CMF ID: 9020) Zegeer et al. NCHRP Report 841: Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments. TRB, (2017).

4. (CMF ID: 2911, 2917) Fitzpatrick, K. and Park, E.S. Safety Effectiveness of the HAWK Pedestrian Crossing Treatment, FHWA-HRT-10-042, (2010).

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Federal Highway Administration

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CITY OF YAKIMA

40th and Chestnut 1/18/2024

Scoping Estimate for Installation of a HAWK System

(Includes New Poles and Arms)

Item No.	Description	Payment Specification	Unit	Unit Cost	Overall Quantity	Overall Cost
1	Minor Change	1-04.4(1)	FA	$1,000.00	1	$1,000.00
2	Installation of HAWK sytem with 8.3% Tax		LS	$277,518.75	1	$277,518.75
3	R/W in SW corner for pole base		LS	$50,000.00	1	$50,000.00
4						$0.00
				Subtotal		$328,518.75
				Contingency 10%		$32,851.88
				Total Estimated Construction Cost		**$361,370.63**

Assumptions:

1 LS cost to install HAWK from Knobel's Electric includes traffic control, removing and replacing curb, gutter & sidewalk including ADA ramps, new painted crosswalk on north side, gravel backfill and paving for conduit cuts, bases, and all other equipment items needed INCLUDING poles and arms.

2 R/W cost a best guess from R/W work on N 1st St project

Environmental		$5,000.00
Total Estimated Project Cost		**$366,370.63**

Estimate prepared by: RPW

_____

CITY OF YAKIMA

40th and Chestnut 2/8/2024

Scoping Estimate for Installation of Wood Pole and Luminaire in NE Corner

(Includes New Poles and Arms)

Item No.	Description	Payment Specification	Unit	Unit Cost	Overall Quantity	Overall Cost
1	Installation of Wood Pole and Luminaire with 8.3% Tax		LS	$6,050.72	1	$6,050.72
2						$0.00
					Subtotal	$6,050.72
					Contingency 5%	$302.54
					Total Estimated Construction Cost	**$6,353.26**

Assumptions:

1 LS cost to install luminaire from Knobel's Electric includes traffic control, wood pole, and all other equipment items needed.

2 Contingency added to cover possible cost escalation of materials

Total Estimated Project Cost **$6,353.26**

Estimate prepared by: RPW

_____

CITY OF YAKIMA
40th and Chestnut
Scoping Estimate for LED Edged Crosswalk Signs on RRFB Post

2/8/2024

Item No.	Description	Payment Specification	Unit	Unit Cost	Overall Quantity	Overall Cost
1	Purchase of four 36" Diamond LED Edged Crosswalk Signs with 8.3% Tax		LS	$8,065.47	1	$8,065.47
2						$0.00
					Subtotal	$8,065.47
					Contingency 20%	$1,613.09
					Total Estimated Construction Cost	**$9,678.56**

Assumptions:
1. Cost is to purchase signs from vendor and install.
2. Contingency added to cover possible cost escalation of materials and upgrade of battery system to handle additional lights.

Total Estimated Project Cost **$9,678.56**

Estimate prepared by: RPW

CITY OF YAKIMA
40th and Chestnut
Scoping Estimate for Advanced Pedestrian Flashers both NB and SB

2/8/2024

Item No.	Description	Payment Specification	Unit	Unit Cost	Overall Quantity	Overall Cost
1	Installation of RRFB poles in Advance of Intersection with 8.3% Tax		LS	$34,543.68	1	$34,543.68
2						$0.00
					Subtotal	$34,543.68
					Contingency 5%	$1,727.18
					Total Estimated Construction Cost	**$36,270.86**

Assumptions:

1 LS cost to install advanced RRFB flashers from Knobel's Electric includes traffic control, poles, bases, signs, and all other equipment items needed.

2 Contingency added to cover possible cost escalation of materials

Total Estimated Project Cost **$36,270.86**

Estimate prepared by: RPW

_____

TENW
Transportation Engineering NorthWest

MEMORANDUM

DATE: June 8, 2023

TO: Bill Preston
City of Yakima

FROM: Chandler Waldal
TENW

SUBJECT: Traffic Analysis and Potential Improvements
40th & Chestnut
TENW Project No. 2022-395

This memorandum summarizes the preliminary traffic analysis conducted at the S 40th Avenue/W Chestnut Avenue intersection in Yakima, WA, evaluates the effectiveness and impacts of previous intersection improvements, and identifies additional potential improvement measures to address reported pedestrian and bicycle safety concerns at this intersection.

Project Background

In December of 2017, the City of Yakima completed a safety project at the S 40th Avenue/W Chestnut Avenue intersection installing curbing and tubular traffic markers on S 40th Avenue, updated crosswalks across the north and south legs of S 40th Avenue, a Rectangular Rapid Flashing Beacon (RRFB) system, and approximately 250-feet of sidewalk on the east side of S 40th Avenue to improve vehicular, bicycle, and pedestrian safety at the intersection. However, despite the improvements, the City has continued to receive concerns from the public regarding undesired traffic flow conditions in the surrounding area and potentially hazardous bicycle and pedestrian conditions occurring at the intersection.

The purpose of this memorandum is to evaluate the existing conditions at the intersection of S 40th Avenue/W Chestnut Avenue and identify potential improvements to address the public's noted concerns. Additionally, the effectiveness and impacts of the previous intersection improvements completed in December 2017 were evaluated.

Summary of Key Findings

Based on the evaluation of existing traffic operations at the S 40th Avenue/W Chestnut Avenue intersection, it can be concluded that the existing conditions are adequate based on data-driven findings. Not only did the previous intersection improvements completed by the City in December 2017 improve intersection operations, but they also significantly reduced collisions at the intersection. However, the City continues to receive complaints regarding safety at this intersection. As a result, five (5) potential intersection improvement alternatives intended to further improve pedestrian and vehicular safety at this intersection were provided for the City's review and consideration.

Existing Conditions

The intersection of S 40th Avenue/W Chestnut Avenue is an existing four-leg intersection with S 40th Avenue running in the north/south direction and West Chestnut Avenue running in the east/west direction. The intersection is currently unsignalized with stop-controlled approaches on W Chestnut Avenue (side street) while S 40th Avenue (main street) operates as free flow.

Existing channelization at the intersection includes two lanes in each direction on S 40th Avenue and right-turn only lanes for both east and west approaches on W Chestnut Avenue. A c-curb runs north-south on S 40th Avenue preventing left-turn movements from the north/south approaches along S 40th Avenue and thru/left-turn movements from the east/west approaches along W Chestnut Avenue. There are marked crosswalks with Rectangular Rapid Flashing Beacon (RRFB) systems on both the north and south legs of the intersection across S 40th Avenue in the east/west direction. Sidewalks are provided on both sides of S 40th Avenue. These modifications were made in December 2017 by the City based on citizen requests for improved safety for pedestrians and bicycles.

Crash History

Crash history at the intersection of S 40th Avenue/W Chestnut Avenue was analyzed for the six-year period from 2016 to 2021 to evaluate the potential change in reported crashes before improvements (2016-2017) and after improvements (2018-2021). Crash data was provided by WSDOT.

Summaries of the total and yearly average crashes during this period are provided in Table 1. Summaries of collisions by severity over the six-year period are provided in Table 2. Summaries of crashes by type over the six-year period are provided in Table 3. Detailed collision history is included in Attachment A.

Table 1
Crash Data Summary by Year, January 1, 2016 to December 31, 2021

Intersection	2016	2017	2018	2019	2020	2021	Six-Year Total Crashes	Average Annual Crash Frequency
S 40th Avenue / W Chestnut Avenue	10	8	1	0	1	1	21	3.5

Source: WSDOT Crash Data.

Table 2
Crash Data Summary by Severity, January 1, 2016 to December 31, 2021

	Crash Severity						
	2016-2017 (pre-improvements)			2018-2021 (post-improvements)			
Intersection	Fatal	Suspected Injury	No Injury / Property Damage Only	Fatal	Suspected Injury	No Injury / Property Damage Only	Six-Year Total Crashes
S 40th Avenue / W Chestnut Avenue	0	6	12	0	2	1	21

Source: WSDOT Crash Data.

Table 3
Crash Data Summary by Type, January 1, 2016 to December 31, 2021

	Crash Type																
	2016-2017 (pre-improvements)								2018-2021 (post-improvements)								
Intersection	Angle (Left/Right)	Angle (T)	Head-on	Other	Parked Veh / Fixed Object	Ped/Bike	Rear end	Sideswipe	Angle (Left/Right)	Angle (T)	Head-on	Other	Parked Veh / Fixed Object	Ped/Bike	Rear end	Sideswipe	Six-Year Total Crashes
S 40th Avenue / W Chestnut Avenue	5	4	0	0	2	1	4	2	0	1	0	0	1	0	1	0	21

Source: WSDOT Crash Data.

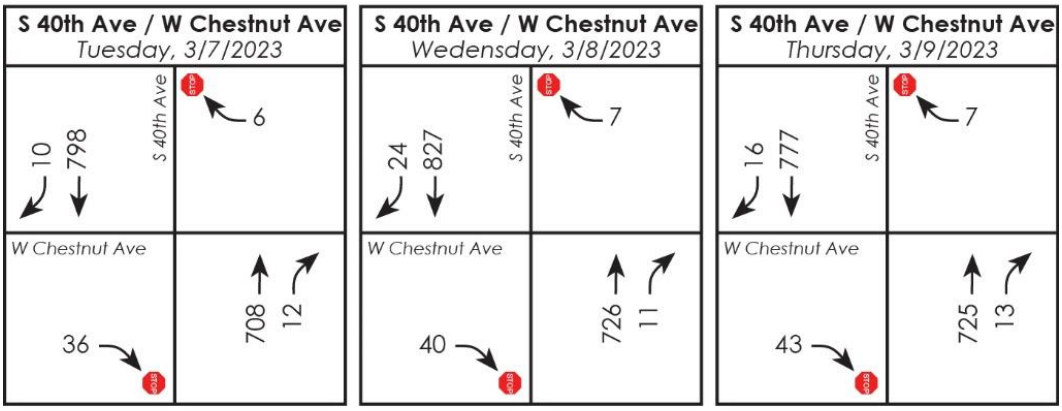
As shown in Tables 1-3, there were twenty-one (21) reported crashes at the intersection of S 40th Avenue/W Chestnut Avenue during the six-year period from 2016 to 2021. Of the twenty-one (21) crashes, eighteen (18) were reported to occur during the two-year period (2016-2017) before the City installed improvements at the intersection and three (3) were reported to occur during the four-year period (2018-2021) after the City installed improvements. Crashes were most commonly reported as Left/Right Angle crashes from 2016 to 2017, and there was no common trend in crash reports from 2018 to 2021. The one T-Angle crash that occurred post-improvements was reported to occur in 2020 as a result of a driver traveling eastbound through the intersection under the influence of alcohol.

Based on the 2016-2021 crash history at the S 40th Avenue/W Chestnut Avenue, it is evident that there were significantly less reported crashes after the City installed vehicular/pedestrian safety improvements at the intersection in December 2017. It should be noted that the 2017 crash history did not include any reported crashes from October to December, so none of the 2017 crashes were reported post-improvements.

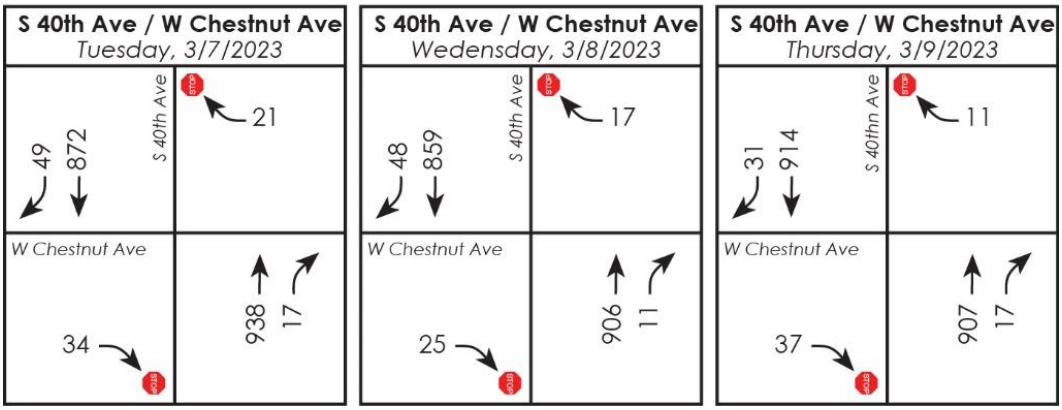
Existing Weekday Peak Hour Traffic Volumes

Existing weekday AM and PM peak hour traffic volumes were collected at the S 40th Avenue/W Chestnut Avenue intersection on Tuesday 3/7/2023, Wednesday 3/8/2023, and Thursday 3/9/2023. The existing weekday AM and PM peak hour traffic volumes represent the highest hour of traffic between 6:00 and 9:00 AM and 3:00 and 6:00 PM, respectively. The existing AM and PM peak hour traffic volumes for each of the three (3) weekdays are shown below:

AM Peak Hour



PM Peak Hour

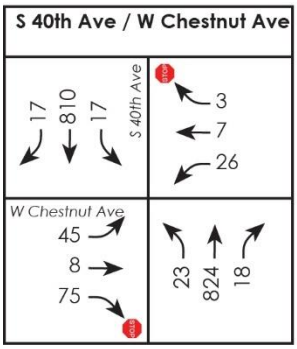


Based on the peak hour turning movement counts collected at the S 40th Avenue/W Chestnut Avenue intersection from March 7, 2023 to March 9, 2023, the weekday AM and PM peak hour counts are generally consistent on a typical weekday with little variation between the three (3) days of data collection.

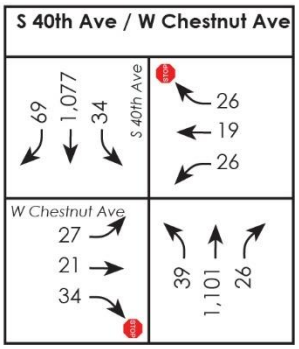
Additionally, pre-improvement 2017 AM and PM peak hour traffic counts were provided by the City of Yakima and compared to the existing counts conducted in 2023. To estimate existing 2023 traffic volumes, a two (2) percent annual growth rate was applied to the 2017 traffic volumes.

The existing AM and PM peak hour traffic volumes without the City's improvements are shown below:

AM Peak Hour



PM Peak Hour



Based on review and comparison between the 2017 peak hour turning movement counts provided by the City of Yakima and recent traffic counts, less than 50 peak hour trips were diverted for each restricted turning movement as a result of the City's improvement project. As a result, the impacts to the adjacent street network that resulted from turn restrictions at this intersection are expected to be minimal.

Intersection Level of Service

Intersection Level of Service (LOS) analyses were completed for 2023 Existing weekday AM and PM peak hour conditions at the S 40th Avenue/W Chestnut Avenue intersection based on counts collected on Tuesday 3/7/2023, Wednesday 3/8/2023, and Thursday 3/9/2023.

LOS calculations were based on the use of *Synchro 11* traffic analysis software. LOS methodology is included in Attachment B. Table 4 summarizes the 2023 Existing LOS results at the S 40th Avenue/W Chestnut Avenue intersection. Detailed LOS calculation worksheets are included in Attachment B.

Table 4
S 40th Ave / W Chestnut Ave
2023 Existing Peak Hour LOS Summary (Post Improvement)

	AM Peak Hour		PM Peak Hour	
Date / Movement	LOS	Delay (sec)	LOS	Delay (sec)
Tuesday – March 7, 2022				
Eastbound Right-Turn (W Chestnut Avenue)	B	12.7	B	12.7
Westbound Right-Turn (W Chestnut Avenue)	B	11.0	B	12.1
Wednesday – March 8, 2022				
Eastbound Right-Turn (W Chestnut Avenue)	B	13.3	B	12.2
Westbound Right-Turn (W Chestnut Avenue)	B	11.2	B	11.9
Thursday – March 9, 2022				
Eastbound Right-Turn (W Chestnut Avenue)	B	13.2	B	13.1
Westbound Right-Turn (W Chestnut Avenue)	B	11.4	B	11.9

As shown in Table 4, all movements operate at LOS B during the AM and PM peak hours.

An additional level of service evaluation was completed for 2023 Existing weekday AM and PM peak hour conditions at the S 40th Avenue/W Chestnut Avenue without the City's improvement project.

Table 5 summarizes the 2023 Existing LOS results at the S 40th Avenue/W Chestnut Avenue intersection based on the adjusted 2017 peak hour traffic volumes provided by the City of Yakima (pre-improvement). Detailed LOS calculation worksheets are included in Attachment B.

Table 5
S 40th Ave / W Chestnut Ave
2023 Existing Peak Hour LOS Summary (Pre-Improvement)

	AM Peak Hour		PM Peak Hour	
Scenario / Movement	LOS	Delay (sec)	LOS	Delay (sec)
Pre-Improvement				
Eastbound Approach (W Chestnut Avenue)	F	>100	F	>100
Westbound Approach (W Chestnut Avenue)	F	61.3	F	>100
Northbound Left-Turn (S 40th Avenue)	A	9.8	B	11.9
Southbound Left-Turn (S 40th Avenue)	A	9.9	B	11.7

As shown in Table 5, the eastbound and westbound approaches would be expected to operate at LOS F during the AM and PM peak hours without the City's improvement project.

Traffic Signal Warrant

Traffic signal warrant analyses were conducted at the S 40th Avenue/W Chestnut Avenue intersection for 2023 Existing conditions based on guidelines outlined in the US Department of Transportation/Federal Highway Administration *Manual on Uniform Traffic Control Devices* (MUTCD), 2009 Edition. Of the eight (8) signal warrants outlined in the MUTCD, four (4) of the warrants were considered.

Warrant 1 (Eight-Hour Vehicular Volume),

Warrant 2 (Four-Hour Vehicular Volume),

Warrant 3 (Peak Hour), and

Warrant 4 (Pedestrian) were analyzed.

To conduct this evaluation, three days of existing 24-hour turning movement traffic counts, approach volumes, speed data, and pedestrian volumes were collected at the S 40th Avenue/W Chestnut Avenue intersection in March 2023. The existing volume and speed data are included and summarized in Attachment C.

The results of the Existing 2023 signal warrant analysis are summarized in Table 6. Detailed signal warrant analysis worksheets are included in Attachment D.

Table 6
S 40th Ave / W Chestnut Ave – Signal Warrant Analysis

Warrant	Warrant Met?
Warrant 1 – Eight Hour Vehicular Volume	
Condition A – Minimum Vehicular Volume	No
Condition B – Interruption of Continuous Traffic	No
Combination of Conditions A and B	No
Warrant Met?	**No**
Warrant 2 – Four Hour Vehicular Volume	
Warrant Met?	**No**
Warrant 3 – Peak Hour	
Category A – AM Peak Hour	No
Category A – PM Peak Hour	No
Category B	No
Warrant Met?	**No**
Warrant 4 – Pedestrian	
Category A – Four Hour Volume	No
Category A – Peak Hour Volume	No
Warrant Met?	**No**

As shown in Table 6, a traffic signal at the S 40th Avenue/W Chestnut Avenue intersection would not be warranted.

Multi-Way Stop Warrant

The potential application of a multi-way stop at the intersection was also evaluated based on guidelines included in the *Manual on Uniform Traffic Control Devices* (MUTCD). It should be noted that the same volumes used to conduct the signal warrant analysis discussed previously were also used to conduct the Multi-Way Stop analysis.

The MUTCD multi-way stop guidelines are included below along with TENW responses to each guideline/criteria. Detailed multi-way stop warrant analysis worksheets are included in **Attachment E**.

MUTCD Section 2B.07 Multi-Way Stop Applications

Support:

1. Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

   TENW Response: The volume of traffic on S 40th Avenue was observed to be significantly greater than the volume of traffic on W Chestnut Avenue. Therefore, a multi-way stop control at the intersection of S 40th Avenue/W Chestnut Avenue is not supported per MUTCD Section 2B.07.

2. The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

3. The decision to install multi-way stop control should be based on an engineering study.
4. The following criteria should be considered in the engineering study for a multi-way STOP sign installation:
   A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

      TENW Response: A traffic signal is not currently warranted at S 40th Avenue/W Chestnut Avenue, therefore this criteria is not applicable. Signal warrant worksheets are included in Attachment D.

   B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.

      TENW Response: Based on the collision history reviewed for the four-year period (2018-2021) after the City installed improvements, there were three (3) reported collisions in total over the whole period. Therefore, this criteria would not be met.

C. Minimum volumes:

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; *and*
2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in items 1 and 2.

TENW Response: Based on the existing data collected and summarized in Attachment C, the volumes on the major street are expected to meet the minimum volume criteria in C.1. However, the average delay to minor-street vehicular traffic is not anticipated to be greater than 30 seconds per vehicle during the highest hour, so criteria C.2 is not met. Additionally, the 85th percentile approach speed does not exceed 40 mph, so criteria C.3 was not evaluated.

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

TENW Response: Criteria D was not evaluated given criteria C.2 is not met.

A summary of our multi-way stop evaluation findings is included in Table 7 below.

Table 7
S 40th Ave / W Chestnut Ave – Multi-Way Stop Warrant Analysis

Criteria	Criteria Met?
Criteria A – Traffic Control Signal Interim Measure	**No**
Criteria B – Collisions	**No**
Criteria C – Minimum Volumes	**No**
Condition 1 – Major Street Volume	**Yes**
Condition 2 – Minor Street Volume	**No**
Condition 3 – 70% of Conditions 1 and 2	N/A
Criteria D – 80% of Criteria B, C.1 and C.2	N/A

As shown in Table 7, a multi-way stop at the S 40th Avenue/W Chestnut Avenue intersection would not be warranted.

Potential Improvement Alternatives

Based on the evaluation of existing traffic operations at the S 40th Avenue/W Chestnut Avenue intersection, it can be concluded that the existing conditions are adequate based on data-driven findings. Not only did the previous intersection improvements completed by the City in December 2017 improve intersection operations, but they also significantly reduced collisions at the intersection. However, the City continues to receive citizen complaints regarding safety at this intersection. As a result, the following five (5) potential intersection improvement alternatives were considered at the S 40th Avenue/W Chestnut Avenue intersection:

- Alternative 1 – Traffic Signal
- Alternative 2 – High-Intensity Activated Crosswalk (HAWK) Signal
- Alternative 3 – Bike Reroute
- Alternative 4 – Road Diet with Refuge Island
- Alternative 5 – Enhance Existing Rectangular Rapid Flashing Beacon (RRFB) Crosswalk

When evaluating the potential intersection improvement alternatives, TENW considered the following:

- Pedestrian/Bike Safety
- Vehicular Safety
- Traffic Operations
- Right-of-Way (ROW) Required
- Cost

A summary of the five (5) potential improvement alternatives at the S 40th Avenue/W Chestnut Avenue intersection and factors for the City to consider are included in Table 8 below:

Table 5
S 40th Ave / W Chestnut Ave – Potential Improvement Alternatives Summary

	Alternative 1 Traffic Signal	Alternative 2 HAWK Signal	Alternative 3 Bike Reroute	Alternative 4 Road Diet	Alternative 5 RRFB Enhancement
Improves Pedestrian/Bike Safety	Yes	Yes	Yes	Yes	Yes
Improves Vehicular Safety	No	No	Yes	No	No
Improves Intersection Operations	No	No	Yes	No	No
Avoids ROW Acquisition	No	No	Yes	Yes	Yes
Minimizes Cost	No	No	Yes	Yes	Yes

Each of the five (5) potential improvement alternatives at the S 40th Avenue/W Chestnut Avenue intersection are discussed in further detail below:

Alternative 1 – Traffic Signal

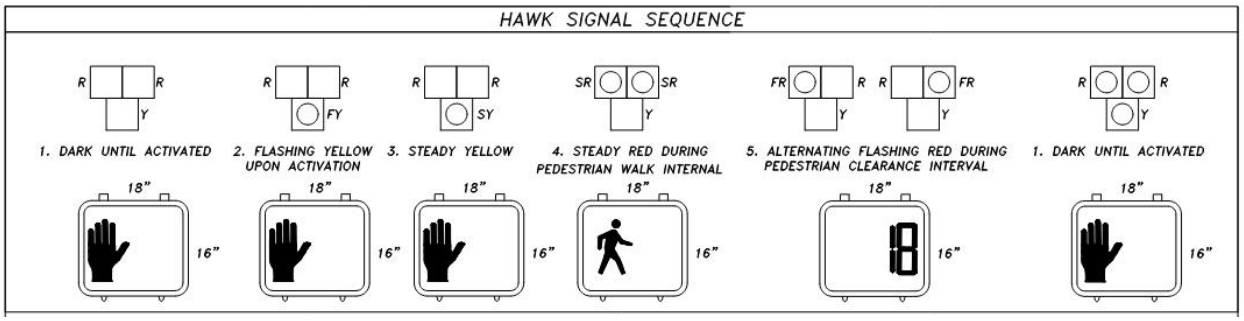
Although a traffic signal is not warranted at the S 40th Avenue/W Chestnut Avenue intersection based on existing traffic volumes, the traffic signal alternative was evaluated as a potential intersection improvement because of the pedestrian safety concerns reported at this intersection. A traffic signal is an automated traffic

control device that assigns right of way and controls movements at an intersection for motorized and nonmotorized users. The following considerations were evaluated at the S 40th Avenue/W Chestnut Avenue intersection with the traffic signal alternative:

- Pedestrian/Bike Safety: The traffic signal alternative is expected to be the safest option as it relates to pedestrian and bicycle safety. The traffic signal alternative would allow for pedestrians to safely cross S 40th Avenue during their dedicated pedestrian phase while northbound and southbound traffic is stopped. Vehicular traffic destined to S 40th Avenue from W Chestnut Avenue would be required to yield to pedestrian traffic.
- Vehicular Safety: The traffic signal alternative is not expected to improve vehicular safety due to the increased number of conflict points (turning movements would be allowed with the traffic signal alternative).
- Traffic Operations: With the traffic signal alternative, the S 40th Avenue/W Chestnut Avenue intersection is anticipated to operate at acceptable levels of service with minimal delay during the AM and PM peak hours. However, the S 40th Avenue/W Chestnut Avenue intersection currently operates at LOS B during the AM and PM peak hours with the major arterial (S 40th Avenue) operating as free-flow. Under the traffic signal alternative, vehicles traveling on S 40th Avenue would be required to stop for pedestrians/bicyclists and eastbound/westbound traffic, which may increase overall delay at the intersection given the magnitude of traffic volume on S 40th Avenue.
- Right-of-Way Required: Preliminary design of the traffic signal alternative anticipates that additional third-party right-of-way acquisitions would likely be required to complete the improvements. Formal topographic survey to confirm right of way boundaries would be required to verify right of way impacts.
- Cost: The traffic signal alternative is anticipated to be one of the more costly improvement alternatives at the S 40th Avenue/W Chestnut Avenue intersection. Significant funding could be required in order to construct a traffic signal at the intersection.

