Spokane Plan Commission Agenda

Wednesday, June 24, 2020
2:00 PM
Virtual Meeting
808 W Spokane Falls Blvd, Spokane, WA 99201

Virtual Meeting - See Below For Information

TIMES GIVEN ARE AN ESTIMATE AND ARE SUBJECT TO CHANGE

Public Comment Period:

3 minutes each	Citizens are invited to address the Plan Commission on any topic not on the agenda.

Commission Briefing Session:

2:00 – 2:30	1. Approve 6/10/2020 meeting minutes	All
	2. City Council Report	CM Candace Mumm
	3. Community Assembly Liaison Report	Mary Winkes
	4. President Report	Todd Beyreuther
	5. Transportation Sub-Committee Report	John Dietzman
	6. Secretary Report	Louis Meuler

Workshops:

2:30 - 2:50	1. Comp Plan Amendment Z19-502COMP	Kevin Freibott
2:50 - 3:10	2. Comp Plan Amendment Z19-042COMP	Kevin Freibott
3:10 - 3:30	3. Comp Plan Amendment Z20-045COMP	Kevin Freibott
3:30 - 4:20	4. Arterial Street Map Amendments	Inga Note
4:20 - 4:40	5. Grand Boulevard Transportation & Land Use Study	Melissa Wittstruck & Inga Note
4:40 - 5:00	6. South University District Subarea Plan	Chris Green

Adjournment:

The next PC meeting will be held on Wednesday, July 08, 2020

In order to comply with public health measures and Governor Inslee's *Stay Home, Stay Safe* order, the Plan Commission meeting will be held on-line.

AMERICANS WITH DISABILITIES ACT (ADA) INFORMATION: The City of Spokane is committed to providing equal access to its facilities, programs and services for persons with disabilities. The Council Chambers and the Council Briefing Center in the lower level of Spokane City Hall, 808 W. Spokane Falls Blvd., are both wheelchair accessible. The Council Briefing Center is equipped with an audio loop system for persons with hearing loss. The Council Chambers currently has an infrared system and headsets may be checked out by contacting the meeting organizer. Individuals requesting reasonable accommodations or further information may call, write, or email Human Resources at 509.625.6363, 808 W. Spokane Falls Blvd, Spokane, WA, 99201; or msteinolfson@spokanecity.org. Persons who are deaf or hard of hearing may contact Human Resources through the Washington Relay Service at 7-1-1. Please contact us forty-eight (48) hours before the meeting date.

Members of the general public are encouraged to join the on-line meeting using the following information:

To participate via video follow the link on your computer (click on "Join meeting")

Join meeting

To participate by phone

Call: +1-408-418-9388 United States Toll
Enter: 146 429 3180 followed by **#** when prompted for a meeting number or access code
Enter **#** when prompted for an attendee ID

Please note that public comments will be taken during the meeting, but the public is encouraged to continue to submit their comments or questions in writing to:

Louis Meuler at
plancommission@spokanecity.org

The audio proceedings of the Plan Commission meeting will be recorded, with digital copies made available upon request.

DRAFT

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Spokane Plan Commission – Draft Minutes

June 10, 2020
Teleconference
Meeting Minutes: Meeting called to order at 2:00 PM by Todd Beyreuther

Attendance:

- Board Members Present: Todd Beyreuther(President), Greg Francis(Vice President), John Dietzman , Michael Baker, Carole Shook, Sylvia St. Clair, Candace Mumm (City Council Liaison), Mary Winkes (Community Assembly Liaison)
- Board Members Not Present: Diana Painter
- *Quorum Present: Yes*
- Staff Members Present: Louis Meuler, Jackie Churchill, Tirrell Black

Public Comment:

None

Briefing Session:

Minutes from the May 27, 2020 meeting approved unanimously.

1. **City Council Liaison Report – Candace Mumm**
   - CM Mumm reported that City Council approved three new Plan Commission members.
   - The City Council is looking at the budget and they are looking at 6% to 12% cut across the board, but City looking ahead to 2021 and believes that there are enough financial reserves. The Council doesn't anticipate any modifications of service to the public other than what has happened under Covid-19.
   - CM Mumm reported that the increase on new Covid-19 cases are fairly isolated and traceable. However, it is not looking like will we move to stage 3 as soon as previously anticipated.
   - She also said that the City expedited the review process of outdoor seating for restaurants and made up guidelines for using the right of way and of how to share the outdoor space. The suspension is temporary through the end of the year.
2. **Community Assembly Liaison Report – Mary Winkes**
   - Ms. Winkes reported that at the last Community Assembly meeting Council Member Cathcart gave a presentation that gave suggestions on projects that should be added to the 6 Year Plan.
3. **Commission President Report – Todd Beyreuther**
   - President Beyreuther reported that next few Plan Commission meetings will focus on Comprehensive Plan Amendments and the Grand Blvd. Transportation and Land Use Study.
4. **Transportation Subcommittee Report – John Dietzman**
   - Mr. Dietzman reported that Plan Commission Transportation Subcommittee did not meet next month but may meet in July.
5. **Secretary Report – Louis Meuler**
   - Mr. Louis reported that there will be an increase in the amount of projects presented in Plan Commission in the next few months.
   - He also stated that City Council approved three new PC members, Thomas Sanderson, Clifford Winger, and Jo Anne Wright. They will be present at the next meeting.

Workshop:

1. **6 Year City Wide Capital Program – CIP and Timeline Overview**

- Presentation provided by Paul Ingiosi
- Questions asked and answered
- Discussion ensued

2. **Comp Plan Amendment Application Z19-499COMP**
   - Presentation provided by Kevin Freibott
   - Questions asked and answered
   - Discussion ensued

3. **Comp Plan Amendment Application Z19-501COMP**
   - Presentation provided by Kevin Freibott
   - Questions asked and answered
   - Discussion ensued

4. **Comp Plan Amendment Application Z21-019COMP**
   - Presentation provided by Colin Quinn-Hurst
   - Questions asked and answered
   - Discussion ensued

*CM Mumm left at 3:27 PM.

Meeting Adjourned at 3:29 PM

Next Plan Commission Meeting scheduled for Wednesday, June 24, 2020

DRAFT

PLANNING SERVICES
808 W. SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3329
509.625.6300
FAX 509.625.6013
my.spokanecity.org

June 17, 2020

President Beyreuther and Plan Commissioners
City of Spokane

Re: June 24, 2020 Comprehensive Plan Amendments Workshop #1

Dear President Beyreuther and Plan Commissioners,

Thank you for your time and consideration during our first workshop on the Comprehensive Plan Amendments. Our next workshop is scheduled for June 24th, during which we will be presenting the following applications to you:

Z19-502COMP – 29th and Ray – CLICK HERE FOR THE PROJECT SITE
Z20-042COMP – Arterial Network Map – CLICK HERE FOR THE PROJECT SITE
Z20-045COMP – Railroad Crossing Safety Text Amendment – CLICK HERE FOR THE PROJECT SITE

For detailed information on the Comprehensive Plan Amendment procedures, please see Spokane Municipal Code (SMC) 17G.020. As before, all pertinent information on the various applications is available at the following web address:

https://my.spokanecity.org/projects/2019-2020-proposed-comprehensive-plan-amendments/

We are only presenting one land use application this workshop. As usual, visiting the location might be useful for you if you have time.

Regarding the text amendment to the plan (Z20-045COMP), I have enclosed the proposed text of that amendment. It's an entirely new paragraph and table that would be inserted into the end of Chapter 4, Transportation.

Thanks again for all your hard work on behalf of the City of Spokane. I look forward to seeing you all online during the meeting.

Sincerely,

Kevin Freibott, Assistant Planner II
Department of Neighborhood and Planning Services
509-625-6184
kfreibott@spokanecity.org

Enclosure

AGENDA

Proposed New Text – Chapter 4, Transportation

The following text is proposed to be added to Chapter 4, Transportation, of the Comprehensive Plan. All of this text is new, and would begin at the end of page 4-71, immediately following the subsection on bridge projects.

Railroad Crossing Projects

There are many at-grade rail crossings within the city. Most of these already have warning devices and gates installed to provide increased protection for vehicles, cyclists, and pedestrians on the road. However, there are a few arterial crossing locations that could use further improvements, as funding becomes available. These locations are already equipped with warning lights and bells. However, due to increased traffic on the roadway or on the rail line, the locations listed in table TR-9 would benefit from additional safety measures.