Alternative 2 – HAWK Signal

A HAWK signal is a potential alternative to improve pedestrian and bicycle safety at the S 40th Avenue/W Chestnut Avenue intersection. A High-Intensity Activated Crosswalk (HAWK) signal is a signalized crossing that controls movements at an intersection or midblock for motorized and nonmotorized users. HAWK signals are only activated by nonmotorized users and alert/stop vehicular movements on the roadway the pedestrians are crossing. The HAWK signals are dark until activated. Once activated, a light progression is followed to alert drivers of pedestrians crossing soon, stop drivers during the active crossing, and allow vehicles to continue through the intersection as soon as pedestrians clear the roadway. The sequence and progression of a HAWK signal is shown below:



The following considerations were evaluated at the S 40th Avenue/W Chestnut Avenue intersection with the HAWK signal alternative:

- Pedestrian/Bike Safety: The HAWK signal alternative would improve safety by more effectively alerting drivers traveling on S 40th Avenue of pedestrian crossing movements through multiple cues including unique, overhead flashing beacons, signage, and stop bars. The HAWK signal alternative would allow for pedestrians and bicyclists to safely cross S 40th Avenue during their dedicated pedestrian phase while northbound and southbound traffic is stopped. Eastbound and westbound traffic on W Chestnut Avenue would continue to be stop-controlled with turn restrictions. W Chestnut Avenue could be supplemented with flashing beacons activated by the HAWK signal restricting turns. It should be noted that the reported concerns regarding pedestrian safety at this intersection were related to vehicles on S 40th Avenue refusing to stop when pedestrians/bicyclists are crossing S 40th Avenue. While there is no guarantee that this improvement will provide a desirable and safe crossing for pedestrians/bicyclists given vehicles on S 40th Avenue may still refuse to stop when the HAWK signal is activated, the HAWK signal alternative is expected to be more effective at getting vehicles to stop for pedestrians/bicyclists than the existing RRFB system.
- Vehicular Safety: The HAWK signal alternative is anticipated to have minimal impacts on vehicular safety at the S 40th Avenue/W Chestnut Avenue intersection.
- Traffic Operations: The HAWK signal alternative is anticipated to have minimal impacts on traffic operations at the S 40th Avenue/W Chestnut Avenue intersection.
- Right-of-Way Required: Preliminary design of the HAWK signal alternative anticipates that additional third-party right-of-way acquisitions would likely be required to complete the improvements. Formal topographic survey to confirm right of way boundaries would be required to verify right of way impacts.
- Cost: The HAWK signal alternative is anticipated to be less costly than a full traffic signal at the S 40th Avenue/W Chestnut Avenue intersection but more costly than all other alternatives.

Alternative 3 – Bike Reroute

A Bike Reroute is a potential alternative to improve pedestrian and bicycle safety at the S 40th Avenue/W Chestnut Avenue intersection. Consideration was given to either reroute bicyclists to the S 40th Avenue/Summitview Avenue signalized intersection (north of 40th/Chestnut) or to the S 40th Avenue/Tieton Drive signalized intersection (south of 40th/Chestnut). Neither Tieton Drive nor Summitview Avenue include existing bicycle lanes. However, future bike lanes are only planned on Tieton Drive in the City's Bicycle Master Plan. Additionally, rerouting bicyclists to Tieton Drive versus Summitview Avenue from Chestnut Avenue would route bicyclists downhill versus uphill if bicycle lanes were ultimately constructed on Tieton Drive. Therefore, under the Bike Reroute Alternative, the recommended reroute would direct bicyclists to the S 40th Avenue/Tieton Drive signalized intersection located approximately one-quarter mile south of the S 40th Avenue/W Chestnut Avenue intersection. Bicyclists traveling eastbound on W Chestnut Avenue would utilize S 45th Avenue, a future Bicycle Boulevard, to access Tieton Drive. For westbound bicyclists on W Chestnut Avenue, the reroute would be directed through S 37th Avenue to Tieton Drive. The Bike Reroute alternative is included in Attachment F. The following considerations were evaluated at the S 40th Avenue/W Chestnut Avenue intersection with the Bike Reroute alternative:

- Pedestrian/Bike Safety: The Bike Reroute alternative is expected to be a safer option for pedestrians and bicyclists. It would eliminate conflicts with vehicles at the S 40th Avenue/W Chestnut Avenue unsignalized intersection and instead direct bicyclists to the S 40th Avenue/Tieton Drive signalized intersection with a future dedicated bike lane and pedestrian crossings.

- Vehicular Safety: The Bike Reroute alternative would also improve vehicular safety by reducing conflicts between vehicles and bicyclists at the S 40th Avenue/W Chestnut Avenue intersection, reducing the number potential annual crashes.
- Traffic Operations: The Bike Reroute alternative is anticipated to have minimal impacts on traffic operations at the S 40th Avenue/W Chestnut Avenue intersection. However, traffic operations may improve given vehicles will no longer need to yield to pedestrians and/or bicyclists.
- Right-of-Way Required: The improvements associated with the Bike Reroute alternative are not anticipated to require additional third-party right-of-way acquisitions. Formal topographic survey to confirm right of way boundaries would be required to verify right of way impacts.
- Cost: The Bike Reroute alternative is expected to be less costly than installing a traffic signal at the S 40th Avenue/W Chestnut Avenue intersection. The reroute would require minor signage and pavement markings to direct bicyclists to the S 40th Avenue/Tieton Drive. There would also be costs associated with removing the existing RRFB infrastructure and installing additional curbing on S 40th Avenue to prevent pedestrians and bicyclists from crossing S 40th Avenue at this intersection. Note, if this alternative is selected, it is recommended that the City evaluate the existing conditions of the roads utilized for reroute (S 45th Avenue, S 37th Avenue and Tieton Drive) to determine if improvements would be beneficial as part of the formal reroute. TENW is available to assist the City with this evaluation if desired.

Alternative 4 – Road Diet with Refuge Island

The Road Diet with Refuge Island is a potential alternative to improve pedestrian and bicycle safety at the S 40th Avenue/W Chestnut Avenue intersection. The Road Diet with Refuge Island alternative involves reducing the number of lanes to calm traffic and adding a Refuge Island, a raised area in the middle of the road that provides a safer crossing for pedestrians. The following factors were evaluated in relation to this alternative:

- Pedestrian/Bike Safety: The Road Diet with Refuge Island alternative is expected to provide a safer option for pedestrians and bicyclists to cross S 40th Avenue. The refuge island would allow pedestrians and bicyclists the opportunity to cross the road in two stages, focusing on one direction of traffic at a time. In addition, the reduction in lanes would reduce speeds, making it easier for pedestrians and bicyclists to cross S 40th Avenue.
- Vehicular Safety: The Road Diet with Refuge Island alternative is anticipated to have minimal impacts on vehicular safety at the S 40th Avenue/W Chestnut Avenue intersection.
- Traffic Operations: Under the Road Diet with Refuge Island alternative, traffic operations are expected to degrade when compared to the existing conditions due to the reduction of travel lanes on S 40th Avenue from 4 to 3. Further analysis will be necessary to assess the feasibility and effectiveness of this alternative in meeting the desired level of service with the magnitude of traffic volume on S 40th Avenue.
- Right-of-Way Required: The improvements associated with the Road Diet with Refuge Island alternative are not anticipated to require additional third-party right-of-way acquisitions to complete the improvements. Formal topographic survey to confirm right of way boundaries would be required to verify right of way impacts.
- Cost: The Road Diet with Refuge Island alternative is anticipated to be less costly than a full traffic signal or a HAWK signal at the S 40th Avenue/W Chestnut Avenue intersection, but more costly than the Bike Reroute and RRFB enhancement alternatives.

Alternative 5 – Enhance Existing RRFB Crosswalk

RRFB enhancement is a potential alternative to improve pedestrian and bicycle safety at the S 40th Avenue/W Chestnut Avenue intersection. A Rectangular Rapid Flashing Beacon (RRFB) is a traffic control device that controls movements at an intersection or midblock for motorized and nonmotorized users. The beacons are only activated by nonmotorized users and alert vehicles when pedestrians are crossing the roadway. Vehicles are yielding to pedestrians with this treatment. The scale of RRFB system improvements can vary depending on the type of intersection or roadway and its associated users. The following considerations were evaluated with RRFB enhancement at the S 40th Avenue/W Chestnut Avenue intersection:

- **Pedestrian/Bike Safety:** The existing RRFB system at the S 40th Avenue/W Chestnut Avenue intersection has been reported to provide insufficient safety for pedestrians and bicyclists crossing S 40th Avenue. The RRFB design can be enhanced with any of the following improvements: overhead signage and RRFB units for better visibility to all vehicular lanes, roadway-scale lights on each side of crosswalk to improve visibility of the crosswalk, reducing the crosswalks at the intersection from 2 to 1, or an in-pavement warning light system.
- **Vehicular Safety:** The RRFB enhancement alternative is anticipated to have minimal impacts on vehicular safety at the S 40th Avenue/W Chestnut Avenue intersection.
- **Traffic Operations:** The RRFB enhancement alternative is anticipated to have minimal impacts on traffic operations at the S 40th Avenue/W Chestnut Avenue intersection.
- **Right-of-Way Required:** The improvements associated with enhancing the existing RRFB system are not anticipated to require additional third-party right-of-way acquisitions to complete the improvements. Formal topographic survey to confirm right of way boundaries would be required to verify right of way impacts.
- **Cost:** The RRFB enhancement alternative is anticipated to be the least expensive improvement alternative at the S 40th Avenue/W Chestnut Avenue intersection.

Note that with any of the alternatives considered, it is recommended that the existing illumination at this intersection be upgraded to meet current City of Yakima lighting criteria; this would in turn have a positive effect on pedestrian, bicycle and vehicular safety at the S 40th Avenue/W Chestnut Avenue intersection as part of any of the alternatives considered.

If you have any questions about the information presented in this memorandum, please contact me at chandler@tenw.com or (760) 994-7376.

cc: Chris Bicket, TENW Vice-President

Jeff Schramm, TENW Principal

Attachments

ATTACHMENT A

Detailed Collision History

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *in the vicinity of* MULTIPLE ROAD SEGMENTS & INTERSECTION IN THE CITY OF YAKIMA

01/01/2016 - 12/31/2021 *See 2nd tab below for road info*

Under 23 U.S. Code § 148 and 23 U.S. Code § 407, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	BLOCK NUMBER	INTERSECTING TRAFFICWAY	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	MILEPOST	A/B	SR ONLY HISTORY/ SUSPENSE	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E630152	01/05/2017	16:14	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E550845	06/01/2016	15:08	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E678809	06/05/2017	14:06	Possible Injury	1	0	3	0	0	Passenger Car	Passenger Car
City Street	Yakima	Yakima	N 40TH AVE	2	W CHESTNUT AVE							No	EB25292	04/06/2021	22:13	No Apparent Injury	0	0	1	0	0	Passenger Car	
City Street	Yakima	Yakima	N 40TH AVE	2	W CHESTNUT AVE							No	EA81388	11/08/2020	17:28	Suspected Serious Injury	2	0	3	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E558311	06/27/2016	14:08	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E574807	08/14/2016	22:56	No Apparent Injury	0	0	1	0	0	Passenger Car	
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E644376	02/20/2017	15:40	Possible Injury	1	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E590999	09/30/2016	20:30	Possible Injury	1	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E630537	01/10/2017	14:12	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Yakima	Yakima	N 40TH AVE	0	W CHESTNUT AVE							No	E658190	03/31/2017	14:18	Possible Injury	1	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Yakima	Yakima	S 40TH AVE	0	W CHESTNUT AVE							No	E783767	03/17/2018	22:30	Possible Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
City Street	Yakima	Yakima	S 40TH AVE	0	W CHESTNUT AVE							No	E566910	07/20/2016	10:29	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car
City Street	Yakima	Yakima	S 40TH AVE	0	W CHESTNUT AVE							No	E610693	11/16/2016	20:12	No Apparent Injury	0	0	3	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
City Street	Yakima	Yakima	S 40TH AVE	0	W CHESTNUT AVE							No	E614073	11/29/2016	16:38	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car
City Street	Yakima	Yakima	S 40TH AVE	0	W CHESTNUT AVE							No	E608795	11/05/2016	16:41	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
City Street	Yakima	Yakima	S 40TH AVE	0	W CHESTNUT AVE							No	E655642	03/18/2017	11:30	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
City Street	Yakima	Yakima	W CHESTNUT AVE	0	N 40TH AVE							No	E712868	09/12/2017	18:52	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car
City Street	Yakima	Yakima	W CHESTNUT AVE	4000	N 40TH AVE							No	E574788	08/16/2016	00:57	No Apparent Injury	0	0	1	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	
City Street	Yakima	Yakima	W CHESTNUT AVE	4000	N 40TH AVE							No	E588804	09/26/2016	10:43	Suspected Minor Injury	1	0	1	1	0	Passenger Car	
City Street	Yakima	Yakima	W CHESTNUT AVE	0	S 40TH AVE							No	E713176	09/18/2017	08:35	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Pickup,Panel Truck or Vanette under 10,000 lb

ATTACHMENT B

Level of Service (LOS) Calculations

Level of Service Methodology

Level of Service (LOS) generally refers to the degree of congestion at an intersection. It is a measure of vehicle operating speed, travel time, travel delays, and driving comfort. A letter scale from A to F generally describes intersection LOS.

Signalized Intersection LOS represents the average control delay (sec/veh) and can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only). The table below outlines the HCM (6th Edition) LOS criteria for signalized intersections.

LOS Criteria for Signalized Intersections [1]

Control Delay (sec/veh)	Level of Service [2]	General Description [3]
≤ 10	A	Exceptionally Favorable Progression (or very short cycle lengths) – Most vehicles arrive during the green indication and travel through the intersection without stopping.
> 10 to ≤ 20	B	Highly Favorable Progression (or short cycle lengths) – While more vehicles than LOS A stop, most vehicles still pass through the intersection without stopping.
> 20 to ≤ 35	C	Favorable Progression (or moderate cycle lengths) – Individual cycle failures begin to appear, but many vehicles still pass through the intersection without stopping.
> 35 to ≤ 55	D	Ineffective Progression (or long cycle lengths) – Many vehicles stop and individual cycle failures are noticeable.
> 55 to ≤ 80	E	Unfavorable Progression (and long cycle lengths) – Individual cycle failures are frequent.
> 80	F	Very Poor Progression (and long cycle lengths) – Most cycles fail to clear the queue at this level.

1 Source: Highway Capacity Manual 6th Edition, Transportation Research Board, 2016.
2 If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0, LOS F is assigned to the individual lane group. For approach-based and intersection-wide assessments at signals, LOS is defined solely by control delay.
3 Individual cycle failures: one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle.

Synchro 11 and/or HCM 2000 LOS methodology may be used when HCM 6th Edition methodology is not supported at an intersection (i.e., intersection geometry and/or custom phasing) or jurisdictional standards require use of an alternative methodology.

Unsignalized Intersection LOS (two-way stop control, all-way stop control, and roundabouts) is based on the average control delay. For two-way stop-controlled intersections, the LOS criteria apply to each controlled minor-street approach, controlled minor-street lane group, and controlled major-street movement (additional v/c ratio criteria apply to lane group LOS only). LOS is not calculated for major-street approaches or for the intersection as a whole at two-way stop-controlled intersections. For all-way stop-controlled intersections and roundabouts, LOS can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only). The table below outlines the HCM (6th Edition) LOS criteria for unsignalized intersections based on these methodologies.

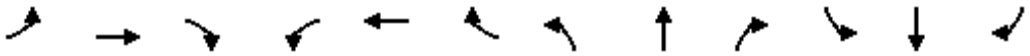
LOS Criteria for Unsignalized Intersections[1]

Control Delay (sec/veh)	Level of Service [2]
≤ 10	A
> 10 to ≤ 15	B
> 15 to ≤ 25	C
> 25 to ≤ 35	D
> 35 to ≤ 50	E
> 50	F

1 Source: Highway Capacity Manual 6th Edition, Transportation Research Board, 2016.
2 If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0, LOS F is assigned to the individual lane group. For approach-based and intersection-wide assessments at unsignalized intersections, LOS is defined solely by control delay.

Lanes, Volumes, Timings
1: S 40th ave & W Chestnut Ave

05/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	36	0	0	6	0	708	12	0	798	10
Future Volume (vph)	0	0	36	0	0	6	0	708	12	0	798	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			5%			-5%	
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		368			613			322			443	
Travel Time (s)		12.5			20.9			6.3			8.6	
Confl. Peds. (#/hr)			2	2			2					2
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	36	0	0	6	0	708	12	0	798	10
Future Vol, veh/h	0	0	36	0	0	6	0	708	12	0	798	10
Conflicting Peds, #/hr	0	0	2	2	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	3	-	-	-3	-	-	5	-	-	-5	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	0	0	0	2	2	2	3	3	3
Mvmt Flow	0	0	42	0	0	7	0	833	14	0	939	12

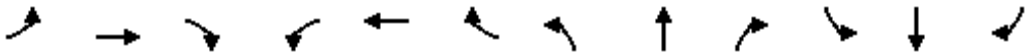
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	480	-	-	424	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.26	-	-	6.6	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.33	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	509	0	0	605	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	507	-	-	605	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	11	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	507	605	-	-
HCM Lane V/C Ratio	-	-	0.084	0.012	-	-
HCM Control Delay (s)	-	-	12.7	11	-	-
HCM Lane LOS	-	-	B	B	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-	-

Lanes, Volumes, Timings
1: S 40th ave & W Chestnut Ave

05/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	34	0	0	21	0	938	17	0	872	49
Future Volume (vph)	0	0	34	0	0	21	0	938	17	0	872	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			5%			-5%	
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		368			613			322			443	
Travel Time (s)		12.5			20.9			6.3			8.6	
Confl. Peds. (#/hr)									2	2		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	34	0	0	21	0	938	17	0	872	49
Future Vol, veh/h	0	0	34	0	0	21	0	938	17	0	872	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	3	-	-	-3	-	-	5	-	-	-5	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	1	1	1
Mvmt Flow	0	0	37	0	0	23	0	1009	18	0	938	53

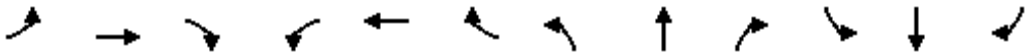
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	496	-	-	516	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.2	-	-	6.6	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.3	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	503	0	0	532	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	503	-	-	531	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	12.1	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	503	531	-	-
HCM Lane V/C Ratio	-	-	0.073	0.043	-	-
HCM Control Delay (s)	-	-	12.7	12.1	-	-
HCM Lane LOS	-	-	B	B	-	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-	-

Lanes, Volumes, Timings
1: S 40th ave & W Chestnut Ave

05/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	40	0	0	7	0	726	11	0	827	24
Future Volume (vph)	0	0	40	0	0	7	0	726	11	0	827	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			5%			-5%	
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		368			613			322			443	
Travel Time (s)		12.5			20.9			6.3			8.6	
Confl. Peds. (#/hr)	3		3	3		3	3		2	2		3
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	40	0	0	7	0	726	11	0	827	24
Future Vol, veh/h	0	0	40	0	0	7	0	726	11	0	827	24
Conflicting Peds, #/hr	3	0	3	3	0	3	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	3	-	-	-3	-	-	5	-	-	-5	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	3	3	3	0	0	0	5	5	5	3	3	3
Mvmt Flow	0	0	48	0	0	8	0	864	13	0	985	29

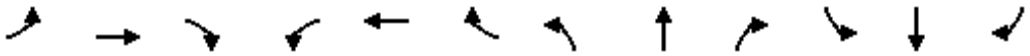
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	513	-	-	444	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.26	-	-	6.6	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.33	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	483	0	0	588	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	480	-	-	585	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.3	11.2	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	480	585	-	-
HCM Lane V/C Ratio	-	-	0.099	0.014	-	-
HCM Control Delay (s)	-	-	13.3	11.2	-	-
HCM Lane LOS	-	-	B	B	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-	-

Lanes, Volumes, Timings
1: S 40th ave & W Chestnut Ave

05/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	25	0	0	17	0	906	11	0	859	48
Future Volume (vph)	0	0	25	0	0	17	0	906	11	0	859	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			5%			-5%	
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		368			613			322			443	
Travel Time (s)		12.5			20.9			6.3			8.6	
Confl. Peds. (#/hr)	5					5			2	2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	6%	6%	6%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	25	0	0	17	0	906	11	0	859	48
Future Vol, veh/h	0	0	25	0	0	17	0	906	11	0	859	48
Conflicting Peds, #/hr	5	0	0	0	0	5	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	3	-	-	-3	-	-	5	-	-	-5	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	6	6	6	1	1	1	1	1	1
Mvmt Flow	0	0	26	0	0	18	0	934	11	0	886	49

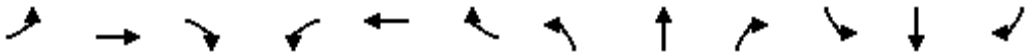
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	468	-	-	480	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.2	-	-	6.72	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.3	-	-	3.36	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	526	0	0	543	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	526	-	-	539	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.2	11.9	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	526	539	-	-
HCM Lane V/C Ratio	-	-	0.049	0.033	-	-
HCM Control Delay (s)	-	-	12.2	11.9	-	-
HCM Lane LOS	-	-	B	B	-	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-	-

Lanes, Volumes, Timings
1: S 40th ave & W Chestnut Ave

05/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	43	0	0	7	0	725	13	0	777	16
Future Volume (vph)	0	0	43	0	0	7	0	725	13	0	777	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			5%			-5%	
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		368			613			322			443	
Travel Time (s)		12.5			20.9			6.3			8.6	
Confl. Peds. (#/hr)			1	1			3		1	1		3
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	43	0	0	7	0	725	13	0	777	16
Future Vol, veh/h	0	0	43	0	0	7	0	725	13	0	777	16
Conflicting Peds, #/hr	0	0	1	1	0	0	3	0	1	1	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	3	-	-	-3	-	-	5	-	-	-5	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	0	0	0	3	3	3	3	3	3
Mvmt Flow	0	0	54	0	0	9	0	906	16	0	971	20

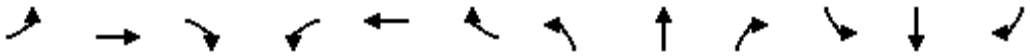
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	500	-	-	462	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.24	-	-	6.6	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	495	0	0	574	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	493	-	-	573	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	11.4	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	493	573	-	-
HCM Lane V/C Ratio	-	-	0.109	0.015	-	-
HCM Control Delay (s)	-	-	13.2	11.4	-	-
HCM Lane LOS	-	-	B	B	-	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-	-

Lanes, Volumes, Timings
1: S 40th ave & W Chestnut Ave

05/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	37	0	0	11	0	907	17	0	914	31
Future Volume (vph)	0	0	37	0	0	11	0	907	17	0	914	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			5%			-5%	
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		368			613			322			443	
Travel Time (s)		12.5			20.9			6.3			8.6	
Confl. Peds. (#/hr)			3	3			1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	8%	8%	8%	9%	9%	9%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	37	0	0	11	0	907	17	0	914	31
Future Vol, veh/h	0	0	37	0	0	11	0	907	17	0	914	31
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	3	-	-	-3	-	-	5	-	-	-5	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	8	8	8	9	9	9	2	2	2	3	3	3
Mvmt Flow	0	0	39	0	0	11	0	945	18	0	952	32

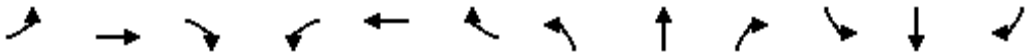
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	496	-	-	482	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.36	-	-	6.78	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.38	-	-	3.39	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	483	0	0	533	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	481	-	-	533	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	11.9	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	481	533	-	-
HCM Lane V/C Ratio	-	-	0.08	0.021	-	-
HCM Control Delay (s)	-	-	13.1	11.9	-	-
HCM Lane LOS	-	-	B	B	-	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	-

Lanes, Volumes, Timings
1: S 40th ave & W Chestnut Ave

05/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	7	67	23	6	3	20	732	16	15	719	15
Future Volume (vph)	40	7	67	23	6	3	20	732	16	15	719	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			5%			-5%	
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		368			613			322			443	
Travel Time (s)		12.5			20.9			6.3			8.6	
Confl. Peds. (#/hr)			2	2			2					2
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	10.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	7	67	23	6	3	20	732	16	15	719	15
Future Vol, veh/h	40	7	67	23	6	3	20	732	16	15	719	15
Conflicting Peds, #/hr	0	0	2	2	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	3	-	-	-3	-	-	5	-	-	-5	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	0	0	0	2	2	2	3	3	3
Mvmt Flow	47	8	79	27	7	4	24	861	19	18	846	18

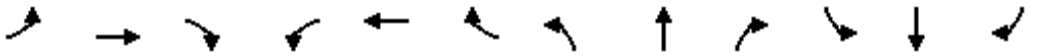
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1375	1821	436	1384	1821	440	866	0	0	880	0	0
Stage 1	893	893	-	919	919	-	-	-	-	-	-	-
Stage 2	482	928	-	465	902	-	-	-	-	-	-	-
Critical Hdwy	8.16	7.16	7.26	6.9	5.9	6.6	4.14	-	-	4.16	-	-
Critical Hdwy Stg 1	7.16	6.16	-	5.9	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.16	6.16	-	5.9	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.5	4	3.3	2.22	-	-	2.23	-	-
Pot Cap-1 Maneuver	82	56	545	132	106	592	773	-	-	757	-	-
Stage 1	259	307	-	345	411	-	-	-	-	-	-	-
Stage 2	491	293	-	597	417	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	71	50	543	91	95	592	772	-	-	757	-	-
Mov Cap-2 Maneuver	71	50	-	91	95	-	-	-	-	-	-	-
Stage 1	243	292	-	324	386	-	-	-	-	-	-	-
Stage 2	450	275	-	472	397	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	131.8	61.3	0.5	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	772	-	-	138	100	757	-	-
HCM Lane V/C Ratio	0.03	-	-	0.972	0.376	0.023	-	-
HCM Control Delay (s)	9.8	0.3	-	131.8	61.3	9.9	0.2	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	6.9	1.5	0.1	-	-

Lanes, Volumes, Timings
1: S 40th ave & W Chestnut Ave

05/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	21	34	26	19	26	39	1101	26	34	1077	69
Future Volume (vph)	27	21	34	26	19	26	39	1101	26	34	1077	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			-3%			5%			-5%	
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		368			613			322			443	
Travel Time (s)		12.5			20.9			6.3			8.6	
Confl. Peds. (#/hr)									2	2		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	115.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Traffic Vol, veh/h	27	21	34	26	19	26	39	1101	26	34	1077	69
Future Vol, veh/h	27	21	34	26	19	26	39	1101	26	34	1077	69
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	3	-	-	-3	-	-	5	-	-	-5	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	1	1	1
Mvmt Flow	29	23	37	28	20	28	42	1184	28	37	1158	74

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1955	2567	616	1949	2590	608	1232	0	0	1214	0	0
Stage 1	1269	1269	-	1284	1284	-	-	-	-	-	-	-
Stage 2	686	1298	-	665	1306	-	-	-	-	-	-	-
Critical Hdwy	8.1	7.1	7.2	6.9	5.9	6.6	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	7.1	6.1	-	5.9	4.9	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.1	6.1	-	5.9	4.9	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 28	~ 17	416	55	39	467	567	-	-	576	-	-
Stage 1	147	196	-	220	294	-	-	-	-	-	-	-
Stage 2	364	188	-	470	288	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 6	~ 10	416	-	24	466	567	-	-	575	-	-
Mov Cap-2 Maneuver	~ 6	~ 10	-	-	24	-	-	-	-	-	-	-
Stage 1	113	155	-	169	226	-	-	-	-	-	-	-
Stage 2	240	145	-	290	228	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 3474.4		1.6	1.3
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	567	-	-	12	-	575	-	-
HCM Lane V/C Ratio	0.074	-	-	7.348	-	0.064	-	-
HCM Control Delay (s)	11.9	1.3		$ 3474.4	-	11.7	1.1	-
HCM Lane LOS	B	A	-	F	-	B	A	-
HCM 95th %tile Q(veh)	0.2	-	-	12.2	-	0.2	-	-

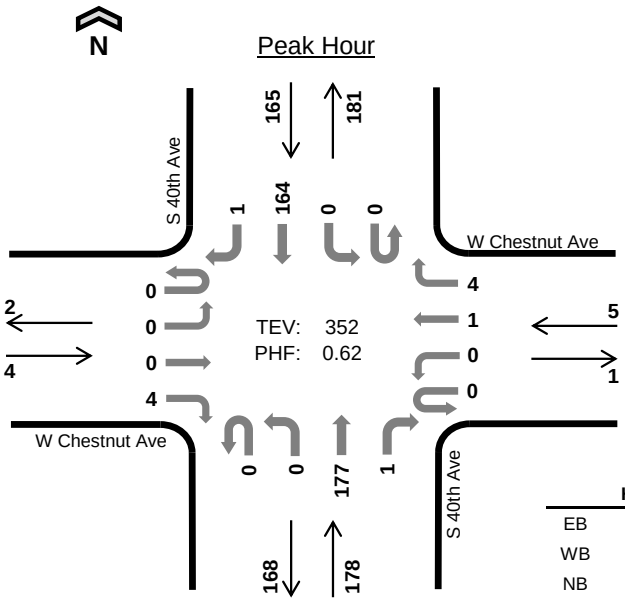
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