TABLE TR 9 – RAILROAD CROSSING PROJECT LIST

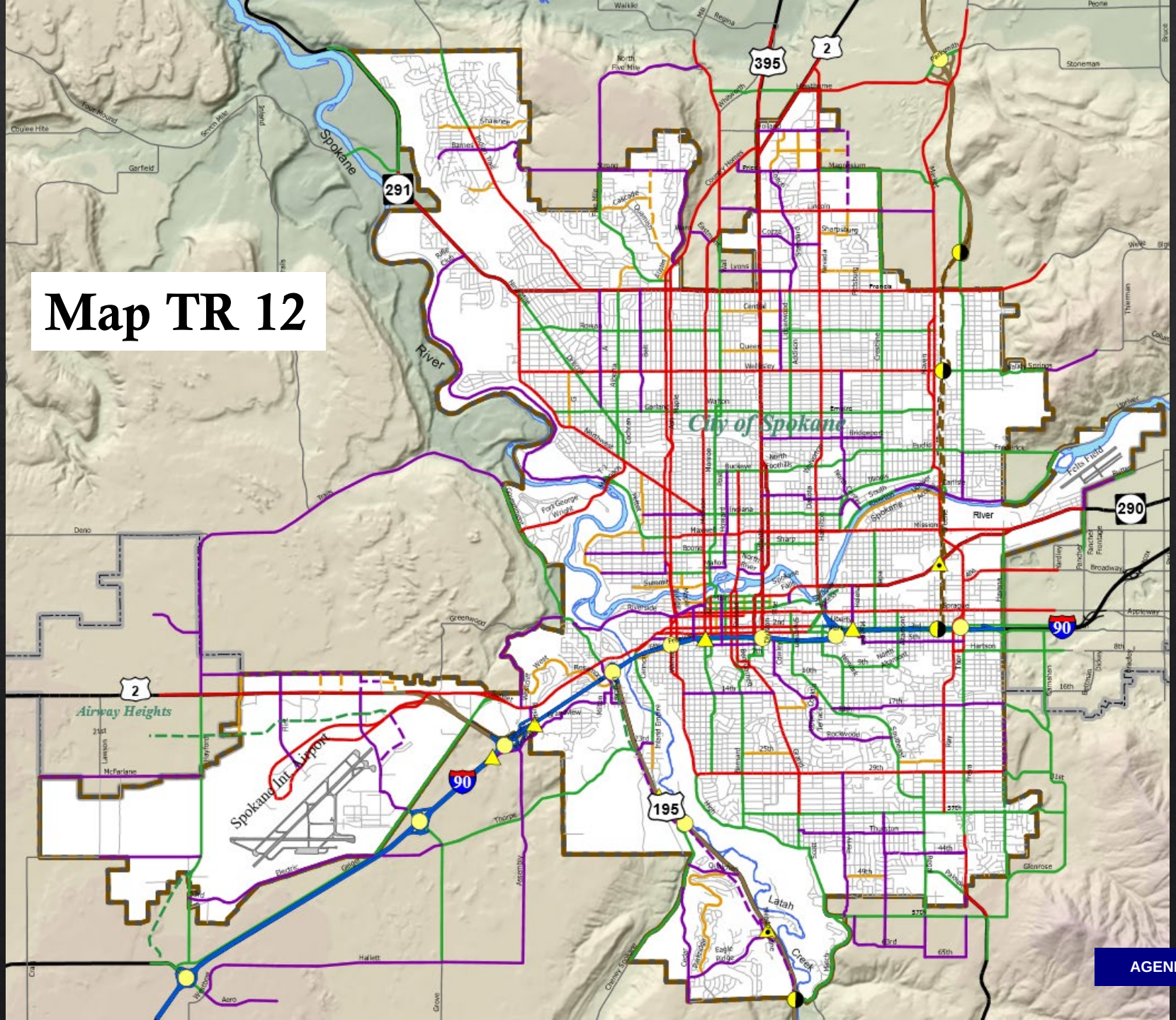
Project Name	Needed Improvements
Havana Street crossing of UP (n/o Sprague Avenue)	Widen crossing for sidewalk, install gates, update preemption equipment and track circuit for the adjacent traffic signal
Freya Street crossing of UP (n/o Sprague Avenue)	Install gates, update preemption equipment and track circuit for the adjacent traffic signal
Mission Street crossing of BNSF (e/o Perry Street)	Install gates, update preemption equipment and track circuit for the adjacent traffic signal

Notes: UP = Union Pacific Railroad. BNSF = Burlington Northern and Santa Fe Railroad.

Arterial Street Map Amendments

Plan Commission
June 24th 2020

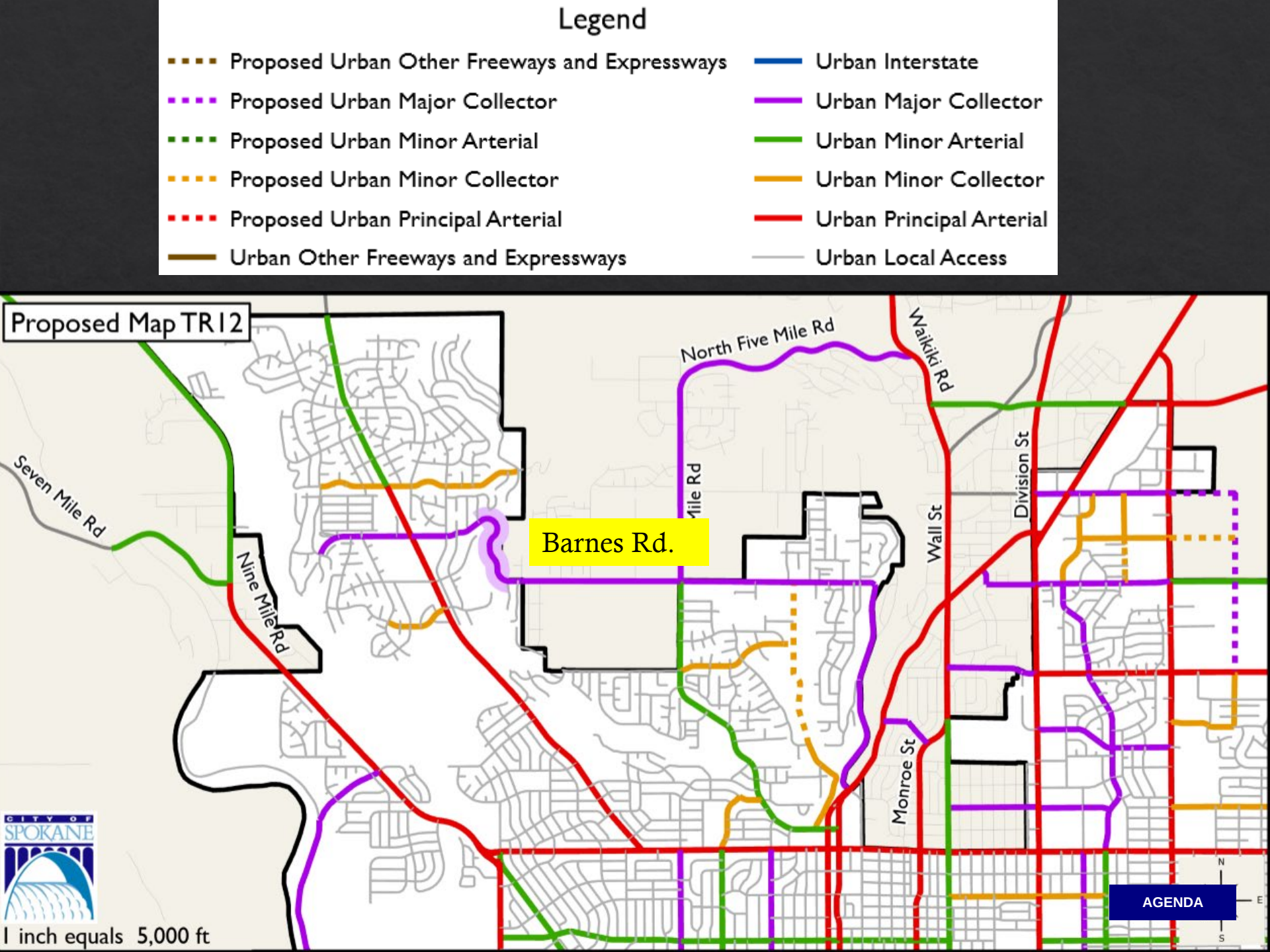
AGENDA


Map TR 12
City of Spokane
Airway Heights
Spokane Int. Airport
Spokane River
Latah Creek
395
2
291
90
195
290
AGENDA

Reasons for TR 12 update

- Error correction
- Consistency with SMC Arterial map
- Vacated street (Upriver)
- Constructed streets
  (Barnes, Campus and MLK)
- Requested addition by NEPDA
  (Myrtle and Rowan)