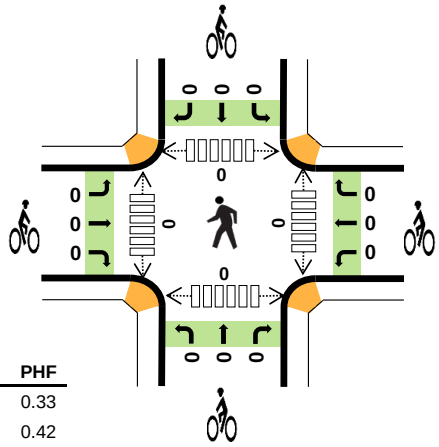
ATTACHMENT C

Existing Volumes

S 40th Ave
W Chestnut Ave

Date: 03/07/2023
Count Period: 12:00 AM to 6:00 AM
Peak Hour: 5:00 AM to 6:00 AM





	HV %:	PHF
EB	0.0%	0.33
WB	0.0%	0.42
NB	1.1%	0.74
SB	4.2%	0.52
TOTAL	2.6%	0.62

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
5:00 AM		0	0	0	0	0	0	0	2	0	0	18	0	0	0	15	0	35	0
5:15 AM		0	0	0	1	0	0	0	0	0	0	40	1	0	0	29	0	71	0
5:30 AM		0	0	0	0	0	0	1	2	0	0	59	0	0	0	41	1	104	0
5:45 AM		0	0	0	3	0	0	0	0	0	0	60	0	0	0	79	0	142	352
Peak Hour	All	0	0	0	4	0	0	1	4	0	0	177	1	0	0	164	1	352	0
	HV	0	0	0	0	0	0	0	0	0	0	2	0	0	0	7	0	9	0
	HV%	-	-	-	0%	-	-	0%	0%	-	-	1%	0%	-	-	4%	0%	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
5:00 AM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 AM	0	0	0	4	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	2	7	*9*	0	0	0	0	*0*	0	0	0	0	*0*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 AM	0	0	0	0	0	0	0	1	0	0	9	0	0	0	11	2	23	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	15	0	0	0	11	0	26	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	6	0	11	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	7	0	17	77
1:00 AM	0	0	0	0	0	0	0	1	0	0	4	0	0	0	6	0	11	65
1:15 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	7	46
1:30 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	10	45
1:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5	33
2:00 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	9	0	15	37
2:15 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	5	35
2:30 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	6	0	17	42
2:45 AM	0	0	0	1	0	0	0	0	0	0	5	0	0	0	2	0	8	45
3:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	7	37
3:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	10	42
3:30 AM	0	0	0	2	0	0	0	0	0	0	13	0	0	0	11	0	26	51
3:45 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	10	1	22	65
4:00 AM	0	0	0	0	0	0	0	0	0	0	14	0	0	0	7	0	21	79
4:15 AM	0	0	0	0	0	0	0	1	0	0	20	1	0	0	6	0	28	97
4:30 AM	0	0	0	1	0	0	0	0	0	0	30	0	0	0	11	1	43	114
4:45 AM	0	0	0	1	0	0	0	0	0	0	24	0	0	0	23	0	48	140
5:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**18**	**0**	**0**	**0**	**15**	**0**	**35**	154
5:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**1**	**0**	**0**	**29**	**0**	**71**	197
5:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**59**	**0**	**0**	**0**	**41**	**1**	**104**	258
5:45 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**60**	**0**	**0**	**0**	**79**	**0**	**142**	**352**
Count Total	0	0	0	9	0	0	1	7	0	0	374	2	0	0	314	5	712	0
Peak Hour All	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**4**	**0**	**0**	**177**	**1**	**0**	**0**	**164**	**1**	**352**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**7**	**0**	**9**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**0%**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**-**	**4%**	**0%**	**3%**	**0**

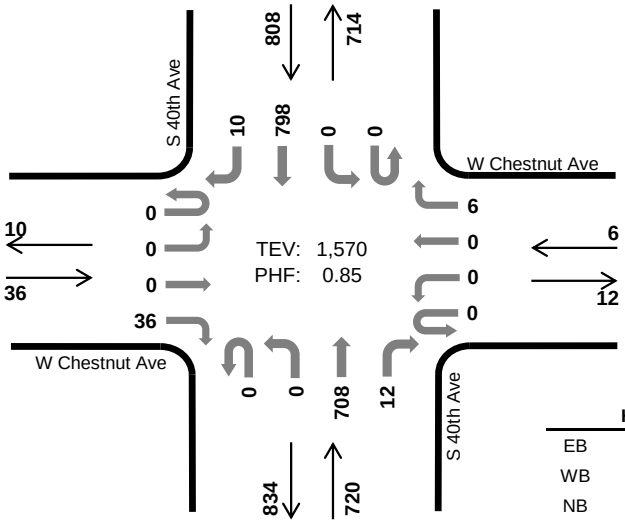
Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

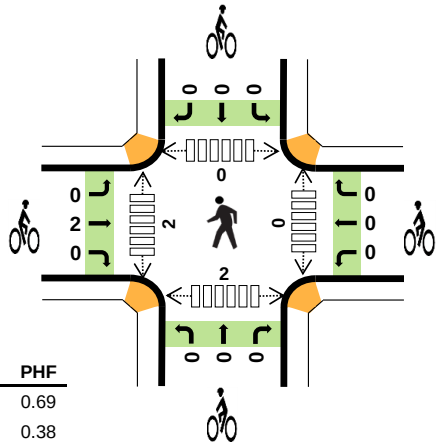
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
12:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
12:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
12:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
12:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
2:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
2:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
2:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:00 AM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 AM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	1	*1*
4:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 AM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 AM	**0**	**0**	**0**	**4**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 AM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	0	0	5	18	*23*	0	0	0	0	*0*	0	1	0	1	*2*
Peak Hour	**0**	**0**	**2**	**7**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

S 40th Ave
W Chestnut Ave

Date: 03/07/2023
Count Period: 6:00 AM to 12:00 PM
Peak Hour: 7:15 AM to 8:15 AM

Peak Hour





	HV %:	PHF
EB	2.8%	0.69
WB	0.0%	0.38
NB	2.4%	0.89
SB	2.8%	0.82
TOTAL	2.6%	0.85

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	9	0	0	0	0	0	0	148	4	0	0	186	0	347	0
7:30 AM		0	0	0	5	0	0	0	4	0	0	185	4	0	0	241	2	441	0
7:45 AM		0	0	0	13	0	0	0	1	0	0	200	3	0	0	243	3	463	0
8:00 AM		0	0	0	9	0	0	0	1	0	0	175	1	0	0	128	5	319	1,570
Peak Hour	All	0	0	0	36	0	0	0	6	0	0	708	12	0	0	798	10	1,570	0
	HV	0	0	0	1	0	0	0	0	0	0	15	2	0	0	23	0	41	0
	HV%	-	-	-	3%	-	-	-	0%	-	-	2%	17%	-	-	3%	0%	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	0	0	6	13	*19*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	4	5	*9*	1	0	0	0	*1*	0	1	0	1	*2*
7:45 AM	1	0	4	3	*8*	1	0	0	0	*1*	0	0	0	1	*1*
8:00 AM	0	0	3	2	*5*	0	0	0	0	*0*	0	1	0	0	*1*
Peak Hour	1	0	17	23	*41*	2	0	0	0	*2*	0	2	0	2	*4*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	5	0	0	0	1	0	0	69	1	0	0	58	0	134	0
6:15 AM	0	0	0	1	0	0	0	1	0	0	93	1	0	0	91	0	187	0
6:30 AM	0	0	0	4	0	0	0	2	0	0	108	0	0	0	133	1	248	0
6:45 AM	0	0	0	7	0	0	0	4	0	0	123	0	0	0	138	1	273	842
7:00 AM	0	0	0	3	0	0	0	3	0	0	108	1	0	0	132	3	250	958
7:15 AM	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**148**	**4**	**0**	**0**	**186**	**0**	**347**	1,118
7:30 AM	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**4**	**0**	**0**	**185**	**4**	**0**	**0**	**241**	**2**	**441**	1,311
7:45 AM	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**1**	**0**	**0**	**200**	**3**	**0**	**0**	**243**	**3**	**463**	1,501
8:00 AM	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**1**	**0**	**0**	**175**	**1**	**0**	**0**	**128**	**5**	**319**	**1,570**
8:15 AM	0	0	0	7	0	0	0	6	0	0	155	2	0	0	121	4	295	1,518
8:30 AM	0	0	0	3	0	0	0	1	0	0	135	1	0	0	149	1	290	1,367
8:45 AM	0	0	0	2	0	0	0	4	0	0	148	1	0	0	189	2	346	1,250
9:00 AM	0	0	0	0	0	0	0	2	0	0	138	2	0	0	155	1	298	1,229
9:15 AM	0	0	0	5	0	0	0	1	0	0	144	1	0	0	148	4	303	1,237
9:30 AM	0	0	0	6	0	0	0	0	0	0	156	1	0	0	136	1	300	1,247
9:45 AM	0	0	0	1	0	0	0	1	0	0	141	1	0	0	179	3	326	1,227
10:00 AM	0	0	0	5	0	0	0	4	0	0	124	2	0	0	166	6	307	1,236
10:15 AM	0	0	0	8	0	0	0	2	0	0	139	1	0	0	186	5	341	1,274
10:30 AM	0	0	0	2	0	0	0	2	0	0	135	2	0	0	179	0	320	1,294
10:45 AM	0	0	0	7	0	0	0	1	0	0	160	1	0	0	184	4	357	1,325
11:00 AM	0	0	0	2	0	0	0	4	0	0	163	2	0	0	168	2	341	1,359
11:15 AM	0	0	0	2	0	0	0	2	0	0	166	3	0	0	180	3	356	1,374
11:30 AM	0	0	0	9	0	0	0	2	0	0	194	4	0	0	163	1	373	1,427
11:45 AM	0	0	0	1	0	0	0	4	0	0	170	1	0	0	205	5	386	1,456
Count Total	0	0	0	116	0	0	0	53	0	0	3,477	40	0	0	3,858	57	7,601	0
Peak Hour All	**0**	**0**	**0**	**36**	**0**	**0**	**0**	**6**	**0**	**0**	**708**	**12**	**0**	**0**	**798**	**10**	**1,570**	**0**
Peak Hour HV	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**2**	**0**	**0**	**23**	**0**	**41**	**0**
Peak Hour HV%	**-**	**-**	**-**	**3%**	**-**	**-**	**-**	**0%**	**-**	**-**	**2%**	**17%**	**-**	**-**	**3%**	**0%**	**3%**	**0**

Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	0	4	6	*10*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	0	8	1	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	0	0	2	1	*3*	1	0	0	0	*1*	0	2	0	0	*2*
7:15 AM	**0**	**0**	**6**	**13**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**0**	**0**	**4**	**5**	***9***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**1**	*2*
7:45 AM	**1**	**0**	**4**	**3**	***8***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
8:00 AM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
8:15 AM	0	1	5	3	*9*	1	0	0	0	*1*	0	0	0	0	*0*
8:30 AM	1	0	4	13	*18*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	6	7	*13*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 AM	0	0	7	5	*12*	0	0	0	0	*0*	0	1	0	1	*2*
9:15 AM	0	0	5	5	*10*	0	0	0	0	*0*	0	0	0	0	*0*
9:30 AM	0	0	10	1	*11*	0	0	0	0	*0*	0	0	0	0	*0*
9:45 AM	0	0	4	6	*10*	0	0	0	0	*0*	0	0	0	0	*0*
10:00 AM	0	0	2	5	*7*	0	0	0	0	*0*	0	0	0	1	*1*
10:15 AM	0	0	4	7	*11*	0	0	0	0	*0*	0	0	0	0	*0*
10:30 AM	0	0	6	1	*7*	0	0	0	0	*0*	0	0	1	0	*1*
10:45 AM	0	0	2	4	*6*	0	0	0	0	*0*	0	0	3	0	*3*
11:00 AM	0	0	6	2	*8*	0	0	0	0	*0*	0	0	0	0	*0*
11:15 AM	0	0	4	4	*8*	0	0	0	0	*0*	0	0	1	0	*1*
11:30 AM	0	0	10	5	*15*	0	0	0	0	*0*	0	0	2	0	*2*
11:45 AM	0	0	4	3	*7*	0	0	0	0	*0*	0	1	0	0	*1*
Count Total	2	1	113	104	*220*	4	0	0	0	*4*	0	6	7	4	*17*
Peak Hour	**1**	**0**	**17**	**23**	***41***	**2**	**0**	**0**	**0**	***2***	**0**	**2**	**0**	**2**	***4***

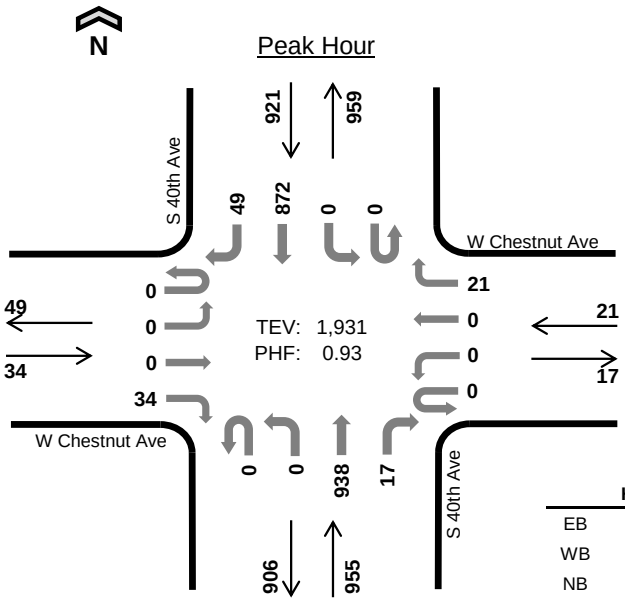
Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	0	6	0	0	0	2	0	0	172	4	0	0	201	6	391	0
12:15 PM	0	0	0	2	0	0	0	1	0	0	168	2	0	0	189	4	366	0
12:30 PM	0	0	0	10	0	0	0	0	0	0	181	1	0	0	156	5	353	0
12:45 PM	0	0	1	4	0	0	0	0	0	0	170	1	0	0	183	2	361	1,471
1:00 PM	0	0	0	7	0	0	0	3	0	0	170	3	0	0	161	7	351	1,431
1:15 PM	0	0	0	5	0	0	0	1	0	0	153	4	0	0	150	7	320	1,385
1:30 PM	0	0	0	3	0	0	0	2	0	0	157	4	0	0	178	6	350	1,382
1:45 PM	0	0	0	5	0	0	0	4	0	0	177	3	0	0	177	8	374	1,395
2:00 PM	0	0	0	4	0	0	0	2	0	0	160	3	0	0	194	3	366	1,410
2:15 PM	0	0	0	7	0	0	0	3	0	0	178	3	0	0	210	1	402	1,492
2:30 PM	0	0	0	4	0	0	0	6	0	0	224	3	0	0	207	3	447	1,589
2:45 PM	0	0	0	8	0	0	1	2	0	0	223	4	0	0	221	2	461	1,676
3:00 PM	0	0	1	11	0	0	0	0	0	0	212	4	0	0	210	8	446	1,756
3:15 PM	0	0	0	2	0	0	0	2	0	0	219	5	0	0	151	5	384	1,738
3:30 PM	0	0	0	8	0	0	0	1	0	0	220	2	0	0	230	5	466	1,757
3:45 PM	0	0	0	4	0	0	0	3	0	0	205	2	0	0	194	5	413	1,709
4:00 PM	0	0	0	10	0	0	0	2	0	0	214	3	0	0	214	11	454	1,717
4:15 PM	0	0	0	8	0	0	0	6	0	0	219	3	0	0	212	10	458	1,791
4:30 PM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**0**	**220**	**3**	**0**	**0**	**198**	**12**	**448**	1,773
4:45 PM	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**4**	**0**	**0**	**222**	**3**	**0**	**0**	**212**	**14**	**465**	1,825
5:00 PM	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**1**	**0**	**0**	**261**	**8**	**0**	**0**	**229**	**8**	**520**	1,891
5:15 PM	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**7**	**0**	**0**	**235**	**3**	**0**	**0**	**233**	**15**	**498**	**1,931**
5:30 PM	0	0	0	1	1	0	0	4	0	0	170	7	0	0	187	4	374	1,857
5:45 PM	0	0	0	5	0	0	0	5	0	0	180	2	0	0	212	8	412	1,804
Count Total	0	0	2	148	1	0	1	70	0	0	4,710	80	0	0	4,709	159	9,880	0
Peak Hour All	**0**	**0**	**0**	**34**	**0**	**0**	**0**	**21**	**0**	**0**	**938**	**17**	**0**	**0**	**872**	**49**	**1,931**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**5**	**0**	**14**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**-**	**1%**	**0%**	**1%**	**0**

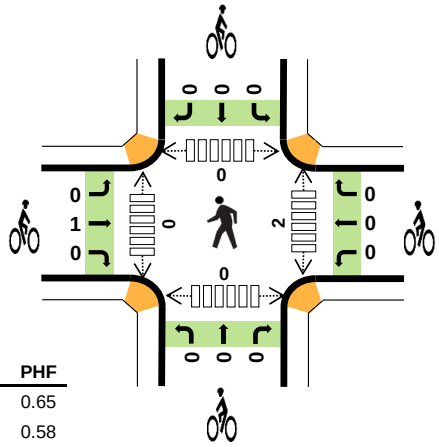
Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
12:00 PM	0	0	5	6	*11*	0	0	0	0	*0*	0	0	0	0	*0*
12:15 PM	0	0	6	2	*8*	0	0	0	0	*0*	0	0	0	1	*1*
12:30 PM	0	0	9	1	*10*	0	0	0	0	*0*	0	0	0	0	*0*
12:45 PM	0	0	5	4	*9*	0	0	0	0	*0*	0	0	0	0	*0*
1:00 PM	0	0	3	6	*9*	0	0	0	0	*0*	0	0	0	0	*0*
1:15 PM	0	0	7	4	*11*	0	0	0	0	*0*	0	0	0	0	*0*
1:30 PM	0	0	2	6	*8*	0	0	0	0	*0*	0	0	0	0	*0*
1:45 PM	0	0	6	3	*9*	0	0	0	0	*0*	0	0	1	0	*1*
2:00 PM	1	0	3	2	*6*	0	0	0	0	*0*	1	0	0	0	*1*
2:15 PM	1	0	8	1	*10*	0	0	0	0	*0*	0	0	0	0	*0*
2:30 PM	0	0	8	2	*10*	0	0	0	0	*0*	1	0	1	0	*2*
2:45 PM	0	0	11	3	*14*	0	0	0	0	*0*	1	2	2	0	*5*
3:00 PM	0	0	5	6	*11*	0	1	0	0	*1*	0	1	1	0	*2*
3:15 PM	0	0	2	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	0	0	7	6	*13*	0	1	0	0	*1*	0	0	0	0	*0*
3:45 PM	1	1	6	4	*12*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	1	1	6	*8*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	1	0	4	3	*8*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**1**	**1**	***2***	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**0**	**0**	*1*
4:45 PM	**0**	**0**	**5**	**1**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	1	3	*4*	0	1	0	0	*1*	0	0	0	1	*1*
Count Total	4	2	110	76	*192*	1	3	0	0	*4*	5	3	5	2	*15*
Peak Hour	**0**	**0**	**9**	**5**	***14***	**1**	**0**	**0**	**0**	***1***	**2**	**0**	**0**	**0**	***2***

S 40th Ave
W Chestnut Ave



Date: 03/07/2023
Count Period: 12:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.0%	0.65
WB	0.0%	0.58
NB	0.9%	0.89
SB	0.5%	0.93
TOTAL	0.7%	0.93

Six-Hour Count Summaries

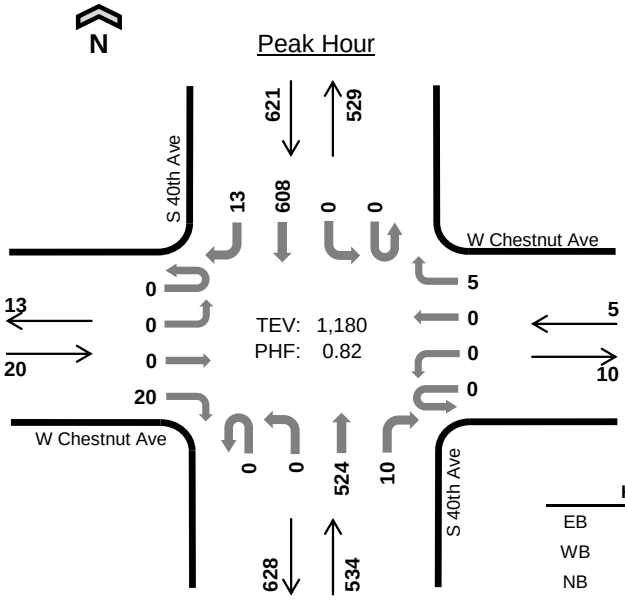
Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	0	6	0	0	0	9	0	0	220	3	0	0	198	12	448	0
4:45 PM		0	0	0	10	0	0	0	4	0	0	222	3	0	0	212	14	465	0
5:00 PM		0	0	0	13	0	0	0	1	0	0	261	8	0	0	229	8	520	0
5:15 PM		0	0	0	5	0	0	0	7	0	0	235	3	0	0	233	15	498	1,931
Peak Hour	All	0	0	0	34	0	0	0	21	0	0	938	17	0	0	872	49	1,931	0
	HV	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14	0
	HV%	-	-	-	0%	-	-	-	0%	-	-	1%	0%	-	-	1%	0%	1%	0

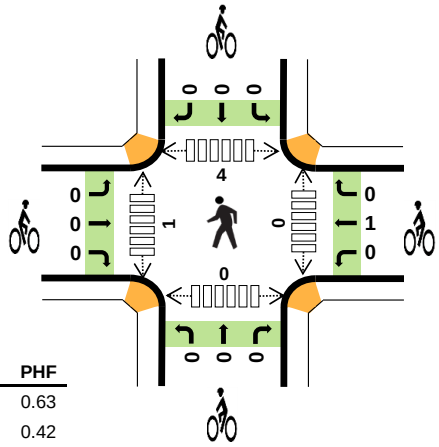
Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	0	0	1	1	*2*	1	0	0	0	*1*	1	0	0	0	*1*
4:45 PM	0	0	5	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	0	0	2	2	*4*	0	0	0	0	*0*	1	0	0	0	*1*
5:15 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	9	5	*14*	1	0	0	0	*1*	2	0	0	0	*2*

S 40th Ave
W Chestnut Ave

Date: 03/07/2023
Count Period: 6:00 PM to 12:00 AM
Peak Hour: 6:00 PM to 7:00 PM





	HV %:	PHF
EB	0.0%	0.63
WB	0.0%	0.42
NB	1.3%	0.75
SB	0.6%	0.86
TOTAL	0.9%	0.82

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM		0	0	0	6	0	0	0	3	0	0	176	1	0	0	169	5	360	0
6:15 PM		0	0	0	8	0	0	0	1	0	0	127	1	0	0	179	2	318	0
6:30 PM		0	0	0	3	0	0	0	0	0	0	119	5	0	0	150	3	280	0
6:45 PM		0	0	0	3	0	0	0	1	0	0	102	3	0	0	110	3	222	1,180
Peak Hour	All	0	0	0	20	0	0	0	5	0	0	524	10	0	0	608	13	1,180	0
	HV	0	0	0	0	0	0	0	0	0	0	7	0	0	0	4	0	11	0
	HV%	-	-	-	0%	-	-	-	0%	-	-	1%	0%	-	-	1%	0%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 PM	0	0	1	1	*2*	0	1	0	0	*1*	0	0	1	0	*1*
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 PM	0	0	5	3	*8*	0	0	0	0	*0*	0	0	3	0	*3*
6:45 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	1	0	0	*1*
Peak Hour	0	0	7	4	*11*	0	1	0	0	*1*	0	1	4	0	*5*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**176**	**1**	**0**	**0**	**169**	**5**	**360**	0
6:15 PM	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**1**	**0**	**0**	**127**	**1**	**0**	**0**	**179**	**2**	**318**	0
6:30 PM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**119**	**5**	**0**	**0**	**150**	**3**	**280**	0
6:45 PM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**102**	**3**	**0**	**0**	**110**	**3**	**222**	**1,180**
7:00 PM	0	0	0	3	0	0	0	1	0	0	97	3	0	0	97	4	205	1,025
7:15 PM	0	0	0	3	0	0	0	1	0	0	110	0	0	0	111	1	226	933
7:30 PM	0	0	0	2	0	0	0	3	0	0	129	2	0	0	104	1	241	894
7:45 PM	0	0	0	1	0	0	0	2	0	0	86	0	0	0	81	4	174	846
8:00 PM	0	0	0	3	0	0	0	1	0	0	86	2	0	0	77	2	171	812
8:15 PM	0	0	0	1	0	0	0	0	0	0	83	2	0	0	74	1	161	747
8:30 PM	0	0	0	2	0	0	0	1	0	0	78	0	0	0	68	1	150	656
8:45 PM	0	0	0	1	0	0	0	1	0	0	87	1	0	0	64	1	155	637
9:00 PM	0	0	0	1	0	0	0	3	0	0	59	1	0	0	60	2	126	592
9:15 PM	0	0	0	2	0	0	0	1	0	0	50	2	0	0	45	1	101	532
9:30 PM	0	0	0	1	0	0	0	0	0	0	40	0	0	0	34	0	75	457
9:45 PM	0	0	0	1	0	0	0	0	0	0	26	0	0	0	37	2	66	368
10:00 PM	0	0	0	1	0	0	0	0	0	0	47	1	0	0	43	2	94	336
10:15 PM	0	0	0	2	0	0	0	0	0	0	35	0	0	0	30	0	67	302
10:30 PM	0	0	0	1	0	0	0	0	0	0	17	0	0	0	35	0	53	280
10:45 PM	0	0	0	3	0	0	0	1	0	0	20	2	0	0	32	2	60	274
11:00 PM	0	0	0	1	0	0	0	0	0	0	15	0	0	0	15	1	32	212
11:15 PM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	24	0	34	179
11:30 PM	0	0	0	0	0	0	0	1	0	0	12	0	0	0	17	0	30	156
11:45 PM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	10	0	21	117
Count Total	0	0	0	49	0	0	0	21	0	0	1,622	26	0	0	1,666	38	3,422	0
Peak Hour All	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**5**	**0**	**0**	**524**	**10**	**0**	**0**	**608**	**13**	**1,180**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**4**	**0**	**11**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**-**	**1%**	**0%**	**1%**	**0**

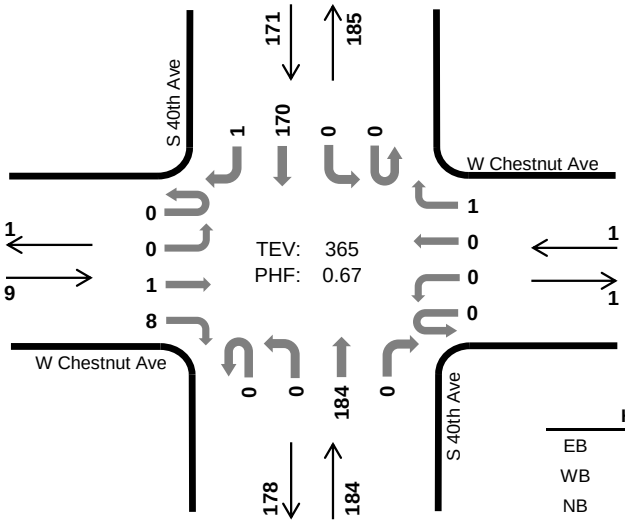
Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