AGENDA


Legend
Proposed Urban Other Freeways and Expressways
Proposed Urban Major Collector
Proposed Urban Minor Arterial
Proposed Urban Minor Collector
Proposed Urban Principal Arterial
Urban Other Freeways and Expressways
Urban Interstate
Urban Major Collector
Urban Minor Arterial
Urban Minor Collector
Urban Principal Arterial
Urban Local Access
Proposed Map TR12
North Five Mile Rd
Waikiki Rd
Seven Mile Rd
Nine Mile Rd
Barnes Rd.
Wall St
Division St
Monroe St
CITY OF SPOKANE
1 inch equals 5,000 ft
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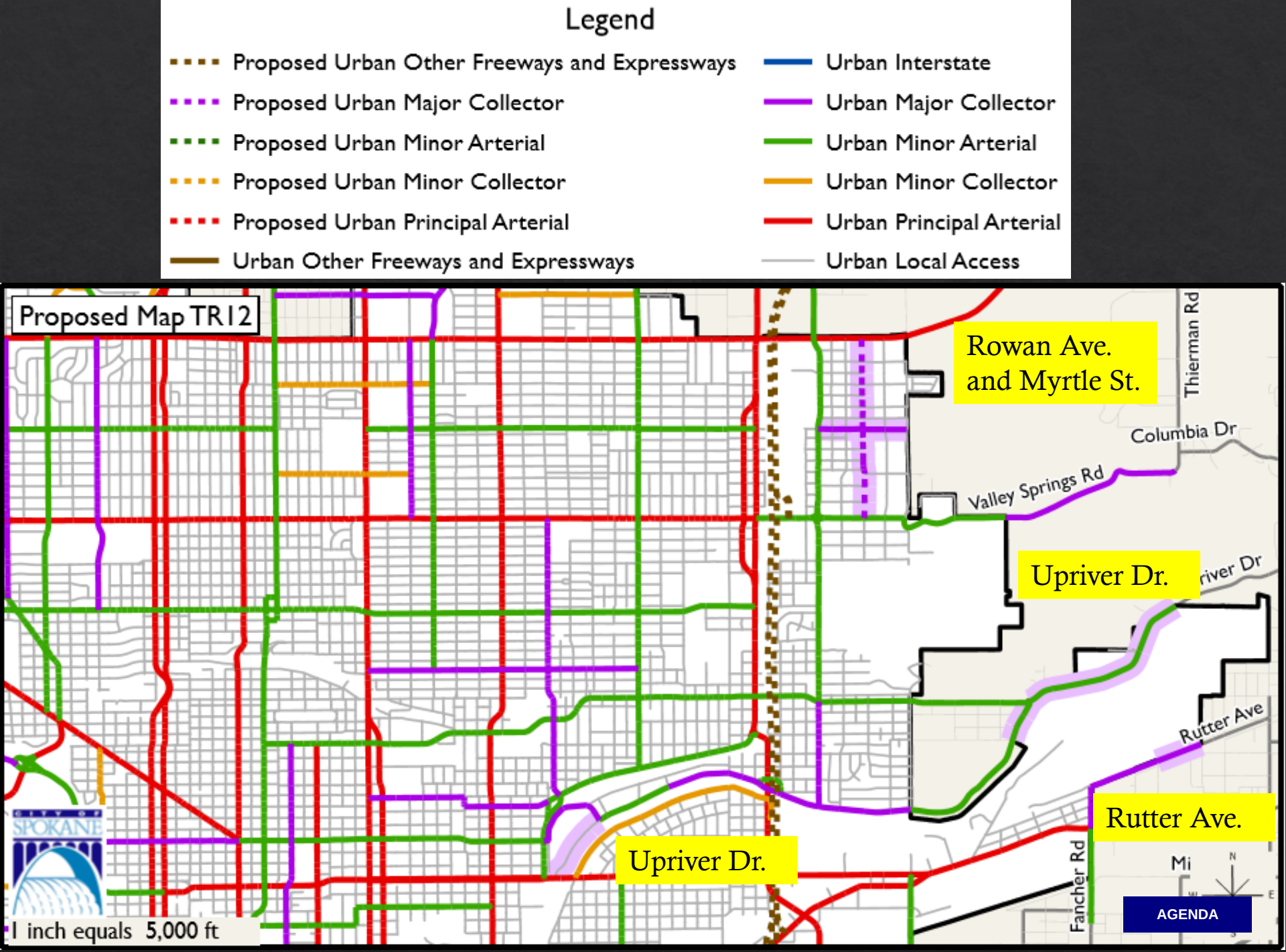
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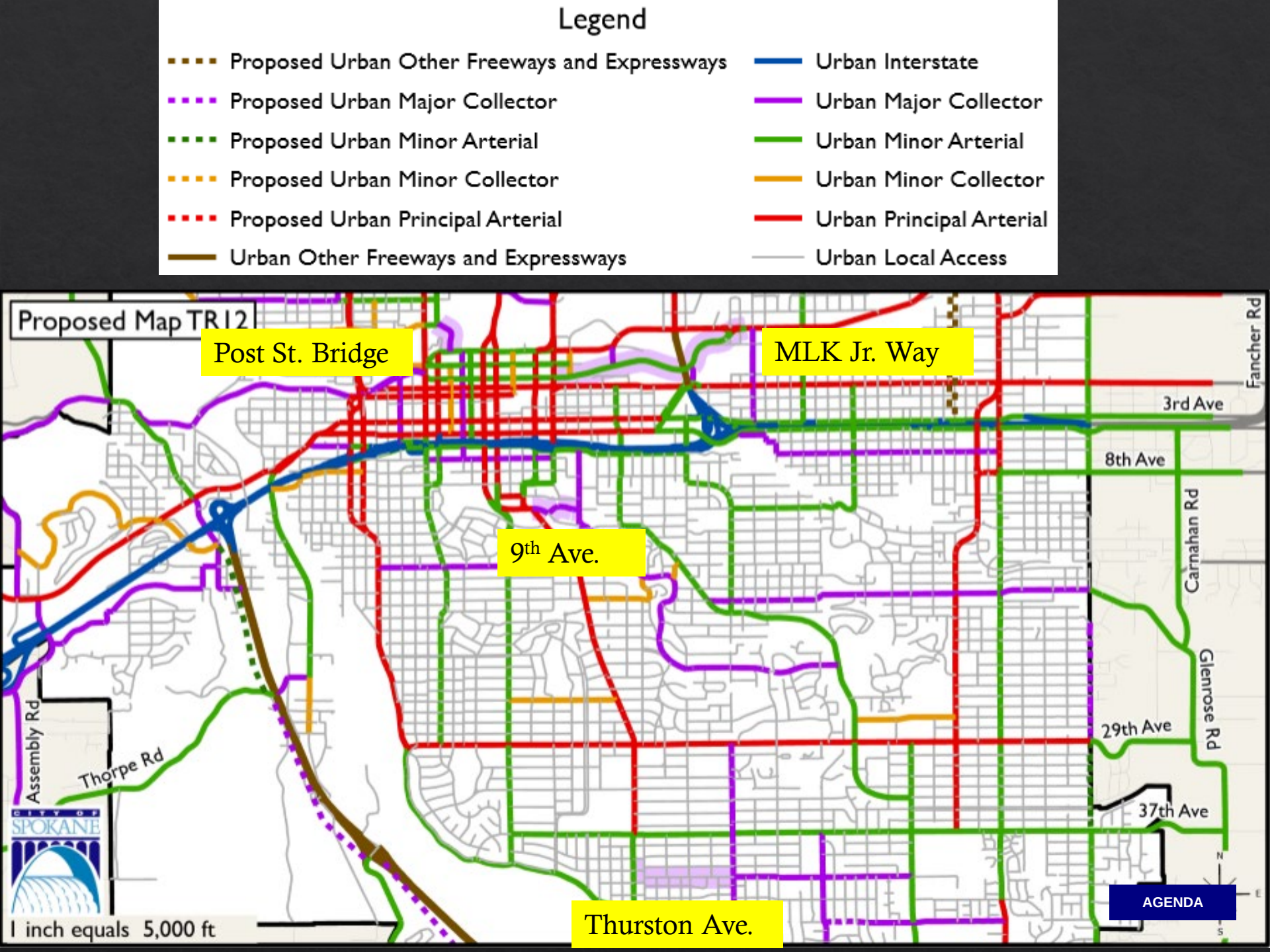
Urban Other Freeways and Expressways
Urban Interstate
Urban Major Collector
Urban Minor Arterial
Urban Minor Collector
Urban Principal Arterial
Urban Local Access
Proposed Map TR12
Rowan Ave. and Myrtle St.
Thierman Rd
Columbia Dr
Valley Springs Rd
Upriver Dr.
Upriver Dr
Rutter Ave
Rutter Ave.
Upriver Dr.
Fancher Rd
Mi
AGENDA
1 inch equals 5,000 ft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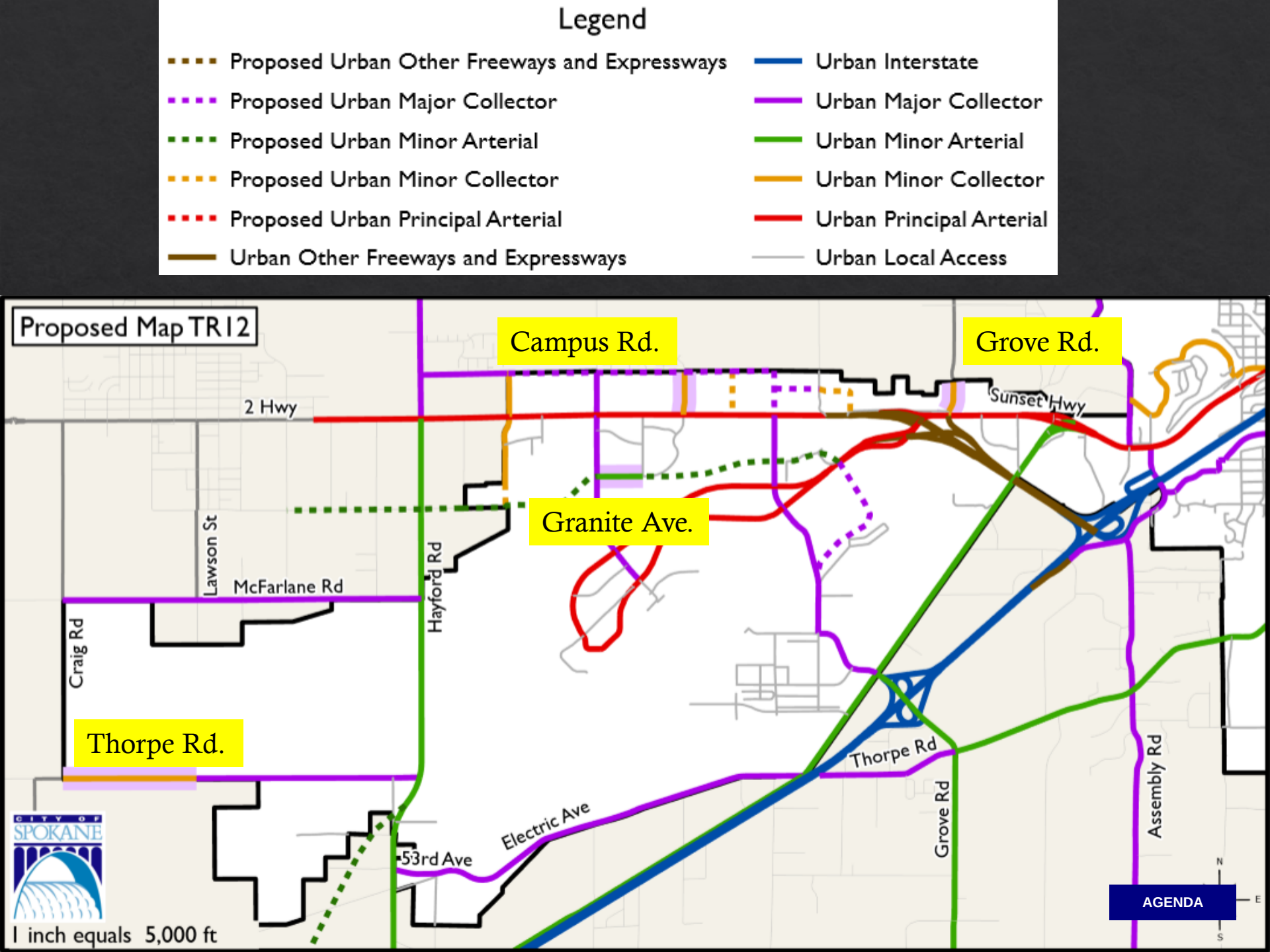
Urban Minor Arterial
Urban Minor Collector
Urban Principal Arterial
Urban Local Access
Proposed Map TR12
Post St. Bridge
MLK Jr. Way
9th Ave.
Thurston Ave.
Fancher Rd
3rd Ave
8th Ave
Carnahan Rd
Glenrose Rd
29th Ave
37th Ave
Assembly Rd
Thorpe Rd
CITY OF SPOKANE
1 inch equals 5,000 ft
AGENDA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Urban Minor Arterial
Urban Minor Collector
Urban Principal Arterial
Urban Local Access
Proposed Map TR12
Campus Rd.
Grove Rd.
Granite Ave.
Thorpe Rd.
2 Hwy
Sunset Hwy
Lawson St
McFarlane Rd
Craig Rd
Hayford Rd
Thorpe Rd
Grove Rd
Assembly Rd
Electric Ave
53rd Ave
CITY OF SPOKANE
1 inch equals 5,000 ft
AGENDA

Railroad Text Amendments

Plan Commission
June 24th 2020

AGENDA

Reasons for RR project additions

- Eligible for more grant programs
- Applications are more competitive

AGENDA

Addition to section **4.5 IMPLEMENTATION**

To be added at the end of the section after "20-year Residential Strategy" on page 4-71

Railroad Crossing Projects

There are many at-grade rail crossings within the city limits. Most of these already have warning devices and gates to provide increased protection for vehicles, cyclists and pedestrians on the road. However there are a few arterial crossing locations that could use further improvements as funding becomes available. These locations are already equipped with warning lights and bells, but due to increased traffic on the roadway or on the rail line, they would benefit from additional safety measures.

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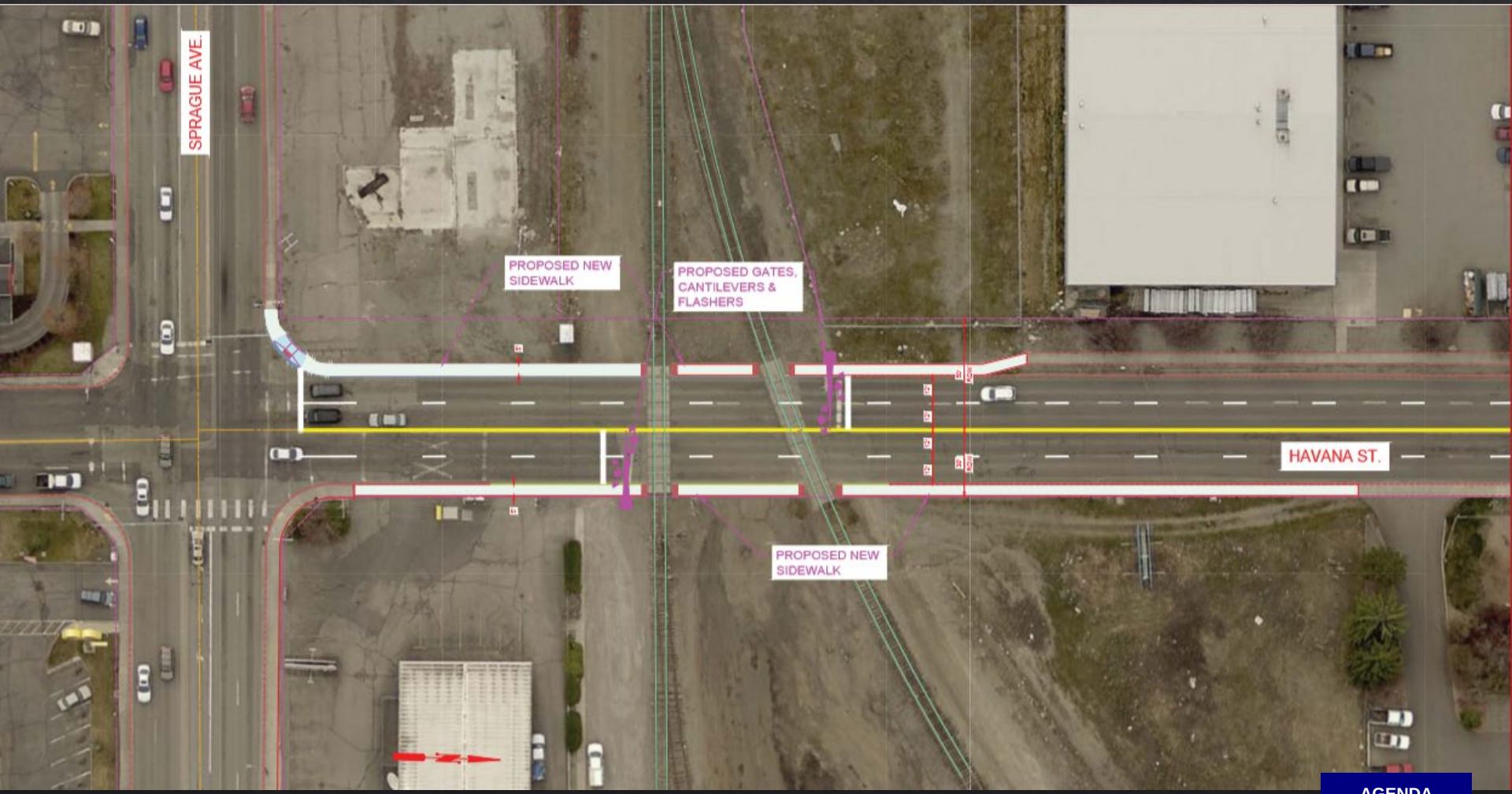
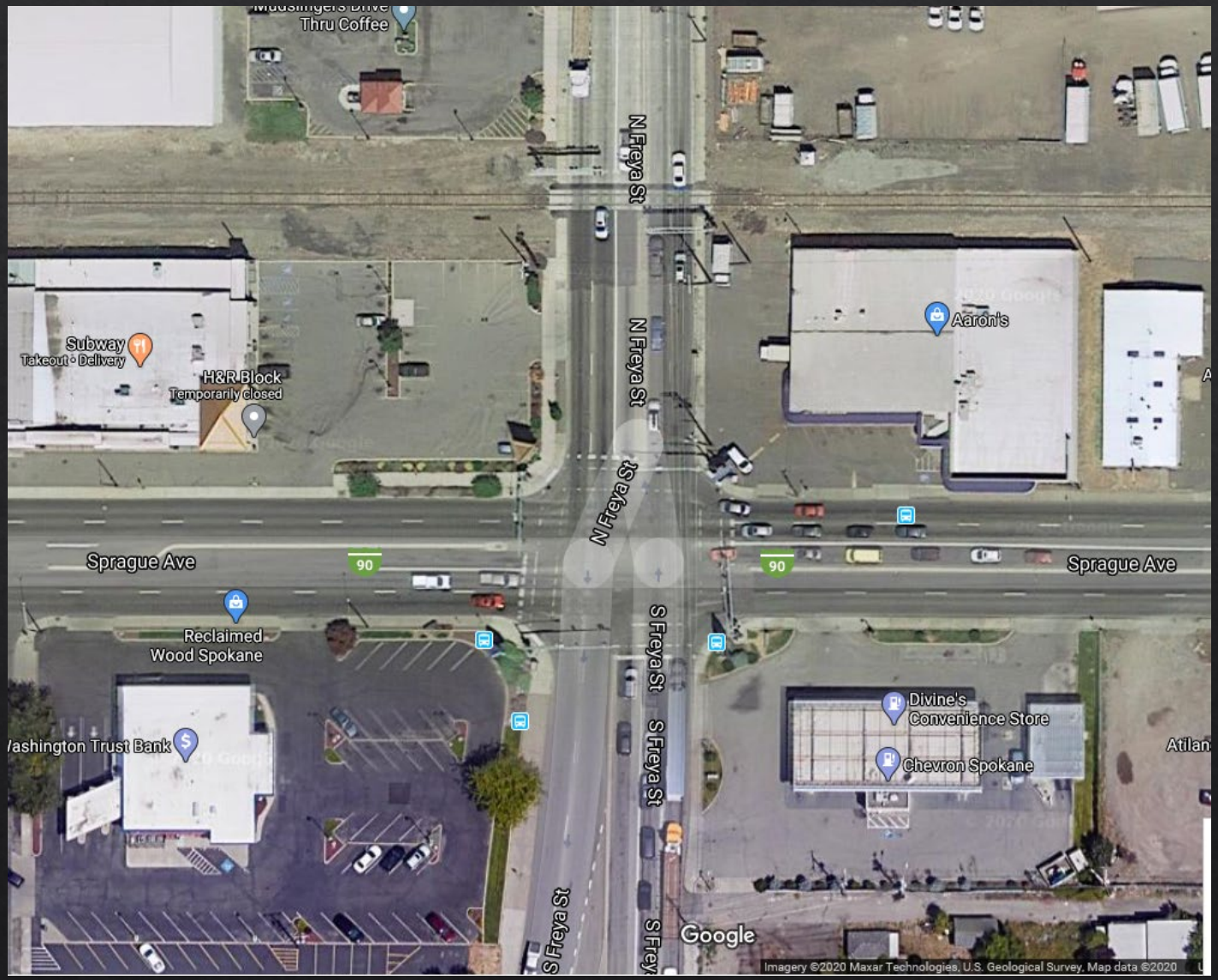
Havana crossing concept