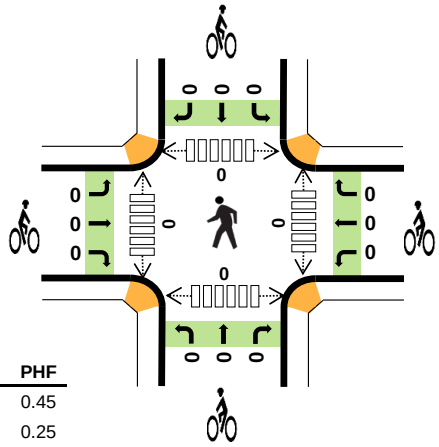
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 PM	**0**	**0**	**1**	**1**	***2***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**1**	**0**	*1*
6:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:30 PM	**0**	**0**	**5**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**3**	**0**	*3*
6:45 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
7:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	1	0	0	*1*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
7:45 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	1	0	0	*1*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
10:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
10:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	1	*1*
10:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
10:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
11:00 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
11:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
11:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
11:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	0	10	9	*19*	0	1	0	0	*1*	2	5	4	1	*12*
Peak Hour	**0**	**0**	**7**	**4**	***11***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**4**	**0**	***5***

S 40th Ave
W Chestnut Ave

Date: 03/08/2023
Count Period: 12:00 AM to 6:00 AM
Peak Hour: 5:00 AM to 6:00 AM

Peak Hour





	HV %:	PHF
EB	0.0%	0.45
WB	0.0%	0.25
NB	0.5%	0.70
SB	2.9%	0.54
TOTAL	1.6%	0.67

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
5:00 AM		0	0	0	0	0	0	0	0	0	0	30	0	0	0	22	0	52	0
5:15 AM		0	0	0	1	0	0	0	0	0	0	37	0	0	0	21	0	59	0
5:30 AM		0	0	0	3	0	0	0	0	0	0	66	0	0	0	48	1	118	0
5:45 AM		0	0	1	4	0	0	0	1	0	0	51	0	0	0	79	0	136	365
Peak Hour	All	0	0	1	8	0	0	0	1	0	0	184	0	0	0	170	1	365	0
	HV	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6	0
	HV%	-	-	0%	0%	-	-	-	0%	-	-	1%	-	-	-	3%	0%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
5:00 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 AM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	1	5	*6*	0	0	0	0	*0*	0	0	0	0	*0*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	18	0	26	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	7	0	16	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	10	1	0	0	4	1	16	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	13	2	18	76
1:00 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	7	0	16	66
1:15 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	11	1	19	69
1:30 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	11	0	18	71
1:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	10	0	15	68
2:00 AM	0	0	0	1	0	0	0	0	0	0	7	0	0	0	10	1	19	71
2:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	6	0	11	63
2:30 AM	0	0	0	1	0	0	0	0	0	0	6	0	0	0	3	1	11	56
2:45 AM	0	0	0	1	0	0	0	0	0	0	8	0	0	0	6	1	16	57
3:00 AM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	3	0	7	45
3:15 AM	0	0	0	0	0	0	0	3	0	0	5	0	0	0	2	0	10	44
3:30 AM	0	0	0	1	0	0	0	0	0	0	7	0	0	0	9	0	17	50
3:45 AM	0	0	0	1	0	0	0	0	0	0	9	0	0	0	7	0	17	51
4:00 AM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	11	0	23	67
4:15 AM	0	0	0	0	0	0	0	0	0	0	13	0	0	0	10	0	23	80
4:30 AM	0	0	0	0	0	0	0	0	0	0	26	0	0	0	9	0	35	98
4:45 AM	0	0	0	1	0	0	0	2	0	0	23	0	0	0	19	0	45	126
5:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**0**	**0**	**22**	**0**	**52**	155
5:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**37**	**0**	**0**	**0**	**21**	**0**	**59**	191
5:30 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**66**	**0**	**0**	**0**	**48**	**1**	**118**	274
5:45 AM	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**51**	**0**	**0**	**0**	**79**	**0**	**136**	**365**
Count Total	0	0	1	15	0	0	0	6	0	0	366	1	0	0	346	8	743	0
Peak Hour All	**0**	**0**	**1**	**8**	**0**	**0**	**0**	**1**	**0**	**0**	**184**	**0**	**0**	**0**	**170**	**1**	**365**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**6**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**1%**	**-**	**-**	**-**	**3%**	**0%**	**2%**	**0**

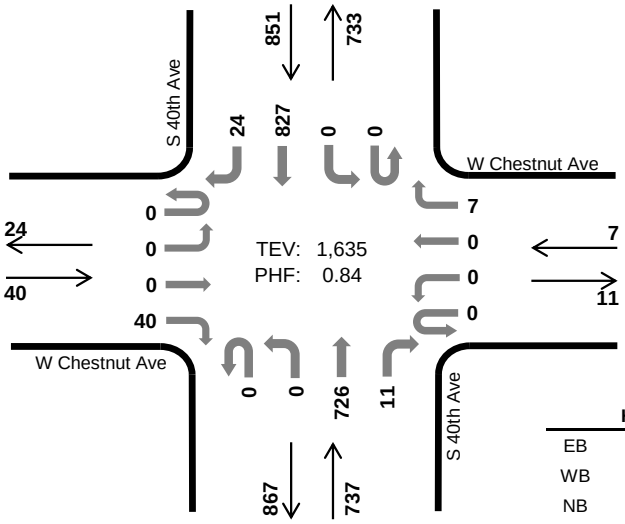
Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
12:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
12:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
12:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
12:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:30 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
1:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
2:00 AM	1	0	2	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
2:15 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
2:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 AM	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	1	0	5	6	*12*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**0**	**1**	**5**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

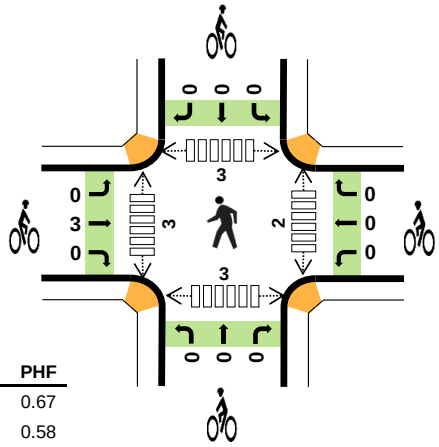
S 40th Ave
W Chestnut Ave

Date: 03/08/2023
Count Period: 6:00 AM to 12:00 PM
Peak Hour: 7:15 AM to 8:15 AM

Peak Hour



	HV %:	PHF
EB	2.5%	0.67
WB	0.0%	0.58
NB	4.6%	0.82
SB	3.2%	0.85
TOTAL	3.8%	0.84



Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	6	0	0	0	1	0	0	147	1	0	0	201	1	357	0
7:30 AM		0	0	0	15	0	0	0	3	0	0	180	4	0	0	246	5	453	0
7:45 AM		0	0	0	12	0	0	0	2	0	0	224	2	0	0	236	11	487	0
8:00 AM		0	0	0	7	0	0	0	1	0	0	175	4	0	0	144	7	338	1,635
Peak Hour	All	0	0	0	40	0	0	0	7	0	0	726	11	0	0	827	24	1,635	0
	HV	0	0	0	1	0	0	0	0	0	0	33	1	0	0	27	0	62	0
	HV%	-	-	-	3%	-	-	-	0%	-	-	5%	9%	-	-	3%	0%	4%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	0	0	4	10	*14*	0	0	0	0	*0*	0	1	1	0	*2*
7:30 AM	0	0	7	10	*17*	2	0	0	0	*2*	0	1	0	2	*3*
7:45 AM	1	0	13	4	*18*	1	0	0	0	*1*	0	1	0	1	*2*
8:00 AM	0	0	10	3	*13*	0	0	0	0	*0*	2	0	2	0	*4*
Peak Hour	1	0	34	27	*62*	3	0	0	0	*3*	2	3	3	3	*11*

Six-Hour Count Summaries

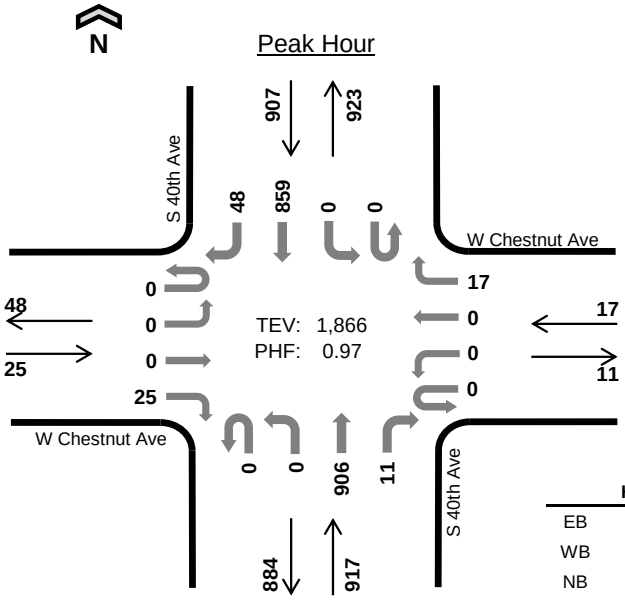
Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	3	0	0	0	1	0	0	62	2	0	0	63	1	132	0
6:15 AM	0	0	0	3	0	0	0	1	0	0	73	1	0	0	89	0	167	0
6:30 AM	0	0	0	5	0	0	0	5	0	0	122	0	0	0	121	1	254	0
6:45 AM	0	0	0	5	0	0	0	0	0	0	126	0	0	0	143	3	277	830
7:00 AM	0	0	0	5	0	0	0	0	0	0	130	3	0	0	121	1	260	958
7:15 AM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**1**	**0**	**0**	**147**	**1**	**0**	**0**	**201**	**1**	**357**	1,148
7:30 AM	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**3**	**0**	**0**	**180**	**4**	**0**	**0**	**246**	**5**	**453**	1,347
7:45 AM	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**2**	**0**	**0**	**224**	**2**	**0**	**0**	**236**	**11**	**487**	1,557
8:00 AM	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**1**	**0**	**0**	**175**	**4**	**0**	**0**	**144**	**7**	**338**	**1,635**
8:15 AM	0	0	0	9	0	0	0	2	0	0	154	0	0	0	147	5	317	1,595
8:30 AM	0	0	0	4	0	0	0	0	0	0	169	0	0	0	165	2	340	1,482
8:45 AM	0	0	0	0	0	0	0	4	0	0	152	2	0	0	181	2	341	1,336
9:00 AM	0	0	0	5	0	0	0	2	0	0	154	0	0	0	156	2	319	1,317
9:15 AM	0	0	0	3	0	0	0	3	0	0	155	3	0	0	152	2	318	1,318
9:30 AM	0	0	0	5	0	0	0	3	0	0	134	1	0	0	142	1	286	1,264
9:45 AM	0	0	0	7	0	0	0	2	0	0	156	2	0	0	160	4	331	1,254
10:00 AM	0	0	0	4	0	0	0	2	0	0	151	2	0	0	159	3	321	1,256
10:15 AM	0	0	0	8	0	0	0	1	0	0	113	1	0	0	158	2	283	1,221
10:30 AM	0	0	0	5	0	0	0	2	0	0	163	3	0	0	161	2	336	1,271
10:45 AM	0	0	0	0	0	0	0	2	0	0	167	3	0	0	185	5	362	1,302
11:00 AM	0	0	0	1	0	0	0	6	0	0	172	2	0	0	190	6	377	1,358
11:15 AM	0	0	0	8	0	0	0	2	0	0	164	5	0	0	170	0	349	1,424
11:30 AM	0	0	0	6	0	0	0	2	0	0	163	1	0	0	163	4	339	1,427
11:45 AM	0	0	0	6	0	0	0	0	0	0	166	1	0	0	196	3	372	1,437
Count Total	0	0	0	132	0	0	0	47	0	0	3,572	43	0	0	3,849	73	7,716	0
Peak Hour All	**0**	**0**	**0**	**40**	**0**	**0**	**0**	**7**	**0**	**0**	**726**	**11**	**0**	**0**	**827**	**24**	**1,635**	**0**
Peak Hour HV	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**33**	**1**	**0**	**0**	**27**	**0**	**62**	**0**
Peak Hour HV%	**-**	**-**	**-**	**3%**	**-**	**-**	**-**	**0%**	**-**	**-**	**5%**	**9%**	**-**	**-**	**3%**	**0%**	**4%**	**0**

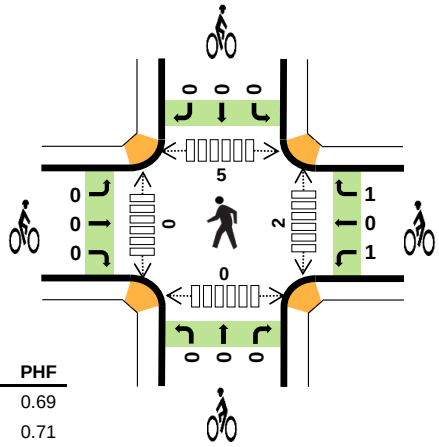
Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	0	2	3	*5*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	1	1	2	7	*11*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	0	3	0	*3*	0	0	0	0	*0*	0	1	0	0	*1*
7:00 AM	0	0	5	6	*11*	1	0	0	0	*1*	0	1	0	1	*2*
7:15 AM	**0**	**0**	**4**	**10**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	*2*
7:30 AM	**0**	**0**	**7**	**10**	***17***	**2**	**0**	**0**	**0**	***2***	**0**	**1**	**0**	**2**	*3*
7:45 AM	**1**	**0**	**13**	**4**	***18***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**1**	*2*
8:00 AM	**0**	**0**	**10**	**3**	***13***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**2**	**0**	***4***
8:15 AM	0	0	5	11	*16*	0	0	0	0	*0*	0	1	0	0	*1*
8:30 AM	1	0	7	11	*19*	0	0	0	0	*0*	0	0	0	2	*2*
8:45 AM	0	0	3	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 AM	0	0	6	3	*9*	0	0	0	0	*0*	0	0	0	1	*1*
9:15 AM	0	0	3	2	*5*	0	0	0	0	*0*	0	0	0	1	*1*
9:30 AM	0	0	5	5	*10*	0	0	0	0	*0*	0	0	0	0	*0*
9:45 AM	0	0	2	4	*6*	0	0	0	0	*0*	0	0	1	0	*1*
10:00 AM	0	0	6	4	*10*	0	0	0	0	*0*	0	0	1	0	*1*
10:15 AM	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
10:30 AM	0	1	2	2	*5*	0	0	0	0	*0*	0	0	0	1	*1*
10:45 AM	0	0	2	4	*6*	0	0	0	0	*0*	0	0	0	0	*0*
11:00 AM	0	0	5	10	*15*	0	0	0	0	*0*	0	0	0	0	*0*
11:15 AM	0	0	1	4	*5*	0	0	0	0	*0*	0	1	0	0	*1*
11:30 AM	0	0	4	7	*11*	0	0	0	0	*0*	0	0	0	0	*0*
11:45 AM	0	0	2	7	*9*	0	0	0	0	*0*	0	1	0	0	*1*
Count Total	3	2	102	123	*230*	4	0	0	0	*4*	2	8	5	9	*24*
Peak Hour	**1**	**0**	**34**	**27**	***62***	**3**	**0**	**0**	**0**	***3***	**2**	**3**	**3**	**3**	***11***

S 40th Ave
W Chestnut Ave

Date: 03/08/2023
Count Period: 12:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.0%	0.69
WB	5.9%	0.71
NB	0.7%	0.92
SB	1.0%	0.91
TOTAL	0.9%	0.97

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	0	4	0	0	0	5	0	0	230	2	0	0	221	14	476	0
4:45 PM		0	0	0	9	0	0	0	3	0	0	209	1	0	0	215	7	444	0
5:00 PM		0	0	0	6	0	0	0	6	0	0	246	4	0	0	189	13	464	0
5:15 PM		0	0	0	6	0	0	0	3	0	0	221	4	0	0	234	14	482	1,866
Peak Hour	All	0	0	0	25	0	0	0	17	0	0	906	11	0	0	859	48	1,866	0
	HV	0	0	0	0	0	0	0	1	0	0	6	0	0	0	9	0	16	0
	HV%	-	-	-	0%	-	-	-	6%	-	-	1%	0%	-	-	1%	0%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	0	1	1	3	*5*	0	0	0	0	*0*	1	0	5	0	*6*
4:45 PM	0	0	2	2	*4*	0	2	0	0	*2*	0	0	0	0	*0*
5:00 PM	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	1	3	*4*	0	0	0	0	*0*	1	0	0	0	*1*
Peak Hour	0	1	6	9	*16*	0	2	0	0	*2*	2	0	5	0	*7*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	0	5	0	0	0	1	0	0	184	1	0	0	188	7	386	0
12:15 PM	0	0	0	4	0	0	0	3	0	0	162	0	0	0	184	4	357	0
12:30 PM	0	0	0	11	0	0	0	4	0	0	161	2	0	0	157	4	339	0
12:45 PM	0	0	0	5	0	0	0	1	0	0	194	1	0	0	187	2	390	1,472
1:00 PM	0	0	0	4	0	0	0	1	0	0	160	3	0	0	195	5	368	1,454
1:15 PM	0	0	0	6	0	0	0	4	0	0	156	1	0	0	159	3	329	1,426
1:30 PM	0	0	0	3	0	0	0	2	0	0	157	4	0	0	155	3	324	1,411
1:45 PM	0	0	0	7	0	0	0	2	0	0	151	4	0	0	193	5	362	1,383
2:00 PM	0	0	0	5	0	0	0	1	0	0	160	1	0	0	190	7	364	1,379
2:15 PM	0	0	0	11	0	0	0	0	0	0	156	3	0	0	214	0	384	1,434
2:30 PM	0	0	0	4	0	0	0	2	0	0	223	2	0	0	201	4	436	1,546
2:45 PM	0	0	0	8	0	0	0	2	0	0	232	4	0	0	212	8	466	1,650
3:00 PM	0	0	0	9	0	0	0	1	0	0	185	2	0	0	197	7	401	1,687
3:15 PM	0	0	0	6	0	0	0	3	0	0	192	4	0	0	201	2	408	1,711
3:30 PM	0	0	0	8	0	0	0	1	0	0	241	4	0	0	219	5	478	1,753
3:45 PM	0	0	0	5	0	0	0	1	0	0	245	5	0	0	190	6	452	1,739
4:00 PM	1	0	0	6	0	0	0	2	0	0	243	3	0	0	210	10	475	1,813
4:15 PM	0	0	0	9	0	0	0	3	0	0	220	1	0	0	219	7	459	1,864
4:30 PM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**0**	**0**	**230**	**2**	**0**	**0**	**221**	**14**	**476**	1,862
4:45 PM	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**3**	**0**	**0**	**209**	**1**	**0**	**0**	**215**	**7**	**444**	1,854
5:00 PM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**6**	**0**	**0**	**246**	**4**	**0**	**0**	**189**	**13**	**464**	1,843
5:15 PM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**221**	**4**	**0**	**0**	**234**	**14**	**482**	**1,866**
5:30 PM	0	0	0	7	0	0	0	2	0	0	226	5	0	0	214	14	468	1,858
5:45 PM	0	0	0	7	0	0	0	4	0	0	158	2	0	0	195	6	372	1,786
Count Total	1	0	0	155	0	0	0	57	0	0	4,712	63	0	0	4,739	157	9,884	0
Peak Hour All	**0**	**0**	**0**	**25**	**0**	**0**	**0**	**17**	**0**	**0**	**906**	**11**	**0**	**0**	**859**	**48**	**1,866**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**16**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**6%**	**-**	**-**	**1%**	**0%**	**-**	**-**	**1%**	**0%**	**1%**	**0**

Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
12:00 PM	0	0	5	6	*11*	0	0	0	0	*0*	0	2	0	0	*2*
12:15 PM	0	0	6	5	*11*	0	0	0	0	*0*	0	0	0	0	*0*
12:30 PM	0	0	4	4	*8*	0	0	0	0	*0*	2	0	0	0	*2*
12:45 PM	0	0	2	6	*8*	0	0	0	0	*0*	1	0	0	1	*2*
1:00 PM	0	0	3	4	*7*	0	0	0	0	*0*	0	0	1	0	*1*
1:15 PM	0	0	7	3	*10*	0	0	0	0	*0*	1	0	1	0	*2*
1:30 PM	0	0	4	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
1:45 PM	0	0	2	6	*8*	0	0	0	0	*0*	2	0	2	0	*4*
2:00 PM	0	0	4	4	*8*	0	0	0	0	*0*	2	0	2	1	*5*
2:15 PM	0	0	1	2	*3*	0	0	0	0	*0*	1	0	0	0	*1*
2:30 PM	0	0	7	3	*10*	0	0	0	0	*0*	1	0	0	0	*1*
2:45 PM	0	0	5	3	*8*	0	0	0	0	*0*	1	1	0	0	*2*
3:00 PM	0	0	1	4	*5*	0	0	0	0	*0*	0	0	0	2	*2*
3:15 PM	0	0	1	4	*5*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	1	0	3	4	*8*	0	0	0	0	*0*	0	0	1	0	*1*
3:45 PM	0	1	4	6	*11*	0	0	0	0	*0*	0	1	0	0	*1*
4:00 PM	0	0	3	7	*10*	0	0	0	0	*0*	0	1	0	0	*1*
4:15 PM	0	0	1	6	*7*	0	0	0	0	*0*	0	1	2	0	*3*
4:30 PM	**0**	**1**	**1**	**3**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**5**	**0**	*6*
4:45 PM	**0**	**0**	**2**	**2**	***4***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**1**	**3**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
5:30 PM	0	0	2	1	*3*	0	1	0	0	*1*	0	0	0	0	*0*
5:45 PM	0	0	0	1	*1*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	1	2	71	90	*164*	0	4	0	0	*4*	13	6	14	4	*37*
Peak Hour	**0**	**1**	**6**	**9**	***16***	**0**	**2**	**0**	**0**	***2***	**2**	**0**	**5**	**0**	***7***

Six-Hour Count Summaries - Heavy Vehicles

Interval Start	W Chestnut Ave				W Chestnut Ave				S 40th Ave				S 40th Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	6	0	11	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	5	0	11	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	8	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	6	0	8	38
1:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	7	34
1:15 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	10	33
1:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	6	31
1:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5	1	8	31
2:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	8	32
2:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	25
2:30 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	10	29
2:45 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	8	29
3:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	5	26
3:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	5	28
3:30 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	4	0	8	26
3:45 PM	0	0	0	0	0	0	0	1	0	0	4	0	0	0	6	0	11	29
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	10	34
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0	7	36
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**5**	33
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	26
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	19
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**4**	**16**
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	14
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	11
Count Total	0	0	0	1	0	0	0	2	0	0	71	0	0	0	89	1	164	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**16**	**0**

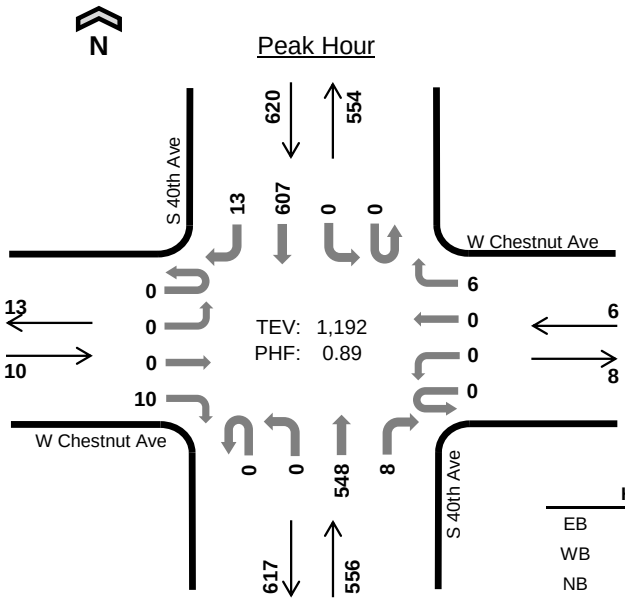
Six-Hour Count Summaries - Bikes

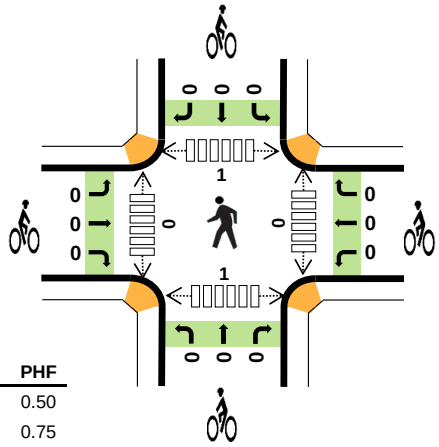
Interval Start	W Chestnut Ave			W Chestnut Ave			S 40th Ave			S 40th Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	3
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Count Total	0	0	0	1	2	1	0	0	0	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S 40th Ave
W Chestnut Ave

Date: 03/09/2023
Count Period: 6:00 PM to 12:00 AM
Peak Hour: 6:00 PM to 7:00 PM





	HV %:	PHF
EB	0.0%	0.50
WB	0.0%	0.75
NB	0.9%	0.86
SB	0.5%	0.93
TOTAL	0.7%	0.89

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM		0	0	0	5	0	0	0	1	0	0	161	1	0	0	163	3	334	0
6:15 PM		0	0	0	2	0	0	0	1	0	0	138	4	0	0	160	2	307	0
6:30 PM		0	0	0	2	0	0	0	2	0	0	149	2	0	0	144	1	300	0
6:45 PM		0	0	0	1	0	0	0	2	0	0	100	1	0	0	140	7	251	1,192
Peak Hour	All	0	0	0	10	0	0	0	6	0	0	548	8	0	0	607	13	1,192	0
	HV	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	8	0
	HV%	-	-	-	0%	-	-	-	0%	-	-	1%	0%	-	-	0%	0%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	1	*1*
6:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 PM	0	0	4	0	*4*	0	0	0	0	*0*	0	0	1	0	*1*
6:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	5	3	*8*	0	0	0	0	*0*	0	0	1	1	*2*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**0**	**0**	**161**	**1**	**0**	**0**	**163**	**3**	**334**	0
6:15 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**138**	**4**	**0**	**0**	**160**	**2**	**307**	0
6:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**149**	**2**	**0**	**0**	**144**	**1**	**300**	0
6:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**100**	**1**	**0**	**0**	**140**	**7**	**251**	**1,192**
7:00 PM	0	0	0	2	0	0	0	1	0	0	111	3	0	0	119	3	239	1,097
7:15 PM	0	0	0	1	0	0	0	1	0	0	113	1	0	0	106	2	224	1,014
7:30 PM	0	0	0	4	0	0	0	2	0	0	119	1	0	0	73	3	202	916
7:45 PM	0	0	0	3	0	0	0	1	0	0	76	0	0	0	93	2	175	840
8:00 PM	0	0	0	0	0	0	0	2	0	0	94	0	0	0	86	2	184	785
8:15 PM	0	0	0	1	0	0	0	1	0	0	97	2	0	0	81	1	183	744
8:30 PM	0	0	0	0	0	0	0	1	0	0	70	4	0	0	91	2	168	710
8:45 PM	0	0	0	2	0	0	1	1	0	0	75	1	0	0	63	2	145	680
9:00 PM	0	0	0	1	0	0	0	4	0	0	61	0	0	0	56	2	124	620
9:15 PM	0	0	0	2	0	0	1	1	0	0	69	1	0	0	60	2	136	573
9:30 PM	0	0	0	1	0	0	0	1	0	0	63	1	0	0	52	3	121	526
9:45 PM	0	0	0	1	0	0	0	1	0	0	44	1	0	0	44	0	91	472
10:00 PM	0	0	0	1	0	0	0	0	0	0	38	0	0	0	50	0	89	437
10:15 PM	0	0	0	2	0	0	0	1	0	0	39	1	0	0	32	1	76	377
10:30 PM	0	0	0	0	0	0	0	0	0	0	26	0	0	0	33	2	61	317
10:45 PM	0	0	0	0	0	0	0	0	0	0	15	0	0	0	33	0	48	274
11:00 PM	0	0	0	2	0	0	0	1	0	0	26	1	0	0	27	1	58	243
11:15 PM	0	0	0	1	0	0	0	1	0	0	18	0	0	0	21	1	42	209
11:30 PM	0	0	0	2	0	0	0	0	0	0	17	0	0	0	17	1	37	185
11:45 PM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	13	1	26	163
Count Total	0	0	0	36	0	0	2	26	0	0	1,731	25	0	0	1,757	44	3,621	0
Peak Hour All	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**6**	**0**	**0**	**548**	**8**	**0**	**0**	**607**	**13**	**1,192**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**8**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**-**	**0%**	**0%**	**1%**	**0**

Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
6:15 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:30 PM	**0**	**0**	**4**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
6:45 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	1	1	*2*	0	0	0	0	*0*	1	0	0	0	*1*
9:00 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
9:30 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
9:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
10:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
10:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
10:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
10:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
11:00 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	1	*1*
11:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
11:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
11:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	0	9	11	*20*	0	0	0	0	*0*	1	1	1	2	*5*
Peak Hour	**0**	**0**	**5**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***

Six-Hour Count Summaries - Heavy Vehicles

Interval Start	W Chestnut Ave				W Chestnut Ave				S 40th Ave				S 40th Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	0
6:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
6:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**4**	0
6:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**8**
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	2
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
9:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
9:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	6
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Count Total	0	0	0	0	0	0	0	0	0	0	9	0	0	0	11	0	20	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**8**	**0**

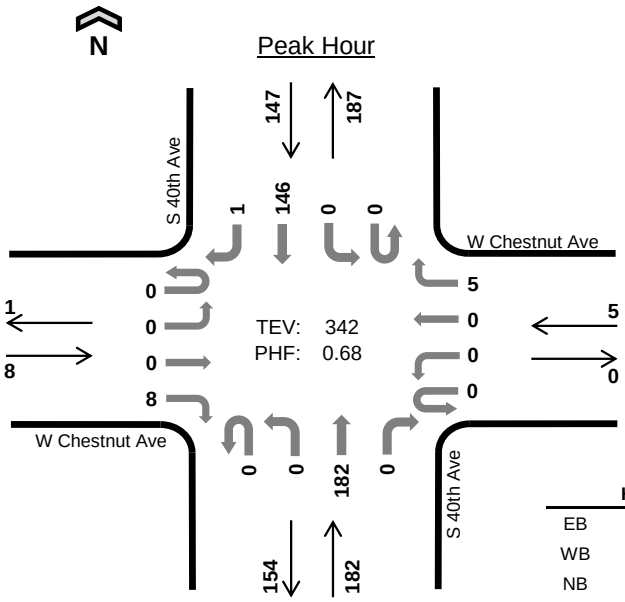
Six-Hour Count Summaries - Bikes

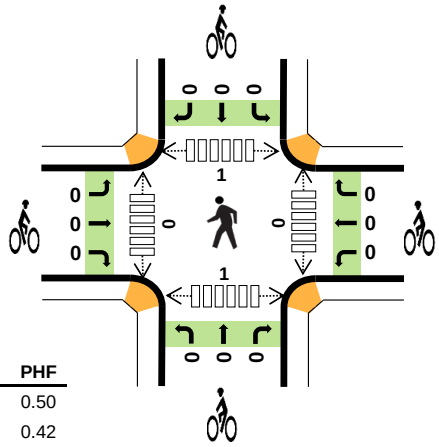
Interval Start	W Chestnut Ave			W Chestnut Ave			S 40th Ave			S 40th Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S 40th Ave
W Chestnut Ave

Date: 03/09/2023
Count Period: 12:00 AM to 6:00 AM
Peak Hour: 5:00 AM to 6:00 AM





	HV %:	PHF
EB	0.0%	0.50
WB	0.0%	0.42
NB	0.5%	0.67
SB	2.7%	0.54
TOTAL	1.5%	0.68

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
5:00 AM		0	0	0	0	0	0	0	0	0	0	20	0	0	0	15	0	35	0
5:15 AM		0	0	0	1	0	0	0	3	0	0	40	0	0	0	26	0	70	0
5:30 AM		0	0	0	3	0	0	0	2	0	0	68	0	0	0	37	1	111	0
5:45 AM		0	0	0	4	0	0	0	0	0	0	54	0	0	0	68	0	126	342
Peak Hour	All	0	0	0	8	0	0	0	5	0	0	182	0	0	0	146	1	342	0
	HV	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	5	0
	HV%	-	-	-	0%	-	-	-	0%	-	-	1%	-	-	-	3%	0%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
5:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	1	*1*
5:30 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	1	0	*1*
Peak Hour	0	0	1	4	*5*	0	0	0	0	*0*	0	0	1	1	*2*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 AM	0	0	0	0	0	0	0	0	0	1	12	0	0	0	6	1	20	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	6	1	0	0	12	0	19	0
12:30 AM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	8	0	11	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	0	20	70
1:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	8	0	11	61
1:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	9	0	14	56
1:30 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	10	0	21	66
1:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	10	0	15	61
2:00 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	9	0	14	64
2:15 AM	0	0	0	1	0	0	0	0	0	0	8	0	0	0	5	0	14	64
2:30 AM	0	0	0	0	0	0	0	2	0	0	7	0	0	0	9	0	18	61
2:45 AM	0	0	0	1	0	0	0	1	0	0	6	0	0	0	2	0	10	56
3:00 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	1	0	9	51
3:15 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	4	0	12	49
3:30 AM	0	0	0	1	0	0	0	1	0	1	13	0	0	0	10	0	26	57
3:45 AM	0	0	0	1	0	0	0	1	0	0	10	0	0	0	6	0	18	65
4:00 AM	0	0	0	0	0	0	0	0	0	0	13	0	0	0	7	0	20	76
4:15 AM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	9	0	21	85
4:30 AM	0	0	0	0	0	0	0	0	0	0	30	1	0	0	13	0	44	103
4:45 AM	0	0	0	1	0	0	0	0	0	0	23	1	0	0	21	0	46	131
5:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**15**	**0**	**35**	146
5:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**40**	**0**	**0**	**0**	**26**	**0**	**70**	195
5:30 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**0**	**68**	**0**	**0**	**0**	**37**	**1**	**111**	262
5:45 AM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**54**	**0**	**0**	**0**	**68**	**0**	**126**	**342**
Count Total	0	0	0	14	0	0	0	10	0	2	379	3	0	0	315	2	725	0
Peak Hour All	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**5**	**0**	**0**	**182**	**0**	**0**	**0**	**146**	**1**	**342**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**1%**	**-**	**-**	**-**	**3%**	**0%**	**1%**	**0**

Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
12:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
12:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
12:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
12:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
1:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
2:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
2:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
2:30 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 AM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 AM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
5:30 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 AM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
Count Total	0	0	6	6	*12*	0	0	0	0	*0*	0	0	2	1	*3*
Peak Hour	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***

Six-Hour Count Summaries - Heavy Vehicles

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	3
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
4:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	4
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	4
5:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	3
5:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**5**
Count Total	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	12	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	**0**

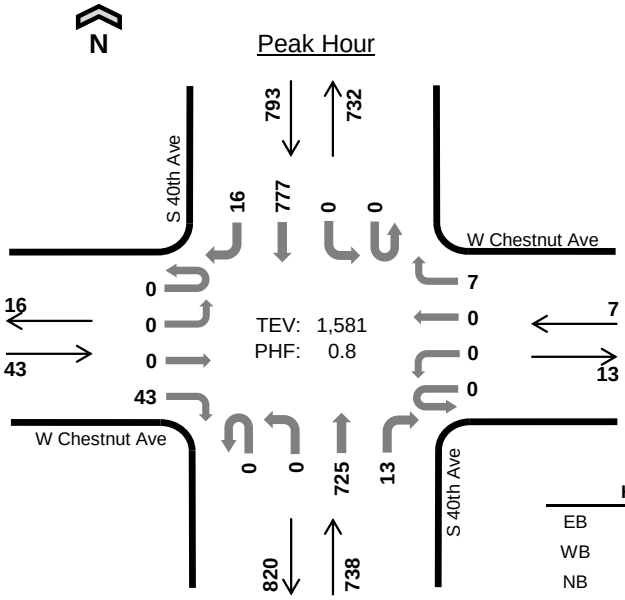
Six-Hour Count Summaries - Bikes

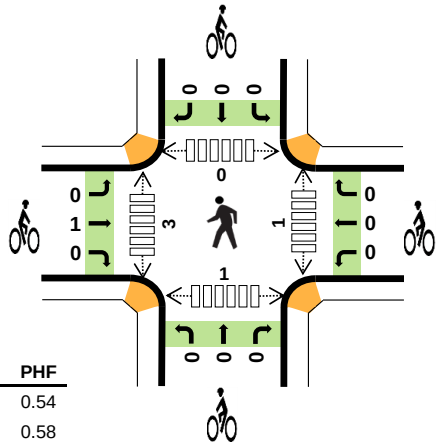
Interval Start	W Chestnut Ave Eastbound			W Chestnut Ave Westbound			S 40th Ave Northbound			S 40th Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S 40th Ave
W Chestnut Ave

Date: 03/09/2023
Count Period: 6:00 AM to 12:00 PM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	2.3%	0.54
WB	0.0%	0.58
NB	3.4%	0.80
SB	2.8%	0.83
TOTAL	3.0%	0.80

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	8	0	0	0	2	0	0	146	1	0	0	186	2	345	0
7:30 AM		0	0	0	7	0	0	0	0	0	0	168	3	0	0	218	6	402	0
7:45 AM		0	0	0	20	0	0	0	3	0	0	226	6	0	0	233	6	494	0
8:00 AM		0	0	0	8	0	0	0	2	0	0	185	3	0	0	140	2	340	1,581
Peak Hour	All	0	0	0	43	0	0	0	7	0	0	725	13	0	0	777	16	1,581	0
	HV	0	0	0	1	0	0	0	0	0	0	24	1	0	0	22	0	48	0
	HV%	-	-	-	2%	-	-	-	0%	-	-	3%	8%	-	-	3%	0%	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	0	0	6	10	*16*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	5	5	*10*	0	0	0	0	*0*	1	1	0	0	*2*
7:45 AM	1	0	5	3	*9*	1	0	0	0	*1*	0	2	0	1	*3*
8:00 AM	0	0	9	4	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	1	0	25	22	*48*	1	0	0	0	*1*	1	3	0	1	*5*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	3	0	0	0	0	0	0	65	1	0	0	58	0	127	0
6:15 AM	0	0	0	4	0	0	0	1	0	0	73	2	0	0	95	0	175	0
6:30 AM	0	0	0	8	0	0	0	3	0	0	106	0	0	0	105	0	222	0
6:45 AM	0	0	0	4	0	0	0	4	0	0	149	1	0	0	145	3	306	830
7:00 AM	0	0	0	3	0	0	0	2	0	0	109	1	0	0	119	2	236	939
7:15 AM	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**2**	**0**	**0**	**146**	**1**	**0**	**0**	**186**	**2**	**345**	1,109
7:30 AM	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**168**	**3**	**0**	**0**	**218**	**6**	**402**	1,289
7:45 AM	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**3**	**0**	**0**	**226**	**6**	**0**	**0**	**233**	**6**	**494**	1,477
8:00 AM	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**2**	**0**	**0**	**185**	**3**	**0**	**0**	**140**	**2**	**340**	**1,581**
8:15 AM	0	0	0	1	0	0	0	5	0	0	139	0	0	0	148	3	296	1,532
8:30 AM	0	0	0	7	0	0	0	2	0	0	172	3	0	0	172	4	360	1,490
8:45 AM	0	0	0	6	0	0	0	3	0	0	152	0	0	0	208	2	371	1,367
9:00 AM	0	0	0	4	0	0	0	1	0	0	127	3	0	0	135	1	271	1,298
9:15 AM	0	0	0	4	0	0	0	3	0	0	133	2	0	0	150	4	296	1,298
9:30 AM	0	0	0	7	0	0	0	0	0	0	117	1	0	0	135	4	264	1,202
9:45 AM	0	0	0	6	0	0	0	1	0	0	152	3	0	0	180	4	346	1,177
10:00 AM	0	0	0	4	0	0	0	1	0	0	146	3	0	0	171	2	327	1,233
10:15 AM	0	0	0	4	0	0	0	5	0	0	165	2	0	0	153	2	331	1,268
10:30 AM	0	0	0	5	0	0	0	2	0	0	145	1	0	0	175	4	332	1,336
10:45 AM	0	0	1	5	0	0	0	3	0	0	151	0	0	0	172	1	333	1,323
11:00 AM	0	0	0	6	0	0	0	4	0	0	145	4	0	0	174	3	336	1,332
11:15 AM	0	0	0	7	0	0	0	1	0	0	180	1	0	0	178	5	372	1,373
11:30 AM	0	0	0	8	0	0	0	2	0	0	166	3	0	0	183	3	365	1,406
11:45 AM	0	0	0	4	0	0	0	2	0	0	184	2	0	0	179	5	376	1,449
Count Total	0	0	1	143	0	0	0	52	0	0	3,501	46	0	0	3,812	68	7,623	0
Peak Hour All	**0**	**0**	**0**	**43**	**0**	**0**	**0**	**7**	**0**	**0**	**725**	**13**	**0**	**0**	**777**	**16**	**1,581**	**0**
Peak Hour HV	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**1**	**0**	**0**	**22**	**0**	**48**	**0**
Peak Hour HV%	**-**	**-**	**-**	**2%**	**-**	**-**	**-**	**0%**	**-**	**-**	**3%**	**8%**	**-**	**-**	**3%**	**0%**	**3%**	**0**

Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	0	6	4	*10*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	0	8	4	*12*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	0	0	4	2	*6*	1	0	0	0	*1*	0	1	0	0	*1*
7:15 AM	**0**	**0**	**6**	**10**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**0**	**0**	**5**	**5**	***10***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**0**	**0**	*2*
7:45 AM	**1**	**0**	**5**	**3**	***9***	**1**	**0**	**0**	**0**	***1***	**0**	**2**	**0**	**1**	*3*
8:00 AM	**0**	**0**	**9**	**4**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	0	0	3	6	*9*	0	0	0	0	*0*	0	1	0	0	*1*
8:30 AM	1	0	6	9	*16*	0	0	0	0	*0*	0	0	1	0	*1*
8:45 AM	0	0	5	9	*14*	1	0	0	0	*1*	0	2	0	0	*2*
9:00 AM	0	0	6	4	*10*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 AM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	1	*1*
9:30 AM	0	0	8	4	*12*	1	0	0	0	*1*	0	0	0	0	*0*
9:45 AM	0	0	7	3	*10*	0	0	0	0	*0*	0	0	0	0	*0*
10:00 AM	0	0	6	4	*10*	0	0	0	0	*0*	1	0	1	0	*2*
10:15 AM	0	0	8	6	*14*	0	0	0	0	*0*	2	0	0	0	*2*
10:30 AM	0	0	2	4	*6*	1	0	0	0	*1*	1	0	0	1	*2*
10:45 AM	0	0	5	3	*8*	1	0	0	0	*1*	0	1	0	0	*1*
11:00 AM	0	0	3	4	*7*	0	1	0	0	*1*	0	1	1	0	*2*
11:15 AM	0	0	6	2	*8*	0	0	0	0	*0*	0	1	1	0	*2*
11:30 AM	0	0	6	4	*10*	0	0	0	0	*0*	0	0	0	0	*0*
11:45 AM	0	0	5	6	*11*	0	0	0	0	*0*	2	0	0	0	*2*
Count Total	2	0	123	104	*229*	6	1	0	0	*7*	7	10	4	3	*24*
Peak Hour	**1**	**0**	**25**	**22**	***48***	**1**	**0**	**0**	**0**	***1***	**1**	**3**	**0**	**1**	***5***

Six-Hour Count Summaries - Heavy Vehicles

Interval Start	W Chestnut Ave				W Chestnut Ave				S 40th Ave				S 40th Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	10	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	4	0	12	28
7:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	6	31
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**10**	**0**	**16**	44
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**5**	**0**	**10**	44
7:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**3**	**0**	**9**	41
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**4**	**0**	**13**	**48**
8:15 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	9	41
8:30 AM	0	0	0	1	0	0	0	0	0	0	6	0	0	0	8	1	16	47
8:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	9	0	14	52
9:00 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	10	49
9:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	42
9:30 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	4	0	12	38
9:45 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	10	34
10:00 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	10	34
10:15 AM	0	0	0	0	0	0	0	0	0	0	7	1	0	0	5	1	14	46
10:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	6	40
10:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	8	38
11:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	7	35
11:15 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2	0	8	29
11:30 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	10	33
11:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	6	0	11	36
Count Total	0	0	0	2	0	0	0	0	0	0	121	2	0	0	102	2	229	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**1**	**0**	**0**	**22**	**0**	**48**	**0**

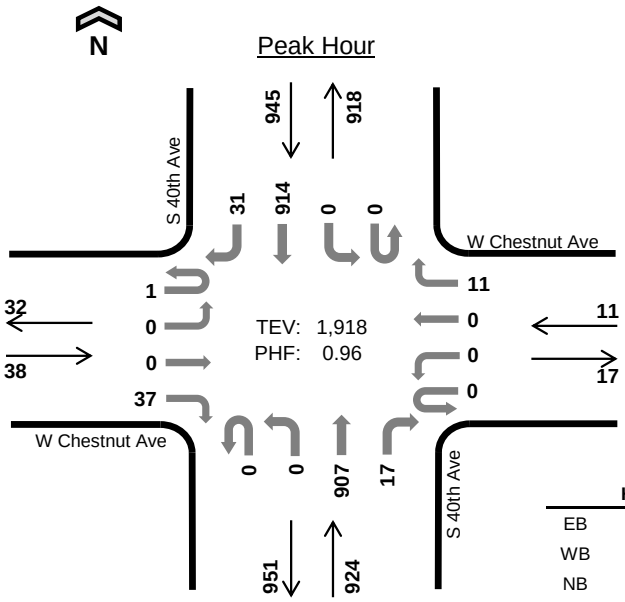
Six-Hour Count Summaries - Bikes

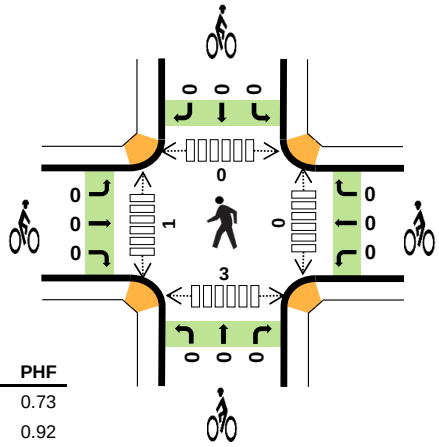
Interval Start	W Chestnut Ave			W Chestnut Ave			S 40th Ave			S 40th Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1
10:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	2
11:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	1	5	0	0	1	0	0	0	0	0	0	0	7	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S 40th Ave
W Chestnut Ave

Date: 03/09/2023
Count Period: 12:00 PM to 6:00 PM
Peak Hour: 3:30 PM to 4:30 PM





	HV %:	PHF
EB	7.9%	0.73
WB	9.1%	0.92
NB	1.6%	0.91
SB	2.8%	0.96
TOTAL	2.3%	0.96

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:30 PM		1	0	0	8	0	0	0	3	0	0	250	3	0	0	222	7	494	0
3:45 PM		0	0	0	13	0	0	0	3	0	0	234	3	0	0	238	7	498	0
4:00 PM		0	0	0	9	0	0	0	3	0	0	225	5	0	0	224	7	473	0
4:15 PM		0	0	0	7	0	0	0	2	0	0	198	6	0	0	230	10	453	1,918
Peak Hour	All	1	0	0	37	0	0	0	11	0	0	907	17	0	0	914	31	1,918	0
	HV	0	0	0	3	0	0	0	1	0	0	15	0	0	0	26	0	45	0
	HV%	0%	-	-	8%	-	-	-	9%	-	-	2%	0%	-	-	3%	0%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	2	1	5	6	*14*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	0	0	5	3	*8*	0	0	0	0	*0*	0	0	0	2	*2*
4:00 PM	1	0	3	9	*13*	0	0	0	0	*0*	0	1	0	1	*2*
4:15 PM	0	0	2	8	*10*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	3	1	15	26	*45*	0	0	0	0	*0*	0	1	0	3	*4*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	0	9	0	0	0	0	0	0	191	3	0	0	201	4	408	0
12:15 PM	0	0	0	5	0	0	0	3	0	0	188	3	0	0	189	4	392	0
12:30 PM	0	0	0	4	0	0	0	1	0	0	183	3	0	0	192	3	386	0
12:45 PM	0	0	0	5	0	0	0	2	0	0	191	4	0	0	197	7	406	1,592
1:00 PM	0	0	0	8	0	0	0	4	0	0	184	2	0	0	183	6	387	1,571
1:15 PM	0	0	0	8	0	0	0	0	0	0	154	0	0	0	170	9	341	1,520
1:30 PM	0	0	0	9	0	0	0	0	0	0	172	1	0	0	204	4	390	1,524
1:45 PM	0	0	0	6	0	0	0	5	0	0	173	5	0	0	200	2	391	1,509
2:00 PM	0	0	0	2	0	0	0	6	0	0	171	3	0	0	183	7	372	1,494
2:15 PM	0	0	0	5	0	0	0	3	0	0	170	2	0	0	191	1	372	1,525
2:30 PM	0	0	0	9	0	0	0	4	0	0	223	3	0	0	210	3	452	1,587
2:45 PM	0	0	0	10	0	0	0	5	0	0	236	3	0	0	198	8	460	1,656
3:00 PM	0	0	0	5	0	0	1	5	0	0	196	3	0	0	252	10	472	1,756
3:15 PM	0	0	0	6	0	0	0	3	0	0	194	2	0	0	201	5	411	1,795
3:30 PM	**1**	**0**	**0**	**8**	**0**	**0**	**0**	**3**	**0**	**0**	**250**	**3**	**0**	**0**	**222**	**7**	**494**	1,837
3:45 PM	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**3**	**0**	**0**	**234**	**3**	**0**	**0**	**238**	**7**	**498**	1,875
4:00 PM	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**3**	**0**	**0**	**225**	**5**	**0**	**0**	**224**	**7**	**473**	1,876
4:15 PM	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**2**	**0**	**0**	**198**	**6**	**0**	**0**	**230**	**10**	**453**	**1,918**
4:30 PM	0	0	0	5	0	0	0	3	0	0	202	3	0	0	220	12	445	1,869
4:45 PM	0	0	0	10	0	0	0	4	0	0	186	6	0	0	222	6	434	1,805
5:00 PM	0	0	0	9	0	0	0	3	0	0	234	5	0	0	237	9	497	1,829
5:15 PM	0	0	0	5	0	0	0	1	0	0	195	7	0	0	225	12	445	1,821
5:30 PM	0	0	0	9	0	0	0	5	0	0	215	5	0	0	198	4	436	1,812
5:45 PM	0	0	0	8	0	0	0	7	0	0	188	2	0	0	187	11	403	1,781
Count Total	1	0	0	174	0	0	1	75	0	0	4,753	82	0	0	4,974	158	10,218	0
Peak Hour All	**1**	**0**	**0**	**37**	**0**	**0**	**0**	**11**	**0**	**0**	**907**	**17**	**0**	**0**	**914**	**31**	**1,918**	**0**
Peak Hour HV	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**15**	**0**	**0**	**0**	**26**	**0**	**45**	**0**
Peak Hour HV%	**0%**	**-**	**-**	**8%**	**-**	**-**	**-**	**9%**	**-**	**-**	**2%**	**0%**	**-**	**-**	**3%**	**0%**	**2%**	**0**

Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
12:00 PM	0	0	6	4	*10*	0	0	0	0	*0*	0	0	0	0	*0*
12:15 PM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	0	2	*2*
12:30 PM	0	0	3	2	*5*	0	0	0	0	*0*	0	0	0	1	*1*
12:45 PM	0	0	6	4	*10*	0	1	0	0	*1*	0	0	2	0	*2*
1:00 PM	0	0	4	6	*10*	0	0	0	0	*0*	0	0	0	0	*0*
1:15 PM	0	0	4	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
1:30 PM	0	0	3	6	*9*	0	0	0	0	*0*	0	0	0	0	*0*
1:45 PM	0	0	2	3	*5*	0	0	0	0	*0*	0	0	0	0	*0*
2:00 PM	0	1	2	3	*6*	0	0	0	0	*0*	0	0	1	1	*2*
2:15 PM	0	0	5	5	*10*	0	0	0	0	*0*	0	0	0	0	*0*
2:30 PM	0	0	7	5	*12*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	1	0	3	3	*7*	0	0	0	0	*0*	1	0	0	0	*1*
3:00 PM	0	0	4	4	*8*	0	0	0	0	*0*	0	1	2	0	*3*
3:15 PM	0	0	4	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	**2**	**1**	**5**	**6**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
3:45 PM	**0**	**0**	**5**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
4:00 PM	**1**	**0**	**3**	**9**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
4:15 PM	**0**	**0**	**2**	**8**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:30 PM	0	0	2	6	*8*	0	0	0	0	*0*	0	2	1	0	*3*
4:45 PM	0	0	4	1	*5*	0	1	0	0	*1*	0	0	1	0	*1*
5:00 PM	0	0	1	3	*4*	0	0	0	0	*0*	0	1	1	0	*2*
5:15 PM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	2	3	*5*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	1	*1*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	4	2	78	93	*177*	0	3	0	0	*3*	1	5	8	7	*21*
Peak Hour	**3**	**1**	**15**	**26**	***45***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**3**	***4***

Six-Hour Count Summaries - Heavy Vehicles

Interval Start	W Chestnut Ave				W Chestnut Ave				S 40th Ave				S 40th Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	10	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	10	28
1:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	10	28
1:15 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	5	30
1:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	9	34
1:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	29
2:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	0	2	1	6	25
2:15 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	10	30
2:30 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	5	0	12	33
2:45 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	3	0	7	35
3:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	8	37
3:15 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	5	32
3:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**5**	**0**	**0**	**0**	**6**	**0**	**14**	34
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**8**	35
4:00 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**9**	**0**	**13**	40
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**8**	**0**	**10**	**45**
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	6	0	8	39
4:45 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	5	36
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	27
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	21
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	18
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	14
Count Total	0	0	0	4	0	0	0	2	0	0	78	0	0	0	92	1	177	0
Peak Hour	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**15**	**0**	**0**	**0**	**26**	**0**	**45**	**0**

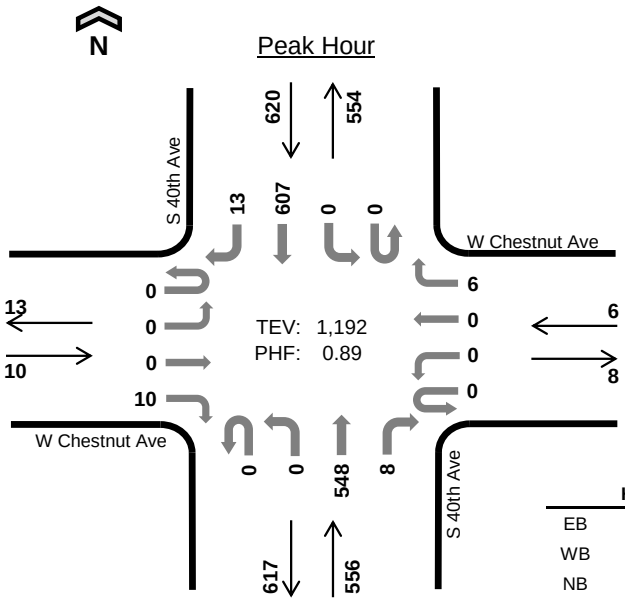
Six-Hour Count Summaries - Bikes

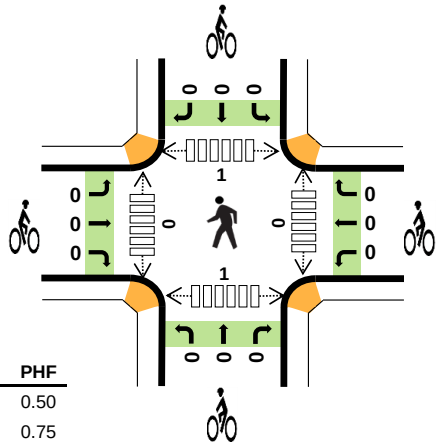
Interval Start	W Chestnut Ave			W Chestnut Ave			S 40th Ave			S 40th Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Count Total	0	0	0	0	3	0	0	0	0	0	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S 40th Ave
W Chestnut Ave

Date: 03/09/2023
Count Period: 6:00 PM to 12:00 AM
Peak Hour: 6:00 PM to 7:00 PM





	HV %:	PHF
EB	0.0%	0.50
WB	0.0%	0.75
NB	0.9%	0.86
SB	0.5%	0.93
TOTAL	0.7%	0.89

Six-Hour Count Summaries

Interval Start		W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM		0	0	0	5	0	0	0	1	0	0	161	1	0	0	163	3	334	0
6:15 PM		0	0	0	2	0	0	0	1	0	0	138	4	0	0	160	2	307	0
6:30 PM		0	0	0	2	0	0	0	2	0	0	149	2	0	0	144	1	300	0
6:45 PM		0	0	0	1	0	0	0	2	0	0	100	1	0	0	140	7	251	1,192
Peak Hour	All	0	0	0	10	0	0	0	6	0	0	548	8	0	0	607	13	1,192	0
	HV	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	8	0
	HV%	-	-	-	0%	-	-	-	0%	-	-	1%	0%	-	-	0%	0%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	1	*1*
6:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 PM	0	0	4	0	*4*	0	0	0	0	*0*	0	0	1	0	*1*
6:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	0	5	3	*8*	0	0	0	0	*0*	0	0	1	1	*2*

Six-Hour Count Summaries

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**0**	**0**	**161**	**1**	**0**	**0**	**163**	**3**	**334**	0
6:15 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**138**	**4**	**0**	**0**	**160**	**2**	**307**	0
6:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**149**	**2**	**0**	**0**	**144**	**1**	**300**	0
6:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**100**	**1**	**0**	**0**	**140**	**7**	**251**	**1,192**
7:00 PM	0	0	0	2	0	0	0	1	0	0	111	3	0	0	119	3	239	1,097
7:15 PM	0	0	0	1	0	0	0	1	0	0	113	1	0	0	106	2	224	1,014
7:30 PM	0	0	0	4	0	0	0	2	0	0	119	1	0	0	73	3	202	916
7:45 PM	0	0	0	3	0	0	0	1	0	0	76	0	0	0	93	2	175	840
8:00 PM	0	0	0	0	0	0	0	2	0	0	94	0	0	0	86	2	184	785
8:15 PM	0	0	0	1	0	0	0	1	0	0	97	2	0	0	81	1	183	744
8:30 PM	0	0	0	0	0	0	0	1	0	0	70	4	0	0	91	2	168	710
8:45 PM	0	0	0	2	0	0	1	1	0	0	75	1	0	0	63	2	145	680
9:00 PM	0	0	0	1	0	0	0	4	0	0	61	0	0	0	56	2	124	620
9:15 PM	0	0	0	2	0	0	1	1	0	0	69	1	0	0	60	2	136	573
9:30 PM	0	0	0	1	0	0	0	1	0	0	63	1	0	0	52	3	121	526
9:45 PM	0	0	0	1	0	0	0	1	0	0	44	1	0	0	44	0	91	472
10:00 PM	0	0	0	1	0	0	0	0	0	0	38	0	0	0	50	0	89	437
10:15 PM	0	0	0	2	0	0	0	1	0	0	39	1	0	0	32	1	76	377
10:30 PM	0	0	0	0	0	0	0	0	0	0	26	0	0	0	33	2	61	317
10:45 PM	0	0	0	0	0	0	0	0	0	0	15	0	0	0	33	0	48	274
11:00 PM	0	0	0	2	0	0	0	1	0	0	26	1	0	0	27	1	58	243
11:15 PM	0	0	0	1	0	0	0	1	0	0	18	0	0	0	21	1	42	209
11:30 PM	0	0	0	2	0	0	0	0	0	0	17	0	0	0	17	1	37	185
11:45 PM	0	0	0	0	0	0	0	0	0	0	12	0	0	0	13	1	26	163
Count Total	0	0	0	36	0	0	2	26	0	0	1,731	25	0	0	1,757	44	3,621	0
Peak Hour All	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**6**	**0**	**0**	**548**	**8**	**0**	**0**	**607**	**13**	**1,192**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**8**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**-**	**0%**	**0%**	**1%**	**0**

Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
6:15 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
6:30 PM	**0**	**0**	**4**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
6:45 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	1	1	*2*	0	0	0	0	*0*	1	0	0	0	*1*
9:00 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
9:30 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
9:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
10:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
10:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
10:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
10:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
11:00 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	1	*1*
11:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
11:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
11:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	0	9	11	*20*	0	0	0	0	*0*	1	1	1	2	*5*
Peak Hour	**0**	**0**	**5**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***

Six-Hour Count Summaries - Heavy Vehicles

Interval Start	W Chestnut Ave Eastbound				W Chestnut Ave Westbound				S 40th Ave Northbound				S 40th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	0
6:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
6:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**4**	0
6:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**8**
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	2
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
9:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
9:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	6
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Count Total	0	0	0	0	0	0	0	0	0	0	9	0	0	0	11	0	20	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**8**	**0**

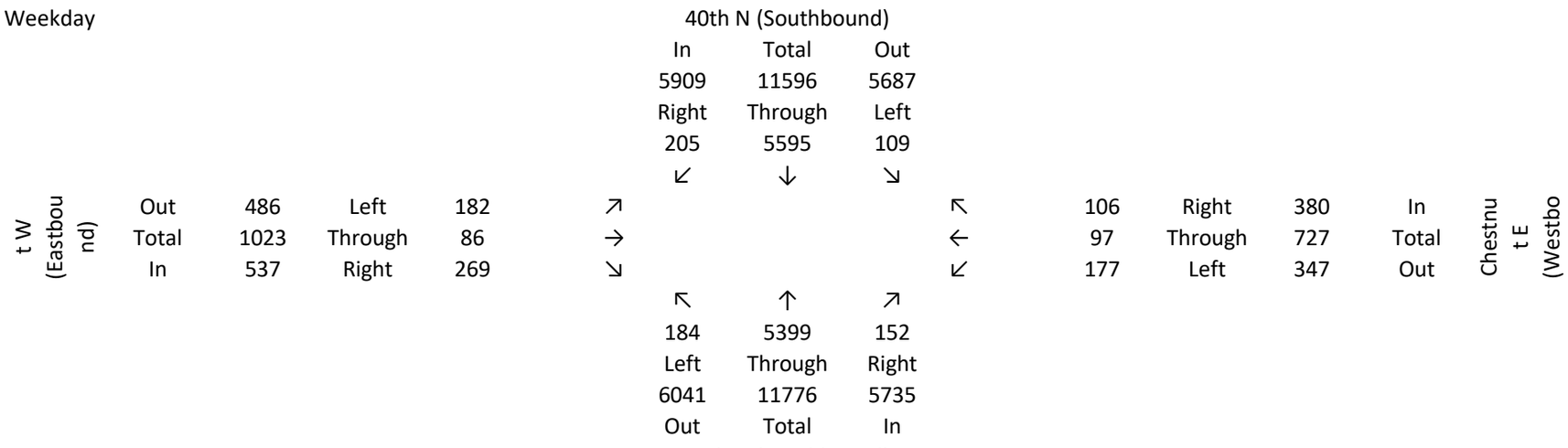
Six-Hour Count Summaries - Bikes

Interval Start	W Chestnut Ave Eastbound			W Chestnut Ave Westbound			S 40th Ave Northbound			S 40th Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
6:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

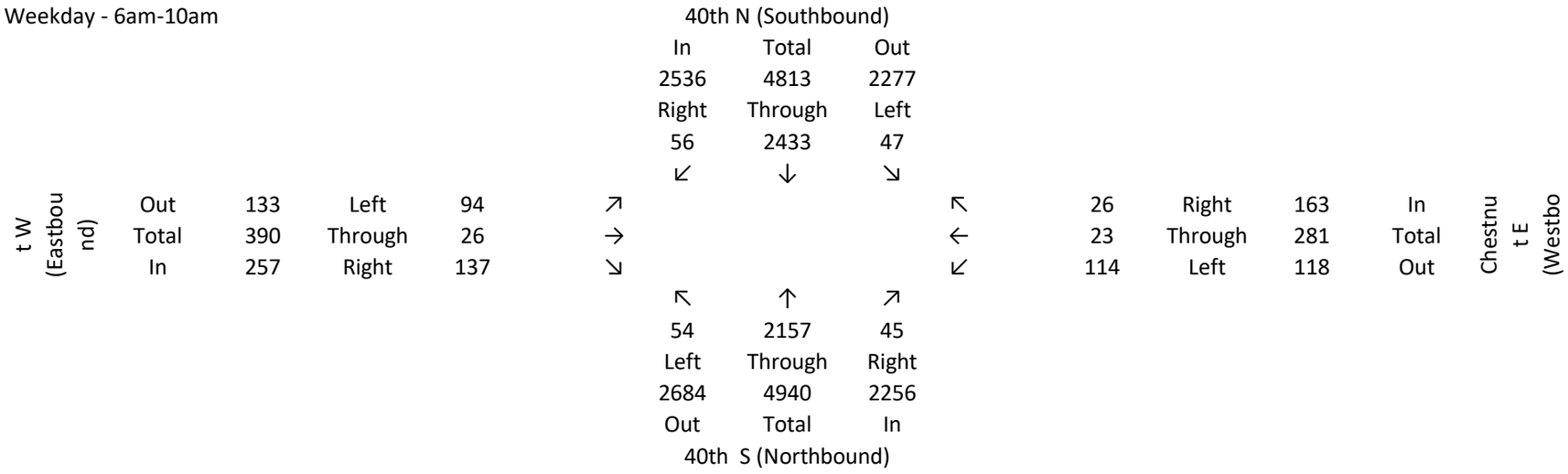
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

2017 AM and PM Peak Hour Counts
Provided by City of Yakima

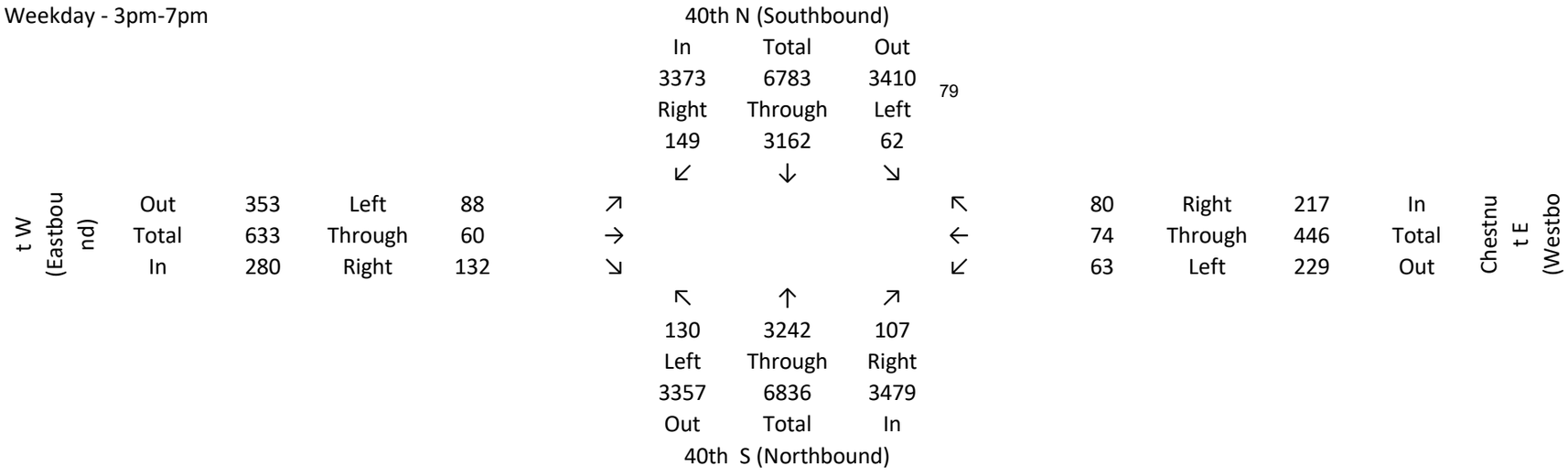
Weekday



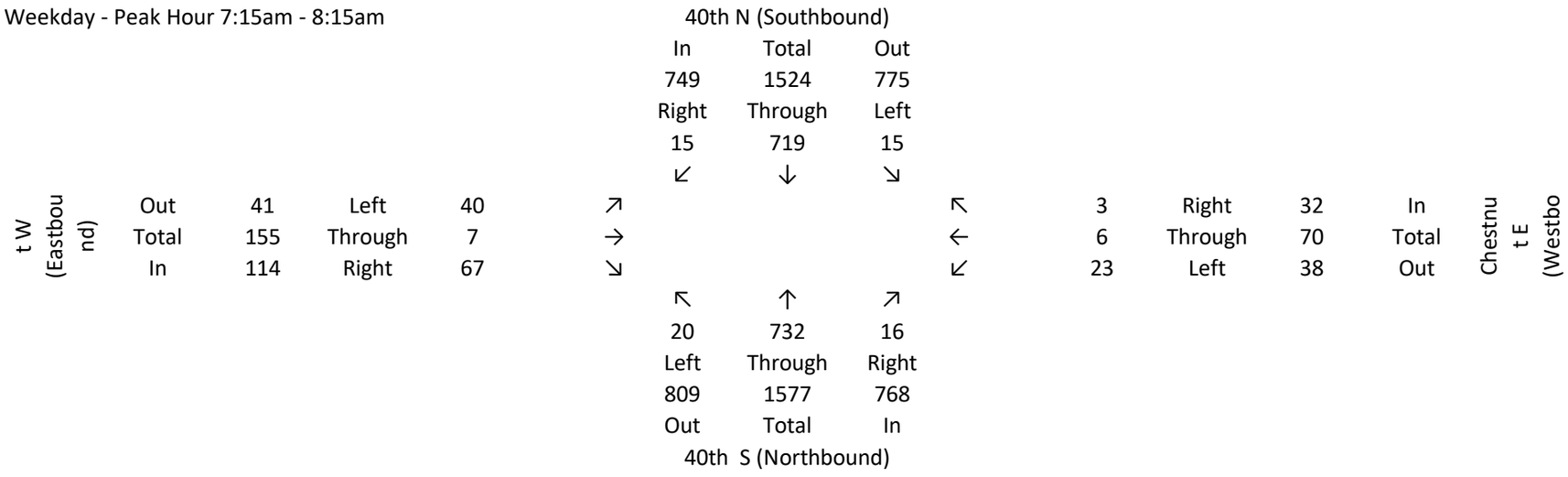
Weekday - 6am-10am



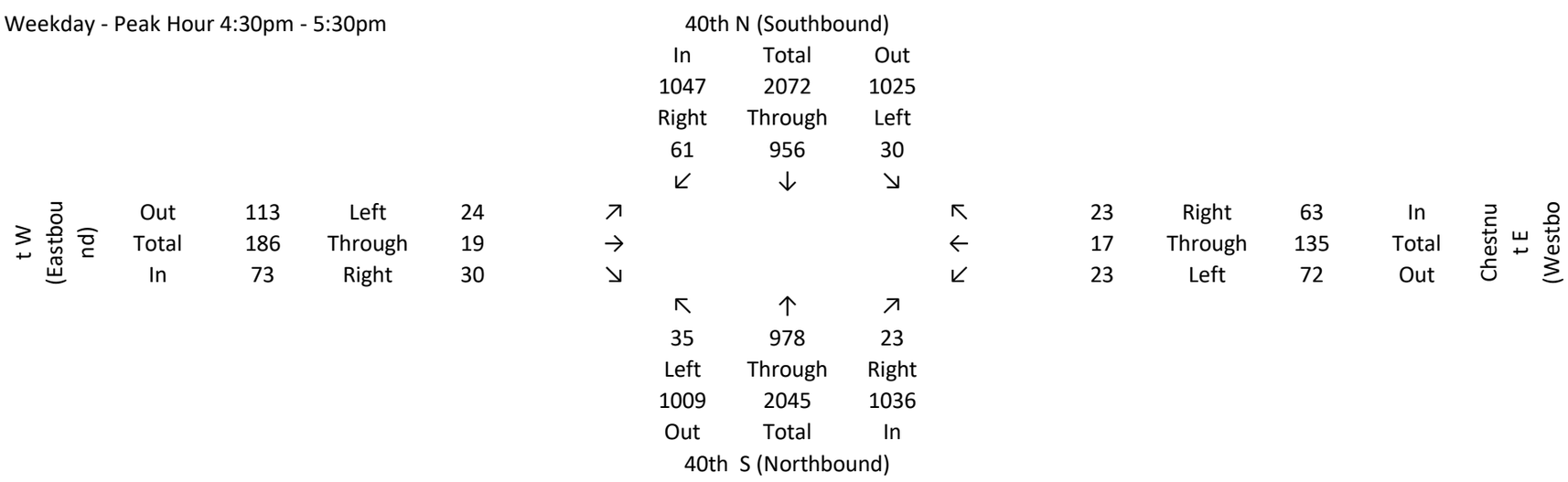
Weekday - 3pm-7pm



Weekday - Peak Hour 7:15am - 8:15am



Weekday - Peak Hour 4:30pm - 5:30pm



Vehicle Speed Report Summary

Location: 40th Ave N-O Chestnut Ave

Count Direction: Northbound / Southbound

Date Range: 3/7/2023 to 3/9/2023

Site Code: 02

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	20	103	144	405	2,915	14,448	10,919	1,972	193	35	5	2	0	1	0	0	0	31,162
Percent	0.1%	0.3%	0.5%	1.3%	9.4%	46.4%	35.0%	6.3%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	31	93	154	222	2,321	12,391	12,494	3,208	389	35	12	2	1	0	0	1	0	31,354
Percent	0.1%	0.3%	0.5%	0.7%	7.4%	39.5%	39.8%	10.2%	1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	51	196	298	627	5,236	26,839	23,413	5,180	582	70	17	4	1	1	0	1	0	62,516
Percent	0.1%	0.3%	0.5%	1.0%	8.4%	42.9%	37.5%	8.3%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	34.3	mph	Mean (Average) Speed	34.3	mph
85th Percentile	38.1	mph	10 mph Pace	29.6 - 39.6	mph
95th Percentile	40.8	mph	Percent in Pace	81.6	%
Southbound			**Southbound**		
50th Percentile (Median)	35.1	mph	Mean (Average) Speed	35.1	mph
85th Percentile	39.4	mph	10 mph Pace	30.2 - 40.2	mph
95th Percentile	42.1	mph	Percent in Pace	79.3	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: 40th Ave N-O Chestnut Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 02

Tuesday, March 7, 2023
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	5	24	11	0	0	0	0	0	0	0	0	0	0	**40**
1:00 AM	0	0	0	1	1	8	2	2	0	0	0	0	0	0	0	0	0	**14**
2:00 AM	0	0	0	0	3	12	5	2	1	0	0	0	0	0	0	0	0	**23**
3:00 AM	0	0	0	0	3	13	13	1	3	0	0	0	0	0	0	0	0	**33**
4:00 AM	0	0	0	3	4	36	40	7	0	1	0	0	0	0	0	0	0	**91**
5:00 AM	0	0	0	5	5	51	91	32	6	0	1	0	0	0	0	0	0	**191**
6:00 AM	0	0	0	3	18	127	197	43	5	2	0	0	0	0	0	0	0	**395**
7:00 AM	1	3	5	9	52	239	278	55	5	2	1	0	0	0	0	0	0	**650**
8:00 AM	0	1	7	3	36	267	249	51	5	0	0	0	0	0	0	0	0	**619**
9:00 AM	0	2	1	7	40	260	222	53	6	0	0	0	0	0	0	0	0	**591**
10:00 AM	0	2	2	8	62	288	177	32	1	1	0	0	0	0	0	0	0	**573**
11:00 AM	0	1	6	7	86	348	222	39	3	0	0	0	0	0	0	0	0	**712**
12:00 PM	0	6	2	8	60	339	250	34	2	1	0	0	0	0	0	0	0	**702**
1:00 PM	1	2	1	9	64	341	203	32	2	0	0	0	0	0	0	0	0	**655**
2:00 PM	1	1	4	15	138	397	211	35	4	1	0	0	0	0	0	0	0	**807**
3:00 PM	1	6	6	29	70	440	267	45	4	0	0	0	0	0	0	0	0	**868**
4:00 PM	0	1	1	7	78	442	285	71	8	0	0	0	0	0	0	0	0	**893**
5:00 PM	1	2	11	19	114	390	295	41	1	1	0	0	0	0	0	0	0	**875**
6:00 PM	0	0	0	3	40	241	194	41	2	2	0	0	0	0	0	0	0	**523**
7:00 PM	1	0	0	4	43	195	159	16	2	0	0	0	0	0	0	0	0	**420**
8:00 PM	0	1	1	2	37	169	99	17	1	1	1	0	0	0	0	0	0	**329**
9:00 PM	0	1	1	1	14	87	62	12	2	1	0	0	0	0	0	0	0	**181**
10:00 PM	0	0	0	2	10	59	42	8	0	0	0	0	0	0	0	0	0	**121**
11:00 PM	1	0	0	0	5	28	15	0	1	0	0	0	0	0	0	0	0	**50**
Total	**7**	**29**	**48**	**145**	**988**	**4,801**	**3,589**	**669**	**64**	**13**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**10,356**
Percent	**0.1%**	**0.3%**	**0.5%**	**1.4%**	**9.5%**	**46.4%**	**34.7%**	**6.5%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	34.3	mph	Mean (Average) Speed	34.2	mph
85th Percentile	38.3	mph	10 mph Pace	29.8 - 39.8	mph
95th Percentile	40.9	mph	Percent in Pace	81.2	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: 40th Ave N-O Chestnut Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 02

Tuesday, March 7, 2023
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	2	18	10	4	1	0	1	0	0	0	0	0	**37**
1:00 AM	0	0	0	0	0	7	10	4	0	0	0	0	0	0	0	0	0	**21**
2:00 AM	0	0	0	0	0	4	3	6	3	0	0	0	0	0	0	0	0	**16**
3:00 AM	0	0	0	0	0	7	9	14	3	0	0	0	0	0	0	0	0	**33**
4:00 AM	0	0	0	0	3	19	15	8	5	1	0	0	0	0	0	0	0	**51**
5:00 AM	0	0	0	0	2	24	72	54	9	2	1	0	0	0	0	1	0	**165**
6:00 AM	0	0	0	0	3	46	222	128	13	0	0	0	0	0	0	0	0	**412**
7:00 AM	5	1	0	7	29	229	399	82	15	1	0	0	0	0	0	0	0	**768**
8:00 AM	2	0	0	0	10	173	283	82	14	0	0	0	0	0	0	0	0	**564**
9:00 AM	0	0	0	4	32	209	279	64	6	0	0	0	0	0	0	0	0	**594**
10:00 AM	2	0	0	6	38	334	280	50	3	0	0	0	0	0	0	0	0	**713**
11:00 AM	1	0	0	2	59	327	246	45	7	0	0	0	0	0	0	0	0	**687**
12:00 PM	2	0	2	7	37	328	273	66	5	0	0	0	0	0	0	0	0	**720**
1:00 PM	3	8	1	4	69	307	228	54	3	0	0	0	0	0	0	0	0	**677**
2:00 PM	0	8	25	19	105	394	222	43	4	0	0	0	0	0	0	0	0	**820**
3:00 PM	1	6	0	3	70	359	275	46	3	0	0	0	0	0	0	0	0	**763**
4:00 PM	0	6	1	5	80	374	304	65	7	0	0	0	0	0	0	0	0	**842**
5:00 PM	0	2	0	6	79	354	320	58	6	1	0	0	0	0	0	0	0	**826**
6:00 PM	1	1	1	8	18	221	269	55	6	0	0	0	0	0	0	0	0	**580**
7:00 PM	0	1	0	3	26	141	171	42	7	0	0	0	0	0	0	0	0	**391**
8:00 PM	0	4	0	3	12	66	138	60	7	0	0	0	0	0	0	0	0	**290**
9:00 PM	0	2	0	0	4	52	83	37	6	0	0	0	0	0	0	0	0	**184**
10:00 PM	1	0	1	1	4	42	66	27	2	0	0	0	0	0	0	0	0	**144**
11:00 PM	0	0	0	0	3	16	32	15	0	0	0	0	0	0	0	0	0	**66**
Total	**18**	**39**	**31**	**78**	**684**	**4,035**	**4,217**	**1,115**	**138**	**6**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**10,364**
Percent	**0.2%**	**0.4%**	**0.3%**	**0.8%**	**6.6%**	**38.9%**	**40.7%**	**10.8%**	**1.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	35.2	mph	Mean (Average) Speed	35.3	mph
85th Percentile	39.5	mph	10 mph Pace	30.2 - 40.2	mph
95th Percentile	42.2	mph	Percent in Pace	79.54	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: 40th Ave N-O Chestnut Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 02

Wednesday, March 8, 2023
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	3	16	8	2	0	0	0	0	0	0	0	0	0	**30**
1:00 AM	0	0	1	1	5	13	6	1	0	0	0	0	0	0	0	0	0	**27**
2:00 AM	0	0	1	0	4	11	9	4	0	0	0	0	0	0	0	0	0	**29**
3:00 AM	0	0	1	1	2	17	4	3	0	0	0	0	0	0	0	0	0	**28**
4:00 AM	0	0	0	1	4	23	34	11	1	0	1	0	0	0	0	0	0	**75**
5:00 AM	0	0	0	4	4	72	79	19	6	3	0	0	0	0	0	0	0	**187**
6:00 AM	0	0	1	4	26	116	183	60	5	0	0	0	0	0	0	0	0	**395**
7:00 AM	1	7	3	2	65	269	283	41	2	0	1	0	0	0	0	0	0	**674**
8:00 AM	0	11	0	6	51	287	247	56	2	0	0	0	0	0	0	0	0	**660**
9:00 AM	0	0	0	10	72	279	205	28	1	1	0	0	0	0	0	0	0	**596**
10:00 AM	0	1	2	6	51	302	211	26	1	1	0	0	0	0	0	0	0	**601**
11:00 AM	2	1	3	12	90	353	179	30	3	0	0	0	0	0	0	0	0	**673**
12:00 PM	0	2	2	6	69	350	226	42	3	0	0	0	0	0	0	0	0	**700**
1:00 PM	0	1	4	11	57	312	205	30	1	1	0	0	0	0	0	0	0	**622**
2:00 PM	0	1	2	14	115	382	231	27	3	0	0	0	0	0	0	0	0	**775**
3:00 PM	5	7	15	13	112	430	219	46	2	0	0	0	0	0	0	0	0	**849**
4:00 PM	0	1	10	9	83	451	294	48	3	1	0	0	0	0	0	0	0	**900**
5:00 PM	2	20	13	25	116	400	237	29	3	1	0	0	0	0	0	0	0	**846**
6:00 PM	1	4	2	4	50	226	185	34	3	0	0	0	0	0	0	0	0	**509**
7:00 PM	0	3	0	2	38	196	163	29	4	1	0	0	0	0	0	0	0	**436**
8:00 PM	0	0	1	4	31	149	102	26	2	0	0	0	0	0	0	0	0	**315**
9:00 PM	0	0	1	6	15	91	67	19	2	0	0	0	0	0	0	0	0	**201**
10:00 PM	0	1	0	1	10	57	29	7	0	0	0	0	0	0	0	0	0	**105**
11:00 PM	0	0	0	1	9	38	22	9	3	0	0	1	0	0	0	0	0	**83**
Total	**11**	**60**	**62**	**144**	**1,082**	**4,840**	**3,428**	**627**	**50**	**9**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**10,316**
Percent	**0.1%**	**0.6%**	**0.6%**	**1.4%**	**10.5%**	**46.9%**	**33.2%**	**6.1%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	34.1	mph	Mean (Average) Speed	34.0	mph
85th Percentile	38.0	mph	10 mph Pace	29.3 - 39.3	mph
95th Percentile	40.7	mph	Percent in Pace	81.0	%