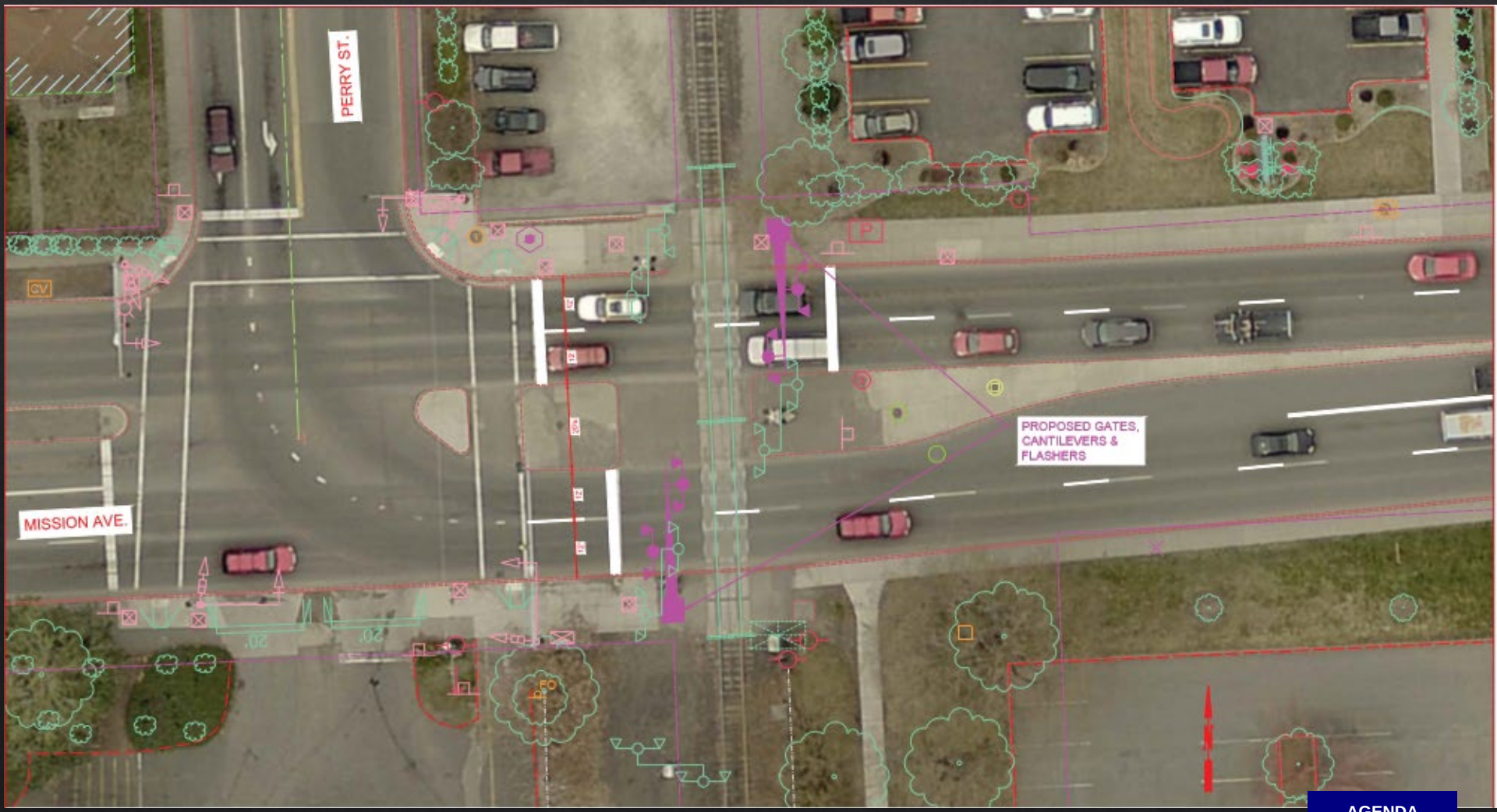


Freya crossing



AGENDA

Mission crossing concept



City of Spokane

Grand Boulevard Transportation & Land Use Study

June 2020

AGENDA

Acknowledgments

CITY OF SPOKANE

City Council

Plan Commission

Neighborhood and Planning Services

Integrated Capital Management

NEIGHBORHOOD COUNCILS

Comstock

Manito-Cannon Hill

Rockwood

DKS ASSOCIATES

Reah Flisakowski, PE

Rochelle Starrett

MIG

Alex Dupey, AICP

Casey Howard, ASLA

LELAND CONSULTING GROUP

Ted Kamp

* *Special thanks to over 140 community members and public agency representatives and 475 online survey participants who supported the creation of this plan.*

Table of Contents

List of Figures

The Grand Boulevard Corridor

1

Grand Boulevard is a key north-south arterial for the City of Spokane through the South Hill neighborhoods. The Grand Boulevard corridor study was commissioned to understand existing issues for pedestrians, bicyclists, and vehicles, develop potential streetscape improvements, and identify economic opportunities and zoning needs.

Introduction

Grand Boulevard is one of the busiest streets on the South Hill with few north-south routes connecting downtown to the historic neighborhoods.

This plan focuses on the Grand Boulevard segment within the Comstock neighborhood between 29th Avenue and 37th Avenue, fronted by both commercial and single family uses and serves a mix of transportation needs – driving, walking, biking, and bus transit.

The traffic volumes on the south segment are lower than the north, due to the distance away from downtown. The surrounding community, who travel to and through the corridor for daily needs, expressed concerns with the current roadway and a desire for improvements. The corridor study explored opportunities for transportation, safety, and streetscape changes to meet community goals.

This plan sets out a long-range vision that can be phased incrementally with safety, access, and mobility improvements as the opportunities arise. The Grand Boulevard Plan area is shown in **Figure 1**.

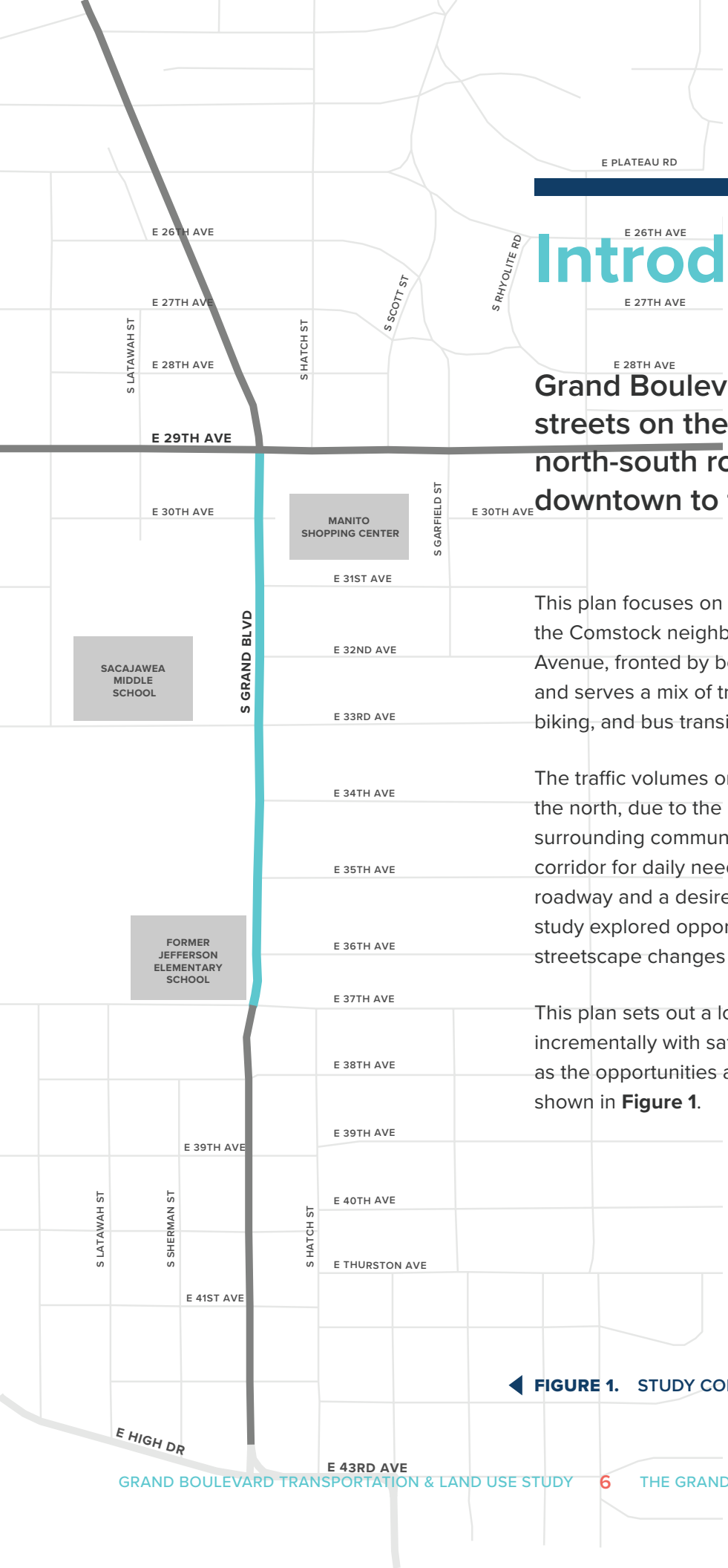


FIGURE 1. STUDY CORRIDOR

The Plan

THE **PLAN** INCLUDES THE FOLLOWING SECTIONS:

CORRIDOR CONDITIONS:

Provides an overview of the corridor and describes the deficiencies and need for change. It also presents a summary of the Market Analysis findings and recommendations.

PLANNING PROCESS:

Describes the milestones and community engagement. It presents the plan goals and how alternatives were evaluated to achieve the community's vision.

VISION:

Describes the future concept for the corridor and its key elements.

IMPLEMENTATION:

Describes the near and long-term steps, funding strategies and coordination.

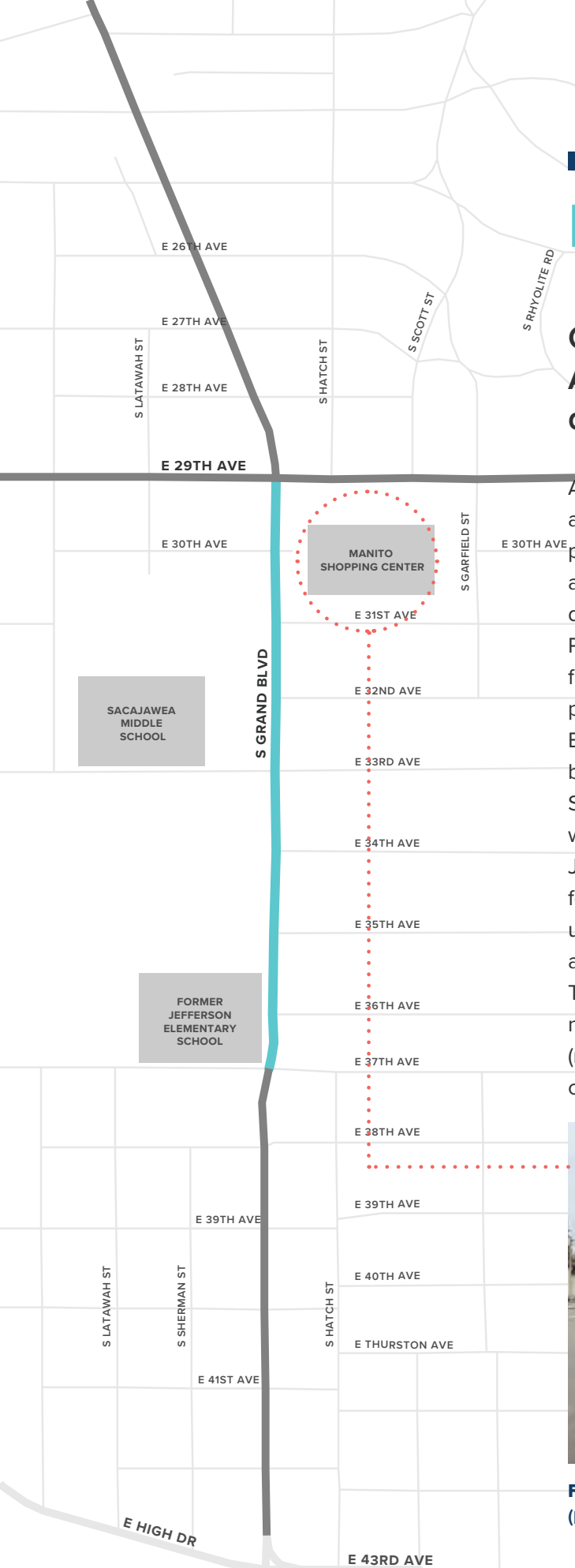
Corridor Conditions

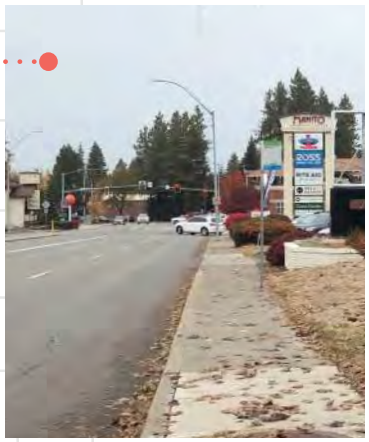
The current project study area features a diverse mix of existing uses, ranging from commercial small businesses and storefronts to single-family homes, multi-family apartment buildings, and two public schools – all contributing to today's driving conditions.

Land Use

Grand Boulevard between 29th Avenue and 37th Avenue features a diverse type of existing uses.

A small business district extends between 29th Avenue and 32nd Avenue which includes a mix of grocery stores, pharmacies, restaurants, coffee shops, and banks, among other commercial establishments. This area is designated as a "center" in the City's Comprehensive Plan, which is aimed to evolve into a more pedestrian-friendly commercial center over time. Single family homes predominate south of 32nd Avenue and east of Grand Boulevard, in addition to several multi-family apartment buildings. Two public schools serve this neighborhood: Sacajawea Middle School located immediately to the west of Grand Boulevard off 33rd Avenue, and the former Jefferson Elementary School site – now temporary home for elementary students whose own home schools are undergoing renovation (currently "Camp Wilson") – located at the intersection of Grand Boulevard and 37th Avenue. The current Jefferson Elementary School is also located near the project study area, farther west on 37th Avenue (not shown). The two corridor land use segments – commercial and residential are shown in **Figure 2**.





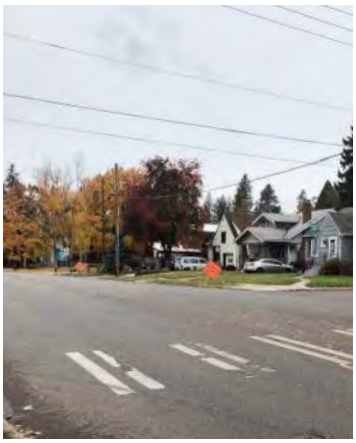


FIGURE 2. GRAND BOULEVARD'S COMMERCIAL SEGMENT (LEFT) AND RESIDENTIAL SEGMENT (RIGHT)

The Need for Change

Grand Boulevard is currently a five-lane facility for vehicles between 29th Avenue and 31st Avenue, where it transitions to a three-lane facility to the south.

Sidewalks extend on both the east and west sides of Grand Boulevard through the study area, although their quality can vary, as seen in **Figure 3**. Landscape buffers are common to the south of 31st Avenue, and marked crosswalks are available at each traffic signal and at 33rd Avenue, a designated Neighborhood Greenway. No bike facilities are currently provided on the study corridor.

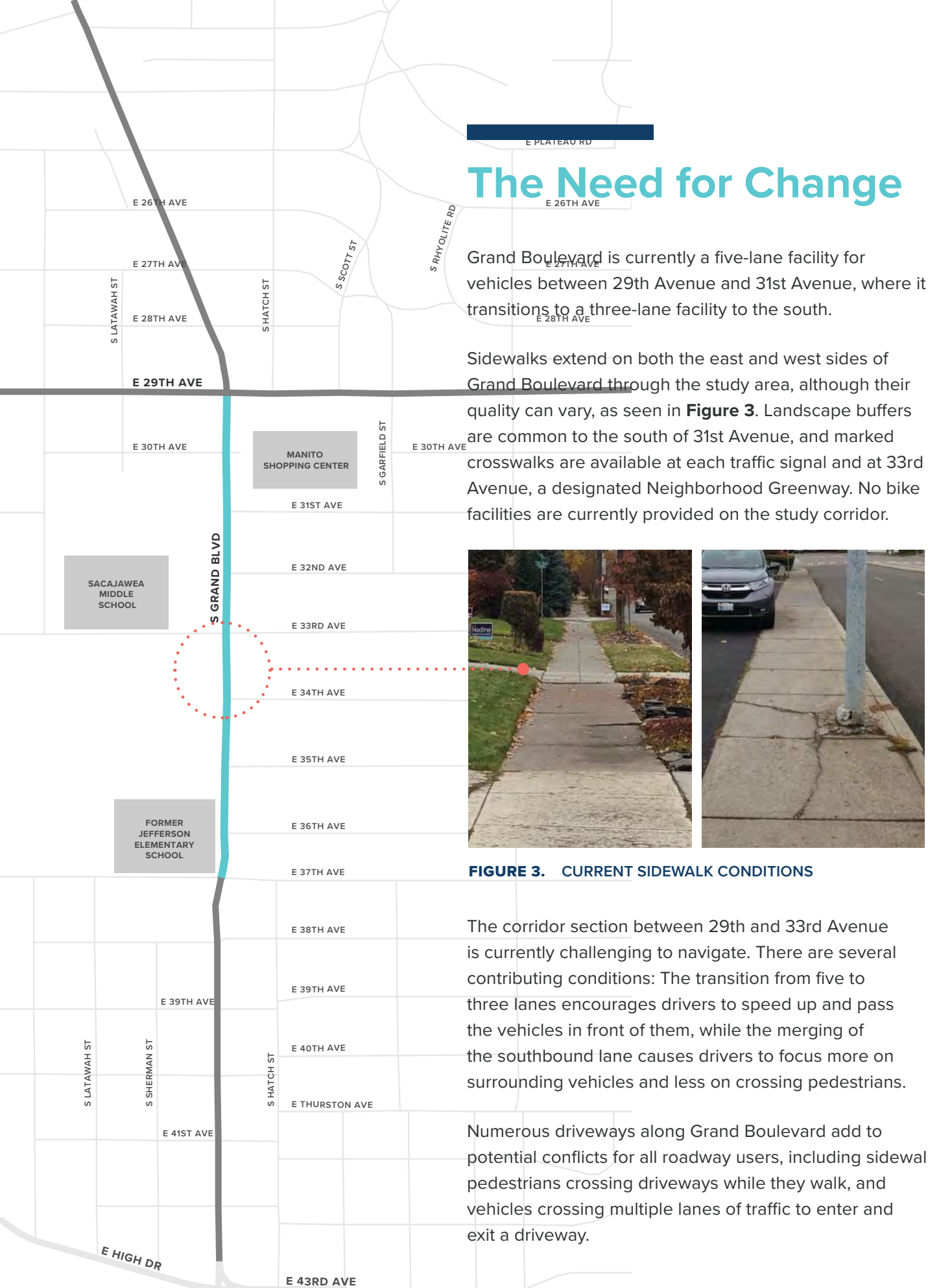
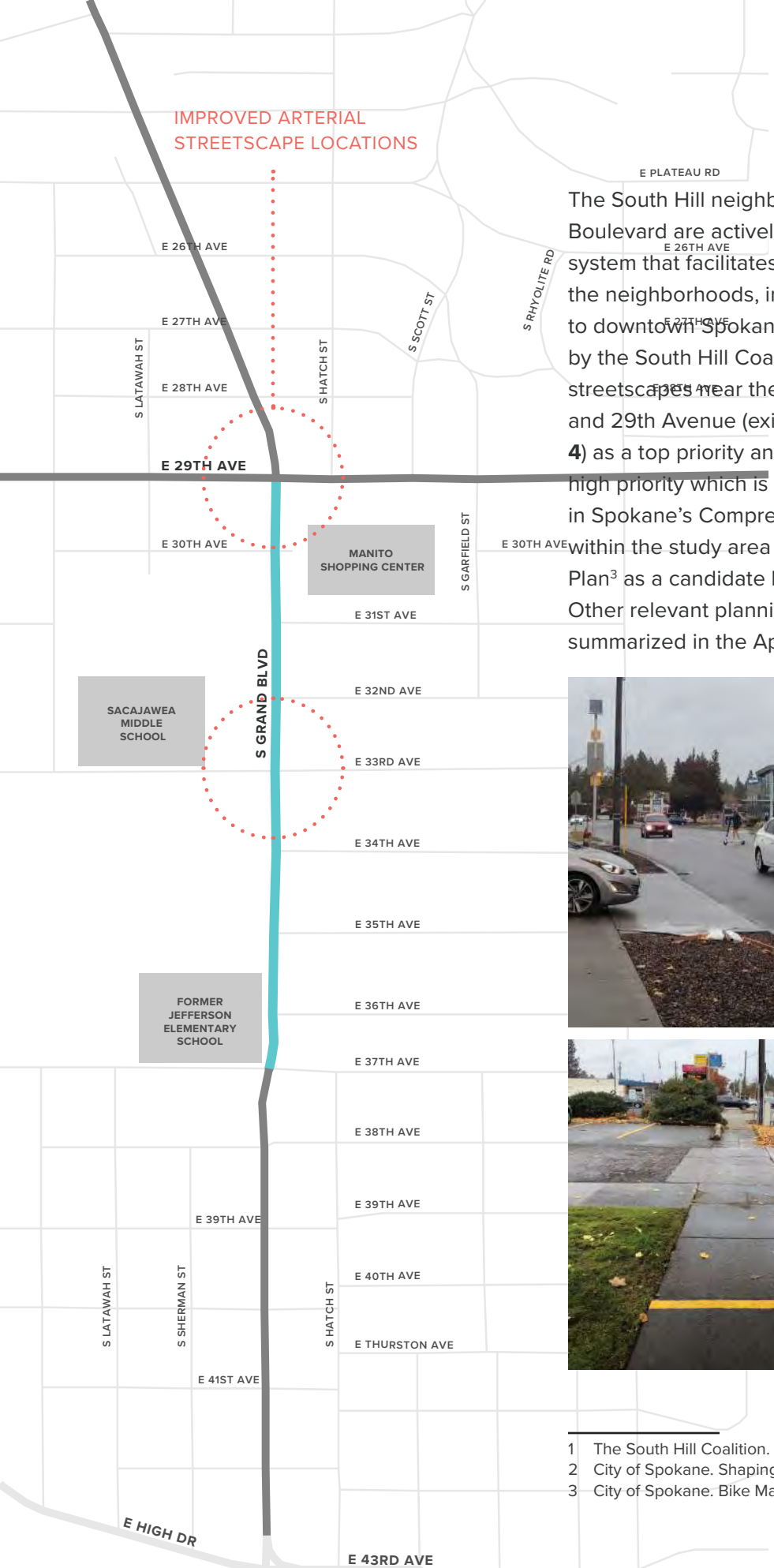


FIGURE 3. CURRENT SIDEWALK CONDITIONS

The corridor section between 29th and 33rd Avenue is currently challenging to navigate. There are several contributing conditions: The transition from five to three lanes encourages drivers to speed up and pass the vehicles in front of them, while the merging of the southbound lane causes drivers to focus more on surrounding vehicles and less on crossing pedestrians.