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Location: 40th Ave N-O Chestnut Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 02

Wednesday, March 8, 2023
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	12	19	12	2	0	0	0	0	0	0	0	0	**45**
1:00 AM	0	0	0	0	1	6	22	10	2	0	0	0	0	0	0	0	0	**41**
2:00 AM	0	0	0	1	2	6	12	6	1	0	0	0	0	0	0	0	0	**28**
3:00 AM	0	0	0	0	0	4	7	9	1	0	0	0	0	0	0	0	0	**21**
4:00 AM	0	0	0	0	2	5	17	17	7	0	0	1	0	0	0	0	0	**49**
5:00 AM	0	0	0	0	3	20	75	58	14	3	1	0	0	0	0	0	0	**174**
6:00 AM	1	0	0	0	8	54	194	141	16	1	0	0	0	0	0	0	0	**415**
7:00 AM	0	2	1	2	55	320	293	70	15	3	0	0	0	0	0	0	0	**761**
8:00 AM	0	1	3	6	36	212	267	84	7	1	0	0	0	0	0	0	0	**617**
9:00 AM	1	3	6	7	47	239	235	55	8	1	0	0	0	0	0	0	0	**602**
10:00 AM	0	0	3	0	44	254	282	59	4	0	1	0	0	0	0	0	0	**647**
11:00 AM	0	0	8	2	60	306	287	27	3	0	0	0	0	0	0	0	0	**693**
12:00 PM	0	0	1	4	44	312	287	61	11	1	0	0	0	0	0	0	0	**721**
1:00 PM	1	0	2	4	38	309	275	56	5	2	0	0	0	0	0	0	0	**692**
2:00 PM	2	10	8	3	80	368	277	49	2	0	0	0	0	0	0	0	0	**799**
3:00 PM	0	2	9	11	81	379	237	53	7	0	0	0	0	0	0	0	0	**779**
4:00 PM	0	1	13	13	123	386	250	59	10	1	0	0	0	0	0	0	0	**856**
5:00 PM	1	0	7	5	134	389	254	58	3	1	0	0	0	0	0	0	0	**852**
6:00 PM	0	0	0	1	38	228	237	47	5	0	0	0	0	0	0	0	0	**556**
7:00 PM	0	2	2	7	24	157	186	39	5	0	3	0	0	0	0	0	0	**425**
8:00 PM	0	2	0	0	5	114	129	42	6	0	0	0	0	0	0	0	0	**298**
9:00 PM	1	0	0	1	9	59	83	22	6	0	0	0	0	0	0	0	0	**181**
10:00 PM	0	0	0	2	3	29	66	29	2	0	0	0	0	0	0	0	0	**131**
11:00 PM	0	0	0	0	7	17	34	17	3	0	0	0	0	0	0	0	0	**78**
Total	**7**	**23**	**63**	**69**	**844**	**4,185**	**4,025**	**1,080**	**145**	**14**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**10,461**
Percent	**0.1%**	**0.2%**	**0.6%**	**0.7%**	**8.1%**	**40.0%**	**38.5%**	**10.3%**	**1.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	35.0	mph	Mean (Average) Speed	35.1	mph
85th Percentile	39.4	mph	10 mph Pace	30.3 - 40.3	mph
95th Percentile	42.2	mph	Percent in Pace	78.52	%

Mark Skaggs:425-250-0777
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Location: 40th Ave N-O Chestnut Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 02

Thursday, March 9, 2023
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	4	18	9	0	0	0	0	0	0	0	0	0	0	**31**
1:00 AM	0	0	0	1	4	9	9	1	0	0	0	0	0	0	0	0	0	**24**
2:00 AM	0	0	1	2	2	10	11	2	1	0	0	0	0	0	0	0	0	**29**
3:00 AM	0	0	0	2	5	20	11	4	1	0	0	0	0	0	0	0	0	**43**
4:00 AM	0	0	0	1	4	24	37	10	0	1	0	0	0	0	0	0	0	**77**
5:00 AM	0	0	0	4	4	49	93	34	6	0	0	1	0	0	0	0	0	**191**
6:00 AM	0	0	1	3	13	124	189	56	6	2	0	0	0	0	0	0	0	**394**
7:00 AM	0	1	1	2	50	254	276	59	9	1	0	0	0	0	0	0	0	**653**
8:00 AM	0	2	0	7	46	283	260	56	4	0	0	0	0	0	0	0	0	**658**
9:00 AM	0	1	0	2	43	226	209	36	2	0	0	0	0	0	0	0	0	**519**
10:00 AM	1	0	0	7	59	279	225	35	1	3	0	0	0	0	0	0	0	**610**
11:00 AM	0	1	8	10	43	339	253	27	6	1	0	0	0	1	0	0	0	**689**
12:00 PM	0	1	5	8	53	368	283	40	3	1	0	0	0	0	0	0	0	**762**
1:00 PM	0	0	0	3	51	339	242	47	6	0	0	0	0	0	0	0	0	**688**
2:00 PM	0	1	0	13	83	412	244	48	5	3	0	0	0	0	0	0	0	**809**
3:00 PM	0	0	3	9	84	436	287	43	5	0	0	0	0	0	0	0	0	**867**
4:00 PM	1	1	2	12	72	389	297	40	2	0	0	0	0	0	0	0	0	**816**
5:00 PM	0	2	8	12	57	435	294	40	8	0	0	0	0	0	0	0	0	**856**
6:00 PM	0	0	0	5	47	256	229	37	1	0	0	0	0	0	0	0	0	**575**
7:00 PM	0	0	4	4	32	179	176	19	6	1	0	0	0	0	0	0	0	**421**
8:00 PM	0	1	1	1	39	170	106	21	1	0	0	0	0	0	0	0	0	**340**
9:00 PM	0	1	0	5	23	106	89	11	6	0	0	0	0	0	0	0	0	**241**
10:00 PM	0	1	0	2	11	56	46	5	0	0	0	0	0	0	0	0	0	**121**
11:00 PM	0	1	0	1	16	26	27	5	0	0	0	0	0	0	0	0	0	**76**
Total	**2**	**14**	**34**	**116**	**845**	**4,807**	**3,902**	**676**	**79**	**13**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**10,490**
Percent	**0.0%**	**0.1%**	**0.3%**	**1.1%**	**8.1%**	**45.8%**	**37.2%**	**6.4%**	**0.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	34.6	mph	Mean (Average) Speed	34.6	mph
85th Percentile	38.4	mph	10 mph Pace	29.9 - 39.9	mph
95th Percentile	40.9	mph	Percent in Pace	83.2	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: 40th Ave N-O Chestnut Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 02

DATA SOLUTIONS

Thursday, March 9, 2023
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	11	17	6	2	0	0	0	0	0	0	0	0	**37**
1:00 AM	0	0	0	0	0	9	27	4	0	0	0	0	0	0	0	0	0	**40**
2:00 AM	0	0	0	0	0	7	11	5	3	0	0	0	0	0	0	0	0	**26**
3:00 AM	0	0	0	0	0	6	9	5	1	0	0	0	0	0	0	0	0	**21**
4:00 AM	0	0	0	0	3	11	18	14	2	2	0	0	0	0	0	0	0	**50**
5:00 AM	0	0	0	0	1	23	75	44	9	1	1	0	0	0	0	0	0	**154**
6:00 AM	0	0	0	1	10	94	208	85	5	2	0	0	0	0	0	0	0	**405**
7:00 AM	0	1	1	1	35	267	291	83	11	2	2	0	0	0	0	0	0	**694**
8:00 AM	0	0	4	6	26	229	294	66	3	0	1	0	0	0	0	0	0	**629**
9:00 AM	0	0	5	0	25	195	284	60	3	0	1	0	0	0	0	0	0	**573**
10:00 AM	0	0	1	2	38	251	270	66	4	1	0	0	0	0	0	0	0	**633**
11:00 AM	0	0	1	8	52	302	248	68	4	0	0	0	0	0	0	0	0	**683**
12:00 PM	0	1	4	11	49	320	281	57	7	0	1	0	0	0	0	0	0	**731**
1:00 PM	0	3	8	2	69	323	288	43	7	1	0	0	0	0	0	0	0	**744**
2:00 PM	0	5	20	13	106	298	278	38	3	2	0	0	0	0	0	0	0	**763**
3:00 PM	3	7	0	9	99	420	279	45	6	1	0	0	0	0	0	0	0	**869**
4:00 PM	0	5	1	7	119	411	301	43	4	0	0	0	0	0	0	0	0	**891**
5:00 PM	1	7	3	9	60	371	311	53	8	0	0	0	0	0	0	0	0	**823**
6:00 PM	1	0	2	0	46	222	256	59	3	0	0	0	1	0	0	0	0	**590**
7:00 PM	0	0	2	1	24	130	176	49	6	0	0	0	0	0	0	0	0	**388**
8:00 PM	1	1	8	2	16	121	143	37	5	0	0	0	0	0	0	0	0	**334**
9:00 PM	0	1	0	1	7	76	83	45	3	1	0	0	0	0	0	0	0	**217**
10:00 PM	0	0	0	1	6	49	68	23	2	1	0	0	0	0	0	0	0	**150**
11:00 PM	0	0	0	1	1	25	36	15	5	1	0	0	0	0	0	0	0	**84**
Total	**6**	**31**	**60**	**75**	**793**	**4,171**	**4,252**	**1,013**	**106**	**15**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**10,529**
Percent	**0.1%**	**0.3%**	**0.6%**	**0.7%**	**7.5%**	**39.6%**	**40.4%**	**9.6%**	**1.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	35.1	mph	Mean (Average) Speed	35	mph
85th Percentile	39.1	mph	10 mph Pace	30.1 - 40.1	mph
95th Percentile	41.9	mph	Percent in Pace	79.89	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: 40th Ave N-O Chestnut Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 02

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	4	19	9	1	0	0	0	0	0	0	0	0	0	**33**
1:00 AM	0	0	0	1	3	10	6	1	0	0	0	0	0	0	0	0	0	**21**
2:00 AM	0	0	1	1	3	11	8	3	1	0	0	0	0	0	0	0	0	**28**
3:00 AM	0	0	0	1	3	17	9	3	1	0	0	0	0	0	0	0	0	**34**
4:00 AM	0	0	0	2	4	28	37	9	0	1	0	0	0	0	0	0	0	**81**
5:00 AM	0	0	0	4	4	57	88	28	6	1	0	0	0	0	0	0	0	**188**
6:00 AM	0	0	1	3	19	122	190	53	5	1	0	0	0	0	0	0	0	**394**
7:00 AM	1	4	3	4	56	254	279	52	5	1	1	0	0	0	0	0	0	**660**
8:00 AM	0	5	2	5	44	279	252	54	4	0	0	0	0	0	0	0	0	**645**
9:00 AM	0	1	0	6	52	255	212	39	3	0	0	0	0	0	0	0	0	**568**
10:00 AM	0	1	1	7	57	290	204	31	1	2	0	0	0	0	0	0	0	**594**
11:00 AM	1	1	6	10	73	347	218	32	4	0	0	0	0	0	0	0	0	**692**
12:00 PM	0	3	3	7	61	352	253	39	3	1	0	0	0	0	0	0	0	**722**
1:00 PM	0	1	2	8	57	331	217	36	3	0	0	0	0	0	0	0	0	**655**
2:00 PM	0	1	2	14	112	397	229	37	4	1	0	0	0	0	0	0	0	**797**
3:00 PM	2	4	8	17	89	435	258	45	4	0	0	0	0	0	0	0	0	**862**
4:00 PM	0	1	4	9	78	427	292	53	4	0	0	0	0	0	0	0	0	**868**
5:00 PM	1	8	11	19	96	408	275	37	4	1	0	0	0	0	0	0	0	**860**
6:00 PM	0	1	1	4	46	241	203	37	2	1	0	0	0	0	0	0	0	**536**
7:00 PM	0	1	1	3	38	190	166	21	4	1	0	0	0	0	0	0	0	**425**
8:00 PM	0	1	1	2	36	163	102	21	1	0	0	0	0	0	0	0	0	**327**
9:00 PM	0	1	1	4	17	95	73	14	3	0	0	0	0	0	0	0	0	**208**
10:00 PM	0	1	0	2	10	57	39	7	0	0	0	0	0	0	0	0	0	**116**
11:00 PM	0	0	0	1	10	31	21	5	1	0	0	0	0	0	0	0	0	**69**
Total	**5**	**35**	**48**	**134**	**972**	**4,816**	**3,640**	**658**	**63**	**11**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**10,383**
Percent	**0.0%**	**0.3%**	**0.5%**	**1.3%**	**9.4%**	**46.4%**	**35.1%**	**6.3%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	34.3	mph	Mean (Average) Speed	34.3	mph
85th Percentile	38.1	mph	10 mph Pace	29.6 - 39.6	mph
95th Percentile	40.8	mph	Percent in Pace	81.6	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: 40th Ave N-O Chestnut Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 02

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	8	18	9	3	0	0	0	0	0	0	0	0	**39**
1:00 AM	0	0	0	0	0	7	20	6	1	0	0	0	0	0	0	0	0	**34**
2:00 AM	0	0	0	0	1	6	9	6	2	0	0	0	0	0	0	0	0	**24**
3:00 AM	0	0	0	0	0	6	8	9	2	0	0	0	0	0	0	0	0	**25**
4:00 AM	0	0	0	0	3	12	17	13	5	1	0	0	0	0	0	0	0	**51**
5:00 AM	0	0	0	0	2	22	74	52	11	2	1	0	0	0	0	0	0	**164**
6:00 AM	0	0	0	0	7	65	208	118	11	1	0	0	0	0	0	0	0	**410**
7:00 AM	2	1	1	3	40	272	328	78	14	2	1	0	0	0	0	0	0	**742**
8:00 AM	1	0	2	4	24	205	281	77	8	0	0	0	0	0	0	0	0	**602**
9:00 AM	0	1	4	4	35	214	266	60	6	0	0	0	0	0	0	0	0	**590**
10:00 AM	1	0	1	3	40	280	277	58	4	0	0	0	0	0	0	0	0	**664**
11:00 AM	0	0	3	4	57	312	260	47	5	0	0	0	0	0	0	0	0	**688**
12:00 PM	1	0	2	7	43	320	280	61	8	0	0	0	0	0	0	0	0	**722**
1:00 PM	1	4	4	3	59	313	264	51	5	1	0	0	0	0	0	0	0	**705**
2:00 PM	1	8	18	12	97	353	259	43	3	1	0	0	0	0	0	0	0	**795**
3:00 PM	1	5	3	8	83	386	264	48	5	0	0	0	0	0	0	0	0	**803**
4:00 PM	0	4	5	8	107	390	285	56	7	0	0	0	0	0	0	0	0	**862**
5:00 PM	1	3	3	7	91	371	295	56	6	1	0	0	0	0	0	0	0	**834**
6:00 PM	1	0	1	3	34	224	254	54	5	0	0	0	0	0	0	0	0	**576**
7:00 PM	0	1	1	4	25	143	178	43	6	0	1	0	0	0	0	0	0	**402**
8:00 PM	0	2	3	2	11	100	137	46	6	0	0	0	0	0	0	0	0	**307**
9:00 PM	0	1	0	1	7	62	83	35	5	0	0	0	0	0	0	0	0	**194**
10:00 PM	0	0	0	1	4	40	67	26	2	0	0	0	0	0	0	0	0	**140**
11:00 PM	0	0	0	0	4	19	34	16	3	0	0	0	0	0	0	0	0	**76**
Total	**10**	**30**	**51**	**74**	**775**	**4,130**	**4,166**	**1,068**	**133**	**9**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**10,449**
Percent	**0.1%**	**0.3%**	**0.5%**	**0.7%**	**7.4%**	**39.5%**	**39.9%**	**10.2%**	**1.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	35.1	mph	Mean (Average) Speed	35.1	mph
85th Percentile	39.4	mph	10 mph Pace	30.2 - 40.2	mph
95th Percentile	42.1	mph	Percent in Pace	79.3	%

Mark Skaggs:425-250-0777
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Vehicle Speed Report Summary

Location: Chestnut Ave E-O 40th Ave

Count Direction: Eastbound / Westbound

Date Range: 3/7/2023 to 3/9/2023

Site Code: 04

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	16	52	155	203	55	7	1	0	0	0	0	0	0	0	0	0	0	489
Percent	3.3%	10.6%	31.7%	41.5%	11.2%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	4	65	132	212	85	12	2	0	0	0	0	0	0	0	0	0	0	512
Percent	0.8%	12.7%	25.8%	41.4%	16.6%	2.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	20	117	287	415	140	19	3	0	0	0	0	0	0	0	0	0	0	1,001
Percent	2.0%	11.7%	28.7%	41.5%	14.0%	1.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Eastbound			**Eastbound**		
50th Percentile (Median)	20.6	mph	Mean (Average) Speed	20.0	mph
85th Percentile	24.5	mph	10 mph Pace	16.0 - 26.0	mph
95th Percentile	27.2	mph	Percent in Pace	75.1	%
Westbound			**Westbound**		
50th Percentile (Median)	21.1	mph	Mean (Average) Speed	20.8	mph
85th Percentile	25.9	mph	10 mph Pace	15.4 - 25.4	mph
95th Percentile	28.6	mph	Percent in Pace	68.6	%

Mark Skaggs:425-250-0777
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Location: Chestnut Ave E-O 40th Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 04

idax DATA SOLUTIONS

Tuesday, March 7, 2023
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
7:00 AM	2	3	4	4	3	1	0	0	0	0	0	0	0	0	0	0	0	**17**
8:00 AM	1	0	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**8**
9:00 AM	1	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
10:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 AM	0	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
12:00 PM	1	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
1:00 PM	1	7	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**17**
2:00 PM	0	0	4	7	1	1	0	0	0	0	0	0	0	0	0	0	0	**13**
3:00 PM	0	0	4	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**14**
4:00 PM	1	2	3	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**15**
5:00 PM	0	1	9	9	5	0	0	0	0	0	0	0	0	0	0	0	0	**24**
6:00 PM	0	1	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 PM	0	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
8:00 PM	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
9:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
10:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**7**	**28**	**55**	**62**	**18**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**172**
Percent	**4.1%**	**16.3%**	**32.0%**	**36.0%**	**10.5%**	**1.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.8	mph	Mean (Average) Speed	19.1	mph
85th Percentile	24.2	mph	10 mph Pace	14.5 - 24.5	mph
95th Percentile	27.0	mph	Percent in Pace	69.2	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Chestnut Ave E-O 40th Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 04

idax DATA SOLUTIONS

Tuesday, March 7, 2023
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	0	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	**8**
7:00 AM	0	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
8:00 AM	0	0	1	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**11**
9:00 AM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
10:00 AM	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 AM	0	6	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
12:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 PM	0	2	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
2:00 PM	0	2	5	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**13**
3:00 PM	1	1	4	4	1	1	0	0	0	0	0	0	0	0	0	0	0	**12**
4:00 PM	1	0	7	15	0	2	0	0	0	0	0	0	0	0	0	0	0	**25**
5:00 PM	0	2	5	8	7	0	0	0	0	0	0	0	0	0	0	0	0	**22**
6:00 PM	0	1	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 PM	0	1	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
8:00 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
9:00 PM	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
10:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**4**	**23**	**44**	**78**	**19**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**173**
Percent	**2.3%**	**13.3%**	**25.4%**	**45.1%**	**11.0%**	**2.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.8	mph	Mean (Average) Speed	20.4	mph
85th Percentile	24.7	mph	10 mph Pace	14.9 - 24.9	mph
95th Percentile	28.6	mph	Percent in Pace	71.68	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Chestnut Ave E-O 40th Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 04

Wednesday, March 8, 2023
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	3	4	5	3	0	1	0	0	0	0	0	0	0	0	0	0	0	**16**
8:00 AM	1	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
9:00 AM	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
10:00 AM	0	0	1	5	1	1	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 AM	0	0	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
12:00 PM	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
1:00 PM	1	1	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
2:00 PM	0	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
3:00 PM	0	0	6	7	3	0	0	0	0	0	0	0	0	0	0	0	0	**16**
4:00 PM	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
5:00 PM	0	1	5	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
6:00 PM	0	0	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
7:00 PM	0	0	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
8:00 PM	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
9:00 PM	0	1	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	**6**
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**5**	**11**	**51**	**69**	**13**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**152**
Percent	**3.3%**	**7.2%**	**33.6%**	**45.4%**	**8.6%**	**1.3%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.5	mph	Mean (Average) Speed	20.1	mph
85th Percentile	24.1	mph	10 mph Pace	15.3 - 25.3	mph
95th Percentile	27.4	mph	Percent in Pace	79.6	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Chestnut Ave E-O 40th Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 04

Wednesday, March 8, 2023
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	0	1	2	7	1	0	0	0	0	0	0	0	0	0	0	0	**11**
7:00 AM	0	1	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	**7**
8:00 AM	0	2	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	**10**
9:00 AM	0	1	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**10**
10:00 AM	0	2	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 AM	0	1	1	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**11**
12:00 PM	0	1	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	**9**
1:00 PM	0	1	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	**11**
2:00 PM	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 PM	0	1	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 PM	0	3	5	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**17**
5:00 PM	0	4	5	6	3	0	0	0	0	0	0	0	0	0	0	0	0	**18**
6:00 PM	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 PM	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
8:00 PM	0	3	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	**10**
9:00 PM	0	1	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**0**	**21**	**41**	**61**	**37**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**162**
Percent	**0.0%**	**13.0%**	**25.3%**	**37.7%**	**22.8%**	**1.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.1	mph	Mean (Average) Speed	21.1	mph
85th Percentile	26.6	mph	10 mph Pace	17.0 - 27.0	mph
95th Percentile	28.9	mph	Percent in Pace	66.67	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Chestnut Ave E-O 40th Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 04

Thursday, March 9, 2023
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
6:00 AM	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	1	1	4	6	3	0	0	0	0	0	0	0	0	0	0	0	0	**15**
8:00 AM	1	1	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**8**
9:00 AM	1	0	2	4	3	0	0	0	0	0	0	0	0	0	0	0	0	**10**
10:00 AM	1	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 AM	0	0	0	7	3	0	0	0	0	0	0	0	0	0	0	0	0	**10**
12:00 PM	0	1	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
1:00 PM	0	0	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
2:00 PM	0	3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
3:00 PM	0	2	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	**9**
4:00 PM	0	1	9	8	2	1	0	0	0	0	0	0	0	0	0	0	0	**21**
5:00 PM	0	1	3	13	1	1	0	0	0	0	0	0	0	0	0	0	0	**19**
6:00 PM	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 PM	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
8:00 PM	0	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
10:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**4**	**13**	**49**	**72**	**24**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**165**
Percent	**2.4%**	**7.9%**	**29.7%**	**43.6%**	**14.5%**	**1.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.3	mph	Mean (Average) Speed	20.8	mph
85th Percentile	25.2	mph	10 mph Pace	16.1 - 26.1	mph
95th Percentile	27.6	mph	Percent in Pace	79.4	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Chestnut Ave E-O 40th Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 04

Thursday, March 9, 2023
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	1	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**11**
7:00 AM	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	**6**
8:00 AM	0	0	0	8	2	1	0	0	0	0	0	0	0	0	0	0	0	**11**
9:00 AM	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
10:00 AM	0	1	2	3	4	1	0	0	0	0	0	0	0	0	0	0	0	**11**
11:00 AM	0	3	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
12:00 PM	0	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 PM	0	2	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
2:00 PM	0	0	7	8	3	0	0	0	0	0	0	0	0	0	0	0	0	**18**
3:00 PM	0	1	6	7	2	1	1	0	0	0	0	0	0	0	0	0	0	**18**
4:00 PM	0	3	3	9	0	0	1	0	0	0	0	0	0	0	0	0	0	**16**
5:00 PM	0	1	4	7	3	0	0	0	0	0	0	0	0	0	0	0	0	**15**
6:00 PM	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 PM	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
8:00 PM	0	1	4	2	0	1	0	0	0	0	0	0	0	0	0	0	0	**8**
9:00 PM	0	1	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	**8**
10:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**0**	**21**	**47**	**73**	**29**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**177**
Percent	**0.0%**	**11.9%**	**26.6%**	**41.2%**	**16.4%**	**2.8%**	**1.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.1	mph	Mean (Average) Speed	21	mph
85th Percentile	25.8	mph	10 mph Pace	16.3 - 26.3	mph
95th Percentile	28.7	mph	Percent in Pace	70.06	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Chestnut Ave E-O 40th Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 04

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
6:00 AM	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	2	3	4	4	2	1	0	0	0	0	0	0	0	0	0	0	0	**16**
8:00 AM	1	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**8**
9:00 AM	1	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
10:00 AM	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 AM	0	1	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
12:00 PM	0	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 PM	1	3	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**13**
2:00 PM	0	2	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
3:00 PM	0	1	3	6	3	0	0	0	0	0	0	0	0	0	0	0	0	**13**
4:00 PM	0	1	5	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**14**
5:00 PM	0	1	6	10	2	0	0	0	0	0	0	0	0	0	0	0	0	**19**
6:00 PM	0	1	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 PM	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
8:00 PM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
9:00 PM	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
10:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**5**	**17**	**51**	**65**	**17**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**156**
Percent	**3.2%**	**10.9%**	**32.7%**	**41.7%**	**10.9%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	20.6	mph	Mean (Average) Speed	20.0	mph
85th Percentile	24.5	mph	10 mph Pace	16.0 - 26.0	mph
95th Percentile	27.2	mph	Percent in Pace	75.1	%

Mark Skaggs:425-250-0777
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Location: Chestnut Ave E-O 40th Ave
Date Range: 3/7/2023 to 3/9/2023
Site Code: 04

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	0	**10**
7:00 AM	0	1	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**7**
8:00 AM	0	1	1	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**11**
9:00 AM	0	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
10:00 AM	1	2	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 AM	0	3	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**11**
12:00 PM	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
1:00 PM	0	2	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
2:00 PM	0	1	5	5	2	0	0	0	0	0	0	0	0	0	0	0	0	**13**
3:00 PM	0	1	4	4	2	1	0	0	0	0	0	0	0	0	0	0	0	**12**
4:00 PM	0	2	5	10	1	1	0	0	0	0	0	0	0	0	0	0	0	**19**
5:00 PM	0	2	5	7	4	0	0	0	0	0	0	0	0	0	0	0	0	**18**
6:00 PM	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 PM	0	2	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
8:00 PM	0	1	2	3	1	1	0	0	0	0	0	0	0	0	0	0	0	**8**
9:00 PM	0	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**1**	**22**	**43**	**70**	**28**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**168**
Percent	**0.6%**	**13.1%**	**25.6%**	**41.7%**	**16.7%**	**2.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	21.1	mph	Mean (Average) Speed	20.8	mph
85th Percentile	25.9	mph	10 mph Pace	15.4 - 25.4	mph
95th Percentile	28.6	mph	Percent in Pace	68.6	%

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ATTACHMENT D

Signal Warrant Analysis

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 1 - Eight Hour Vehicular Volume
Combination of Condition A and Condition B

Hour Begins	Minor Approach W Chestnut Ave Highest EB/WB (2)	Major Approach S 40th Ave Total NB & SB (2)	MUTCD (1) Warrant 1 A/B	80% Condition A	80% Condition B
5:00	8	378			
6:00	19	893			
7:00	39	1,622			
8:00	23	1,421			
9:00	20	1,321			
10:00	21	1,422			
11:00	22	1,565			
12:00	26	1,636			
13:00	26	1,541			
14:00	29	1,792			
15:00	32	1,916			
16:00	34	1,967			
17:00	30	1,929			
18:00	15	1,246			
19:00	10	928			
		WARRANT MET (3) =	**NO**		

Notes:
(1) MUTCD - Manual on Uniform Traffic Control Devices, 2009.
(2) Three-day average of 24-hour volumes conducted on 3/7/23, 3/8/23, and 3/9/23.
(3) Signal warrant satisfied when traffic volumes exist for each of any 8 hours of an average day.

MUTCD Warrant Requirements

Warrant 1: Combination of A and B
The combination of warrants is satisfied where Condition A and Condition B are satisfied to the extent of 80 percent or more of the stated values.
NOTE:
This combination warrant only applies after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

40th & Chestnut

S 40th Ave / W Chestnut Ave

TENW Project #2022-395

Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 1 - Eight Hour Vehicular Volume
Condition A - Minimum Vehicular Volume

Hour Begins	Minor Approach W Chestnut Ave Highest EB/WB (2)	Major Approach S 40th Ave Total NB & SB (2)	MUTCD (1) Warrant 1A
5:00	8	378	
6:00	19	893	
7:00	39	1,622	
8:00	23	1,421	
9:00	20	1,321	
10:00	21	1,422	
11:00	22	1,565	
12:00	26	1,636	
13:00	26	1,541	
14:00	29	1,792	
15:00	32	1,916	
16:00	34	1,967	
17:00	30	1,929	
18:00	15	1,246	
19:00	10	928	
		WARRANT MET (3) =	**NO**

Notes:
(1) MUTCD - Manual on Uniform Traffic Control Devices, 2009.
(2) Three-day average of 24-hour volumes conducted on 3/7/23, 3/8/23, and 3/9/23.
(3) Signal warrant satisfied when traffic volumes exist for each of any 8 hours of an average day.

MUTCD Warrant Requirements

Warrant 1, Condition A: Minimum Vehicular Volume
Minimum volume of 600 vehicles per hour on 2-lane major street (both approaches) and 200 vehicles per hour on 2-lane minor street approach.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 1 - Eight Hour Vehicular Volume
Condition B - Interruption of Continuous Traffic

Hour Begins	Minor Approach W Chestnut Ave Highest EB/WB (2)	Major Approach S 40th Ave Total NB & SB (2)	MUTCD (1) Warrant 1B
5:00	8	378	
6:00	19	893	
7:00	39	1,622	
8:00	23	1,421	
9:00	20	1,321	
10:00	21	1,422	
11:00	22	1,565	
12:00	26	1,636	
13:00	26	1,541	
14:00	29	1,792	
15:00	32	1,916	
16:00	34	1,967	
17:00	30	1,929	
18:00	15	1,246	
19:00	10	928	
		WARRANT MET (3) =	**NO**

Notes:
(1) MUTCD - Manual on Uniform Traffic Control Devices, 2009.
(2) Three-day average of 24-hour volumes conducted on 3/7/23, 3/8/23, and 3/9/23.
(3) Signal warrant satisfied when traffic volumes exist for each of any 8 hours of an average day.

MUTCD Warrant Requirements

Warrant 1, Condition B: Interruption of Continuous Traffic
Minimum volume of 900 vehicles per hour on 2-lane major street (both approaches) and 100 vehicles per hour on 2-lane minor street approach.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 2 - Four Hour Vehicular Volume

Hour Begins	Minor Approach W Chestnut Ave Highest EB/WB (2)	Major Approach S 40th Ave Total NB & SB (2)	MUTCD (1) Warrant 2
5:00	8	378	
6:00	19	893	
7:00	39	1,622	
8:00	23	1,421	
9:00	20	1,321	
10:00	21	1,422	
11:00	22	1,565	
12:00	26	1,636	
13:00	26	1,541	
14:00	29	1,792	
15:00	32	1,916	
16:00	34	1,967	
17:00	30	1,929	
18:00	15	1,246	
17:00	10	928	
		WARRANT MET (3) =	**NO**

Notes:
(1) MUTCD - Manual on Uniform Traffic Control Devices, 2009.
(2) Three-day average of 24-hour volumes conducted on 3/7/23, 3/8/23, and 3/9/23.
(3) Signal warrant satisfied when traffic volumes exist for each of any 4 hours of an average day.

MUTCD Warrant Requirements

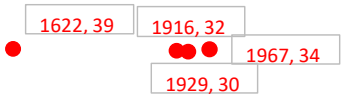
Warrant 2: Four Hour Vehicular Volume
The plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher volume minor street approach (one direction only) all fall above the applicable curve in Figure 4C-1 for the existing combination of approach lanes.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 2 - Four Hour Vehicular Volume

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.



WARRANT MET (2) = NO

Notes:
(1) The four highest hourly minor/major approach volumes as shown in the data for Warrant 1.
(2) The signal warrant is satisfied when the conditions given below exist for each of any 4 hours of an average day.

MUTCD Warrant Requirements

Warrant 2: Four Hour Vehicular Volume

The plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher volume minor street approach (one direction only) all fall above the applicable curve in Figure 4C-1 for the existing combination of approach lanes. On the minor street, the higher volume shall not be required to be on the same approach during each of these 4 hours.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 3 - Peak Hour (AM Peak Hour)

Condition A

This warrant is met if all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

1. The total stopped delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach; or 5 vehicle-hours for a two-lane approach

	40th/Chestnut, EB approach (1 lane)		
Control Delay (sec/veh) =	14.3	sec/veh	**Based on results from HCM 6th analysis
Stopped Delay (sec/veh) =	11.0	sec/veh	
Total Volume (veh/hr) =	40	veh/hour	
Vehicle-Hours =	0.12	veh-hours	
CONDITION 1 MET =	**NO**		

2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes.

	40th/Chestnut, EB approach volume	40
CONDITION 2 MET =	**NO**	

3. The total entering volume serviced during the hour equals or exceeds 650 vehicle per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

	40th/Chestnut, Total entering volume	1,635
CONDITION 3 MET =	**YES**	

WARRANT MET =	**NO**

NOTE:

This signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 3 - Peak Hour (PM Peak Hour)

Condition A

This warrant is met if all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

1. The total stopped delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach; or 5 vehicle-hours for a two-lane approach

	40th/Chestnut, EB approach (1 lane)		
Control Delay (sec/veh) =	14.0	sec/veh	**Based on results from HCM 6th analysis
Stopped Delay (sec/veh) =	10.8	sec/veh	
Total Volume (veh/hr) =	34	veh/hour	
Vehicle-Hours =	0.10	veh-hours	
CONDITION 1 MET =	**NO**		

2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes.

	40th/Chestnut, EB approach volume	34
CONDITION 2 MET =	**NO**	

3. The total entering volume serviced during the hour equals or exceeds 650 vehicle per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

	40th/Chestnut, Total entering volume	1,931
CONDITION 3 MET =	**YES**	

WARRANT MET =	**NO**

NOTE:

This signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 3 - Peak Hour
Condition B

Hour Begins	Minor Approach W Chestnut Ave Highest EB/WB (2)	Major Approach S 40th Ave Total NB & SB (2)	MUTCD (1) Warrant 3
5:00	8	378	
6:00	19	893	
7:00	39	1,622	
8:00	23	1,421	
9:00	20	1,321	
10:00	21	1,422	
11:00	22	1,565	
12:00	26	1,636	
13:00	26	1,541	
14:00	29	1,792	
15:00	32	1,916	
16:00	34	1,967	
17:00	30	1,929	
18:00	15	1,246	
19:00	10	928	
		WARRANT MET (3) =	**NO**

Notes:
(1) MUTCD - Manual on Uniform Traffic Control Devices, 2009.
(2) Three-day average of 24-hour volumes conducted on 3/7/23, 3/8/23, and 3/9/23.
(3) Signal warrant satisfied when traffic volumes exist for one hour of an average day.

MUTCD Warrant Requirements

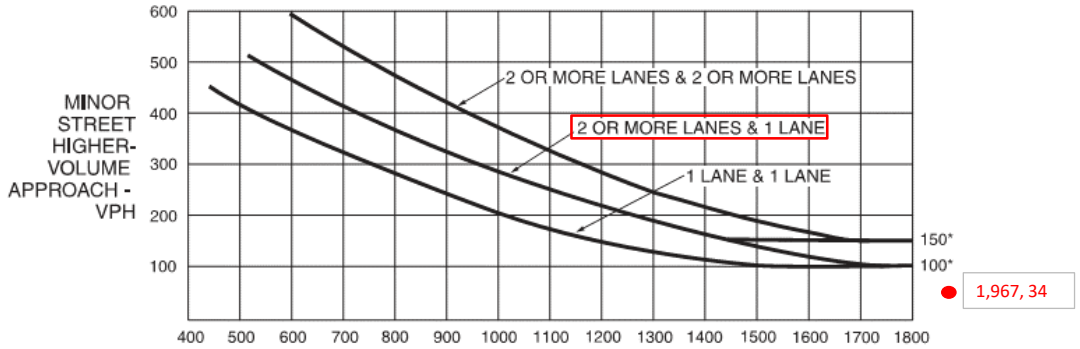
Warrant 3: Peak Hour - Condition B
The plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher volume minor street approach (one direction only) for one hour (any four consectutive 15-minute periods) of an average day falls above the curve in Figure 4C-3 for the existing combination of approach lanes.

NOTE:
This signal warrant shall only be applied in unusual cases. Such cases include, but are not limited to, office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 3 - Peak Hour
Condition B

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT MET (2) = NO

Notes:
(1) The highest hourly minor/major approach volumes as shown in the data for Warrant 1.
(2) The signal warrant is satisfied when the conditions given below exist for one hour of an average day.

MUTCD Warrant Requirements

Warrant 3: Peak Hour - Condition B
The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor street approach (one direction only) for 1 hour of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.
NOTE:
This signal warrant shall only be applied in unusual cases. Such cases include, but are not limited to, office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.

40th & Chestnut

S 40th Ave / W Chestnut Ave

TENW Project #2022-395

Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 4 - Pedestrian Volume

Hour Begins	Minor Approach W Chestnut Ave South + North crossing peds (2)	Major Approach S 40th Ave Total NB & SB (3)	MUTCD (1) Warrant 4
5:00	2	378	
6:00	0	893	
7:00	7	1,622	
8:00	3	1,421	
9:00	4	1,321	
10:00	4	1,422	
11:00	3	1,565	
12:00	4	1,636	
13:00	2	1,541	
14:00	3	1,792	
15:00	5	1,916	
16:00	6	1,967	
17:00	4	1,929	
18:00	4	1,246	
17:00	1	928	
		WARRANT MET (4) =	**NO**

Notes:
(1) MUTCD - Manual on Uniform Traffic Control Devices, 2009.
(2) Three-day average of 24-hour volumes conducted on 3/7/23, 3/8/23, and 3/9/23.
(3) Three-day average of 24-hour volumes conducted on 3/7/23, 3/8/23, and 3/9/23.
(4) Signal warrant satisfied when traffic volumes exist for each of any 4 hours of an average day.

MUTCD Warrant Requirements

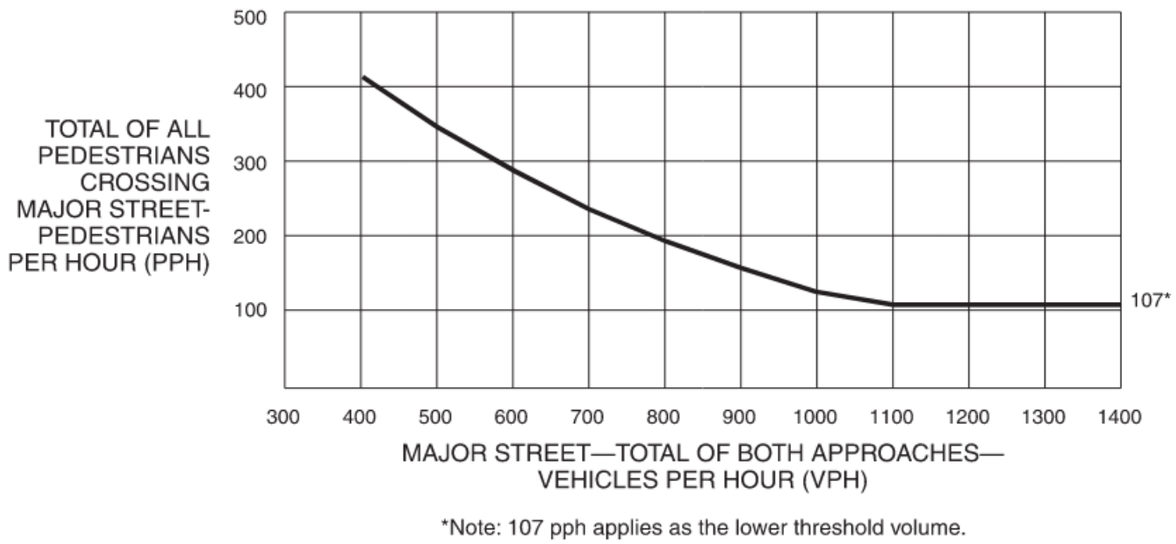
Warrant 4: Pedestrian Volume

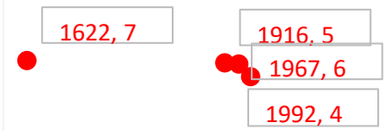
The plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the applicable curve in Figure 4C-5.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 4 - Pedestrian Volume

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume





WARRANT MET (2) = NO

Notes:
(1) The four highest hourly major approach/ped crossing volumes as shown in the data for Warrant 4.
(2) The signal warrant is satisfied when the conditions given below exist for each of any 4 hours of an average day.

MUTCD Warrant Requirements

Warrant 4: Pedestrian Volume

The plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the applicable curve in Figure 4C-5.

40th & Chestnut

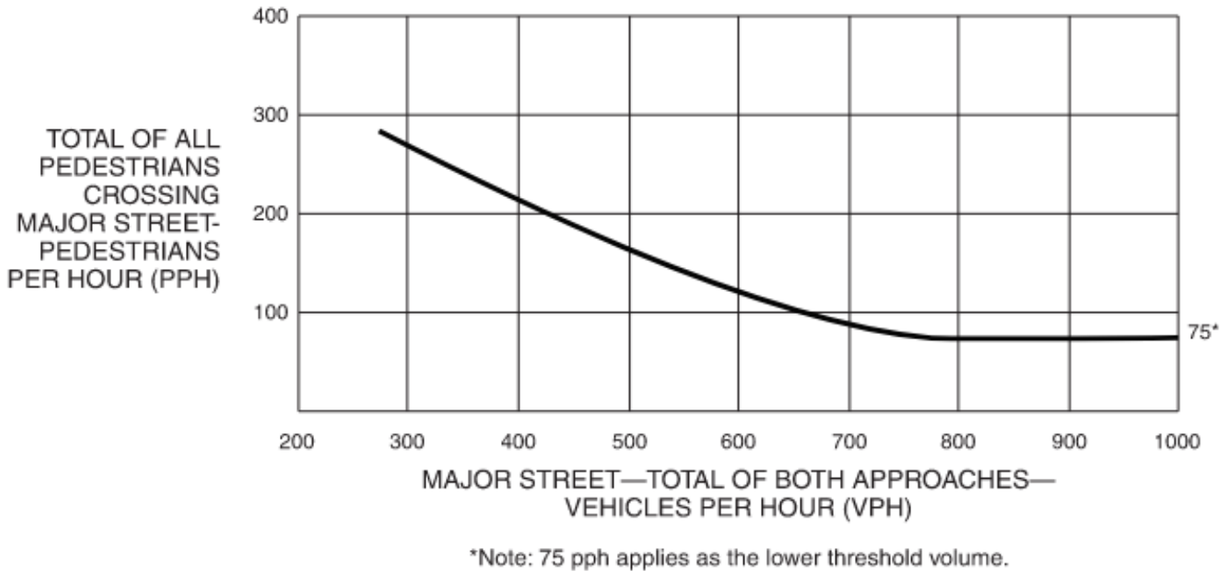
S 40th Ave / W Chestnut Ave

TENW Project #2022-395

Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 4 - Pedestrian Volume

Figure 4C-6. Warrant 4, Pedestrian Four-Hour Volume (70% Factor)



WARRANT MET (2) = NO

Notes:

(1) The four highest hourly major approach/ped crossing volumes as shown in the data for Warrant 4.

(2) The signal warrant is satisfied when the conditions given below exist for each of any 4 hours of an average day.

MUTCD Warrant Requirements

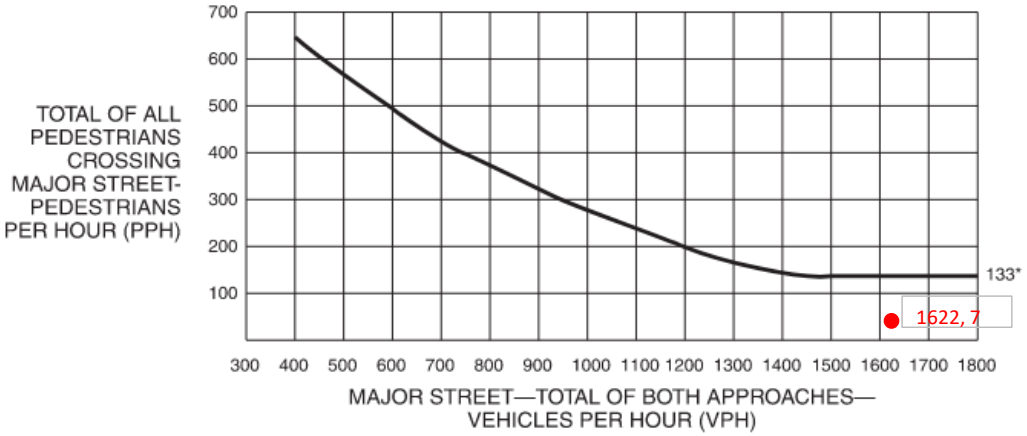
Warrant 4: Pedestrian Volume

The plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the applicable curve in Figure 4C-5.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 4 - Pedestrian Volume

Figure 4C-7. Warrant 4, Pedestrian Peak Hour



*Note: 133 pph applies as the lower threshold volume.

WARRANT MET (4) = NO

Notes:
(1) The highest hourly major approach volumes/pedestrian crossing volumes as shown in the data for Warrant 4.
(2) The signal warrant is satisfied when the conditions given below exist for one hour of an average day.

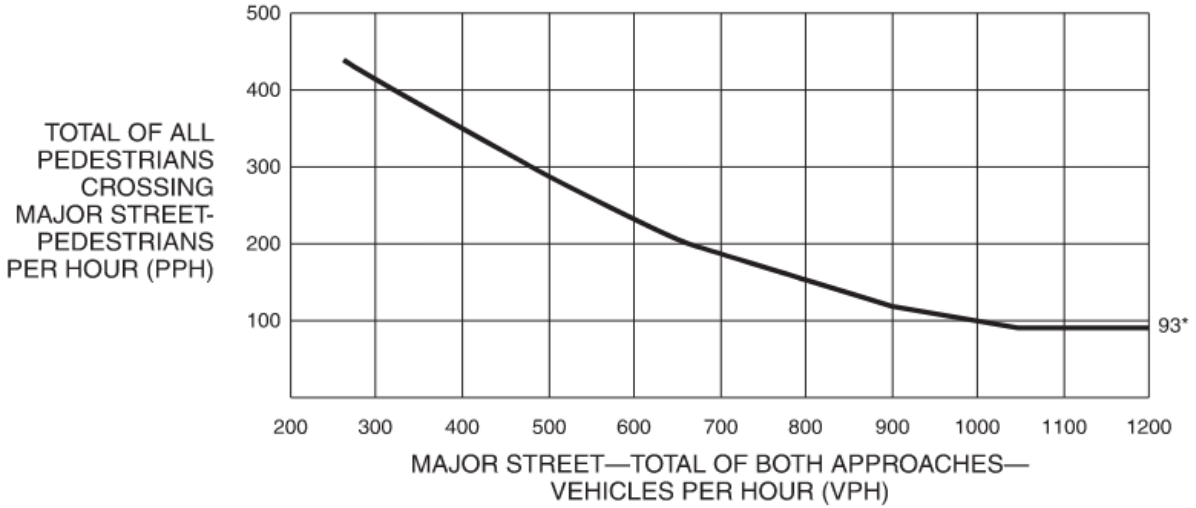
MUTCD Warrant Requirements

Warrant 4: Pedestrian Volume
The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the applicable curve in Figure 4C-5.

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395
Signal Warrant Analysis for S 40th Ave / W Chestnut Ave
2023 Existing

Warrant 4 - Pedestrian Volume

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



*Note: 93 pph applies as the lower threshold volume.

1622, 7

WARRANT MET (4) = NO

Notes:
(1) The highest hourly major approach volumes/pedestrian crossing volumes as shown in the data for Warrant 4.
(2) The signal warrant is satisfied when the conditions given below exist for one hour of an average day.

MUTCD Warrant Requirements

Warrant 4: Pedestrian Volume
The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the applicable curve in Figure 4C-5.

ATTACHMENT E

Multi-Way Stop Analysis

40th & Chestnut
S 40th Ave / W Chestnut Ave
TENW Project #2022-395

Existing Year = 2023

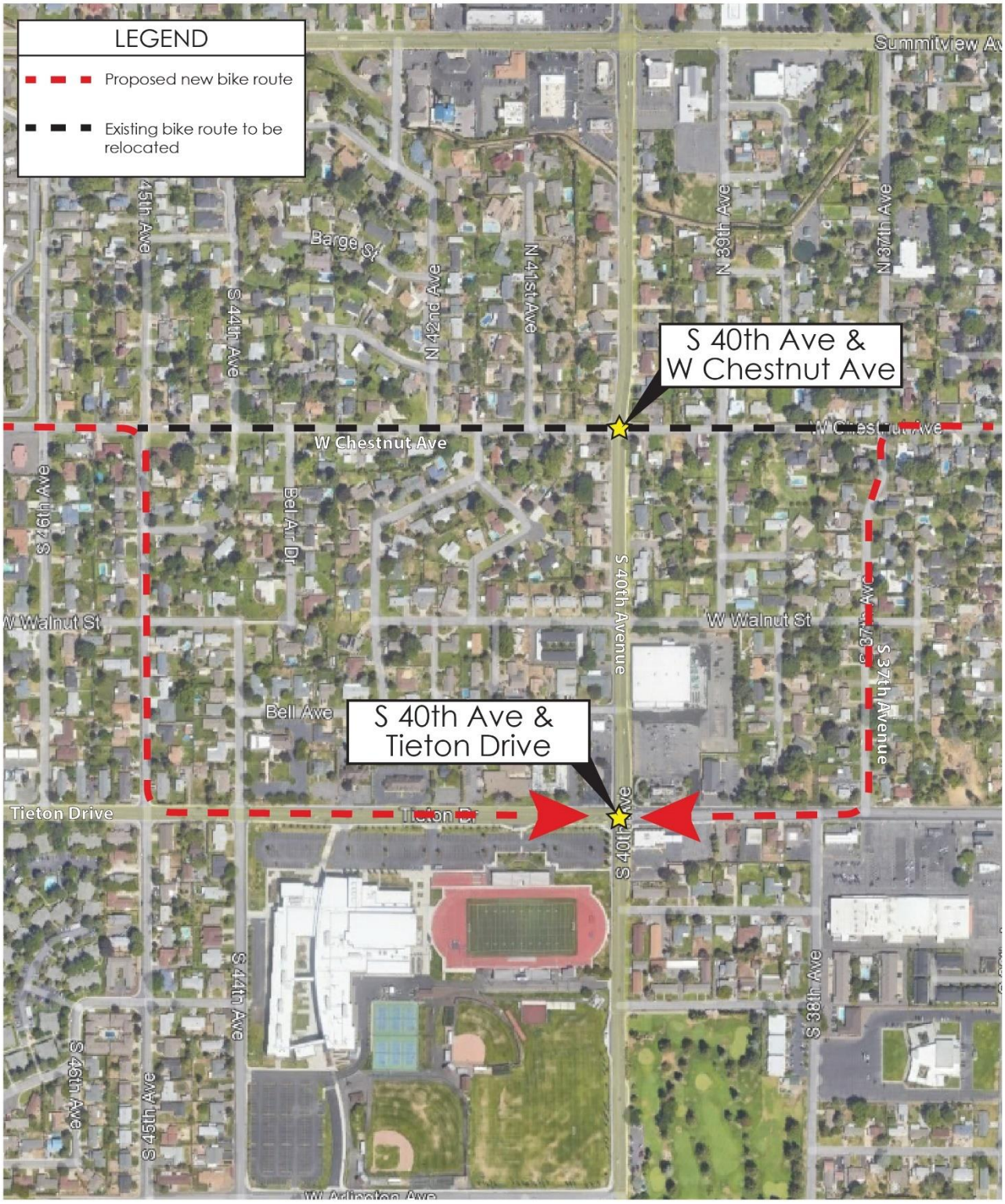
Multi-Way Stop Warrant

	Tuesday 3/7/23				Wednesday 3/8/23				Thursday 3/9/23				2023 Existing - 3 Day Average					
Time	EB (Chestnut)	WB (Chestnut)	NB (40th)	SB (40th)	EB (Chestnut)	WB (Chestnut)	NB (40th)	SB (40th)	EB (Chestnut)	WB (Chestnut)	NB (40th)	SB (40th)	EB (Chestnut)	WB (Chestnut)	NB (40th)	SB (40th)	Total Entering Volume on Chestnut (1)	Total Entering Volume on 40th (2)
12:00 AM	0	1	39	37	0	0	31	45	1	1	32	37	0	1	34	40	1	74
1:00 AM	0	1	13	19	0	0	28	40	0	0	24	37	0	0	22	32	0	54
2:00 AM	1	0	26	18	3	0	26	28	2	3	26	25	2	1	26	24	3	50
3:00 AM	2	0	31	32	3	3	24	21	2	2	40	21	2	2	32	25	4	57
4:00 AM	3	1	89	48	1	2	74	49	1	0	80	50	2	1	81	49	3	130
5:00 AM	4	5	178	165	9	1	184	171	9	6	182	147	8	5	181	161	13	342
6:00 AM	17	8	395	422	16	7	386	421	19	8	397	406	17	8	393	416	25	809
7:00 AM	35	8	653	810	46	7	691	822	41	7	660	772	41	8	668	801	49	1,469
8:00 AM	22	12	618	599	22	9	656	653	23	13	654	679	23	11	643	644	34	1,287
9:00 AM	13	4	584	627	22	11	605	619	23	5	538	613	21	7	576	620	28	1,196
10:00 AM	23	13	564	730	18	8	603	675	22	12	613	680	21	11	593	695	32	1,288
11:00 AM	14	15	703	727	21	10	674	732	25	12	685	730	20	13	687	730	33	1,417
12:00 PM	24	3	699	746	26	9	705	733	26	9	766	797	26	8	723	759	34	1,482
1:00 PM	20	11	671	694	20	13	636	718	31	9	691	778	24	11	666	730	35	1,396
2:00 PM	23	17	798	841	29	7	781	836	27	19	811	801	27	14	797	826	41	1,623
3:00 PM	26	9	869	808	30	7	878	827	35	17	885	942	31	12	877	859	43	1,736
4:00 PM	35	21	887	883	29	22	909	903	32	15	831	931	33	19	876	906	52	1,782
5:00 PM	25	19	866	896	26	17	866	879	31	18	851	883	28	19	861	886	47	1,747
6:00 PM	20	10	534	621	12	5	501	557	11	7	556	620	15	8	530	599	23	1,129
7:00 PM	9	7	427	403	8	7	434	433	10	5	424	401	9	7	428	412	16	840
8:00 PM	7	3	339	288	5	8	308	301	3	6	343	328	5	6	330	306	11	636
9:00 PM	5	4	178	181	5	9	193	182	5	8	240	219	5	7	204	194	12	398
10:00 PM	8	1	122	144	4	0	110	126	3	1	119	151	6	1	117	140	7	257
11:00 PM	1	1	48	67	2	2	81	76	6	2	74	82	4	2	68	75	6	143
																	>200	>300
																	0	17

(1) The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; and
(2) The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day

ATTACHMENT F

Bike Reroute Alternative



Attachment F: Bike Reroute Alternative