Numerous driveways along Grand Boulevard add to potential conflicts for all roadway users, including sidewalk pedestrians crossing driveways while they walk, and vehicles crossing multiple lanes of traffic to enter and exit a driveway.



The South Hill neighborhoods surrounding Grand Boulevard are actively seeking an enhanced transportation system that facilitates multimodal connections between the neighborhoods, including across the boulevard, and to downtown Spokane. A 2012 planning effort[1] sponsored by the South Hill Coalition identified improved arterial streetscapes near the intersection of Grand Boulevard and 29th Avenue (existing streetscape pictured in **Figure 4**) as a top priority and the 33rd Avenue greenway as a high priority which is also a financially constrained project in Spokane's Comprehensive Plan[2]. Grand Boulevard within the study area is also identified in the Bike Master Plan[3] as a candidate location for bike lanes in the future. Other relevant planning initiatives and their findings are summarized in the Appendix.

FIGURE 4.
DRIVEWAYS ALONG GRAND BOULEVARD (TOP) AND EXISTING STREETSCAPE (BOTTOM)

1 The South Hill Coalition. Connectivity and Livability Strategic Plan. 2014.
2 City of Spokane. Shaping Spokane. 2017.
3 City of Spokane. Bike Master Plan, Proposed Bike Network Map. 2016.

Existing Transportation System

Safety

Over the past five years, 111 crashes were recorded within the project study area, an average of 22 crashes each year, and seven additional crashes occurred in January 2019, summarized in **Figure 5**. Crashes are most common at intersections where over 60% (72 of 118) crashes occur. Most crashes were not severe; only 13% of crashes (15 of 118) resulted in minor injuries while only one crash led to a serious injury. No fatalities were recorded in the project study area in the past five years. Most crashes occur with clear skies (84 of 118 crashes), dry roads (83 of 118 crashes), and during the day (79 of 118 crashes). Alcohol use was a factor in 15 crashes (13%).

Pedestrians and bicyclists were each involved in four crashes over the past five years. Two pedestrian crashes occurred near the intersection of Grand Boulevard and 29th Avenue when a vehicle struck a pedestrian while turning. One pedestrian crash occurred near the intersection of Grand Boulevard and 33rd Avenue when a driver ran off the road near a school crossing, striking both a sign and a pedestrian. The fourth pedestrian crash occurred on 33rd Avenue near Arthur Street (not pictured in Figure 5) when a vehicle travelling straight struck a crossing pedestrian. Two bicyclist crashes occurred on Grand Boulevard, including near 29th Avenue and at 36th Avenue. In the crash occurring near 29th Avenue, a bicyclist riding on the sidewalk did not grant right of way to a vehicle, while in the crash occurring at 36th Avenue, a bicyclist riding in traffic was struck by a turning vehicle. Two other crashes involved bicyclists near the intersections of 29th Avenue/Lamonte Street and 36th Avenue/Arthur Street, which are not pictured in Figure 5.

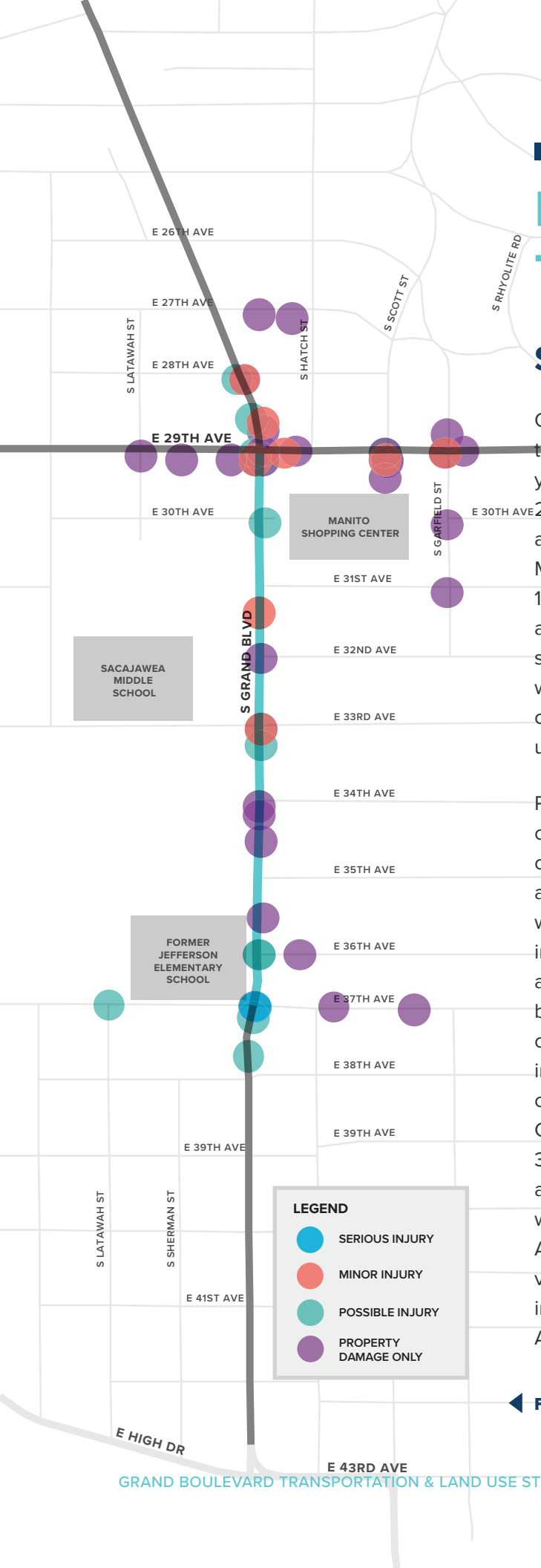


FIGURE 5. HISTORICAL CRASH LOCATIONS (2014-2019)

Multimodal Demand

Pedestrian demand, shown in **Figure 6**, is highest adjacent to major pedestrian generators. Daily pedestrian crossings of Grand Boulevard are highest at 33rd Avenue, shown in **Figure 7**, near Sacajawea Middle School, where over 250 pedestrians cross Grand Boulevard each day. Pedestrian volumes at this location are closely correlated with school traffic; most crossings are observed before school starts or after school ends when crossing guards are also in place.

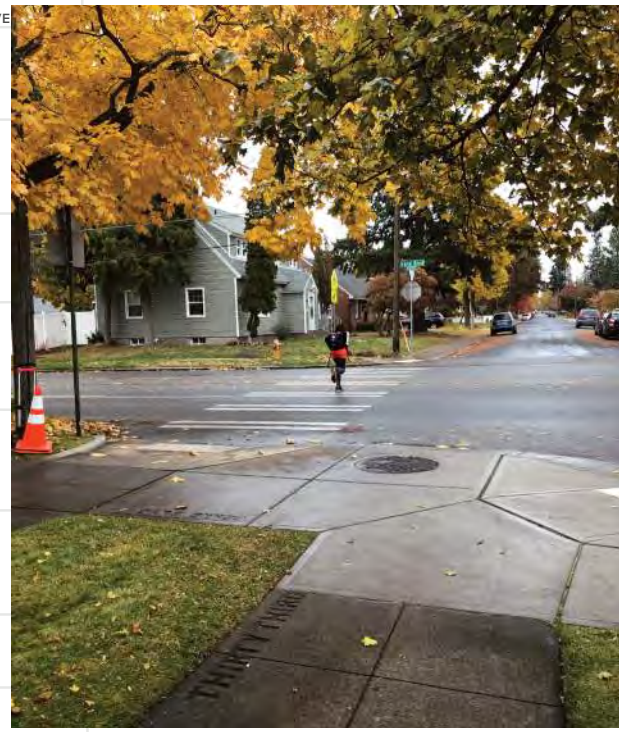


FIGURE 7. PEDESTRIAN CROSSING AT 33RD AVENUE

Between 150 and 200 daily pedestrian crossings are also observed at 30th Avenue and 32nd Avenue. The pedestrian crossing at 30th Avenue is regularly used by elderly residents who cross Grand Boulevard to reach the Manito Shopping Center from the nursing home immediately west of Grand Boulevard. Pedestrians also regularly use the crossings at 32nd Avenue, which provide access to a nearby bank, residences, the post office, and Sacajawea Middle School.

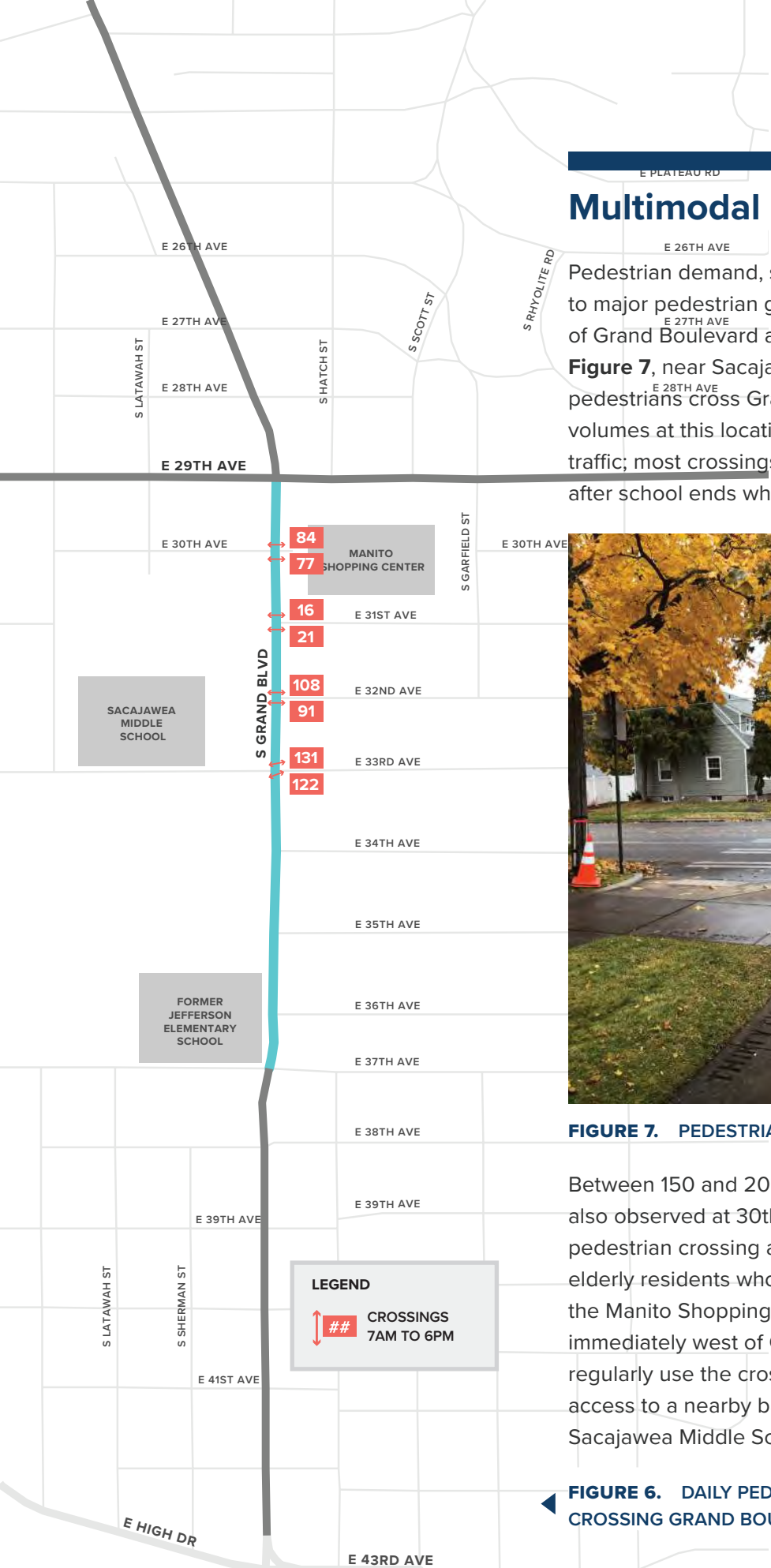


FIGURE 6. DAILY PEDESTRIAN DEMAND FOR CROSSING GRAND BOULEVARD

Pedestrian crossings are fairly consistent throughout the day at 32nd Avenue, and additional pedestrians are expected at this crossing site when a new coffee shop opens near the intersection.

FIGURE 8. ROUTE 144, A COMMUTER EXPRESS SERVICE LINE SERVING THE STUDY AREA

The study area is also currently served by Route 4, the Monroe-Regal high capacity transit line and Route 144 (**Figure 8**), a commuter express service that recently started service on Grand Boulevard in September 2019. Route 4 operates with 15-minute headways during weekdays and Route 144 operates with 20-minute headways during weekday peak hours. Both transit lines began operation in September 2019, and average daily weekday utilization data from their first month of operation is summarized in **Figure 9**.

Transit ridership is highest near the intersection of Grand Boulevard and 29th Avenue. Approximately 45 riders travel between the intersection of Grand Boulevard/29th Avenue and downtown each weekday; 10 or fewer riders travel between Grand Boulevard/29th Avenue and the Moran Station Park and Ride each weekday. Ridership is more limited on Route 144 although the utilization could be low since no transit service was previously provided on Grand Boulevard through the study area. Ridership is highest near the Manito Shopping Center and commercial developments near the intersection of Grand Boulevard/ 37th Avenue.

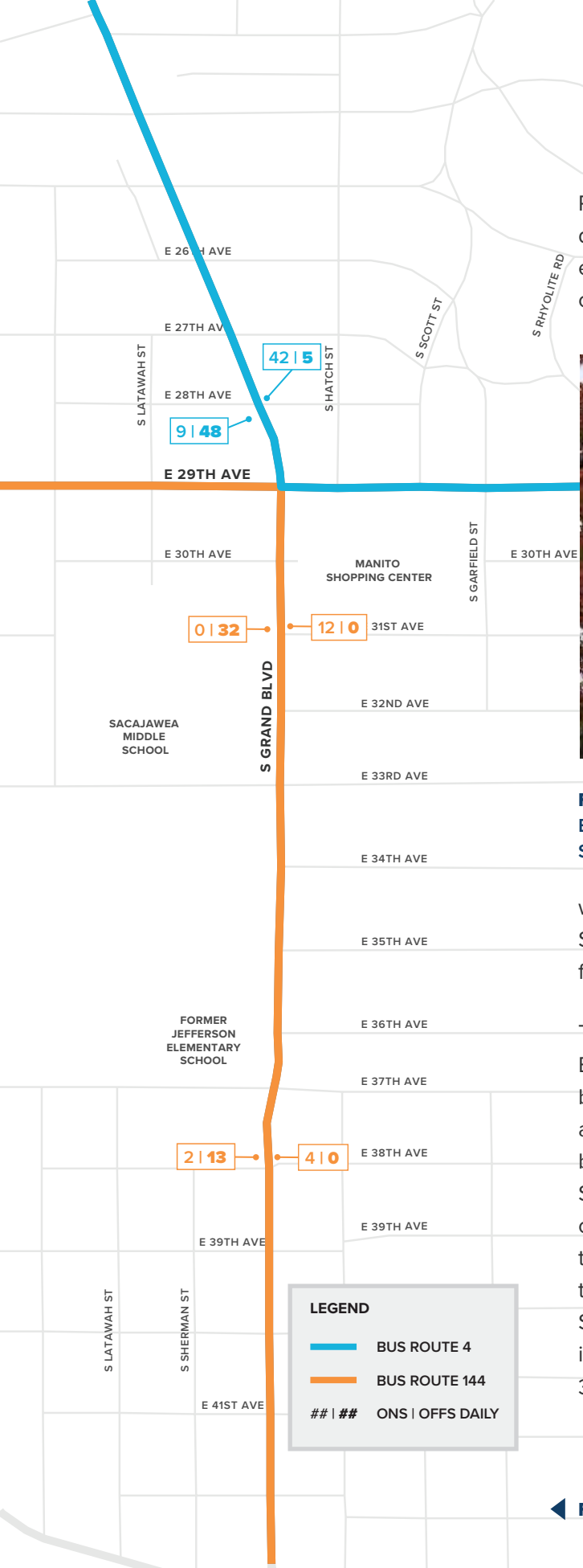


FIGURE 9. ROUTES 4 AND 144 DAILY WEEKDAY UTILIZATION

Traffic Analysis

THE **PREFERRED CORRIDOR** ALTERNATIVE INCLUDED:

- Reducing the corridor to three-lanes south of 29th Avenue
- Reconfiguring the lanes on Grand Boulevard at 29th Avenue
- Limiting vehicle access at Grand Boulevard/30th Avenue to provide an enhanced pedestrian crossing

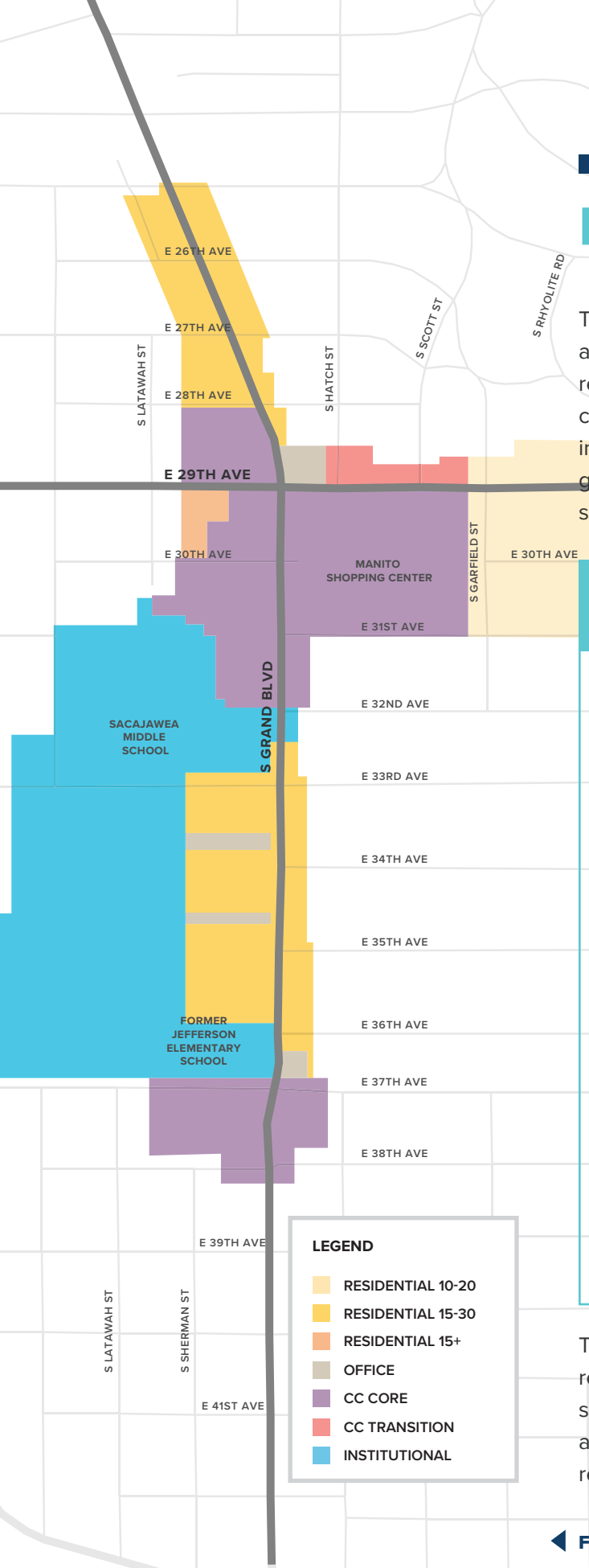
To determine if there are opportunities to reconfigure the street space to develop a comprehensive, multimodal corridor, a traffic operations analysis was conducted. Key intersections on the corridor were evaluated for existing and future year 2040 conditions to test several improvement alternatives.

Implementing the preferred alternative will have relatively modest impacts to overall vehicle traffic operations to allow improved bicycle and pedestrian facilities. Traffic operations at the Grand Boulevard/29th Avenue intersection would experience the biggest change during the evening peak hour with increased overall driver delay and longer southbound queue lengths. The complete Spokane Grand Boulevard Traffic Analysis report is provided in the Appendix.

FIGURE 10. PEAK HOUR TRAFFIC CONDITIONS

Market Analysis

To complement the transportation analysis, a market analysis was conducted to evaluate the area's redevelopment potential and study how private sector changes to the built environment might best support infrastructure recommendations to further community goals. The land use designations in the study area are shown in **Figure 11**.



KEY FINDINGS AND RECOMMENDATIONS FROM THE ANALYSIS:

- Existing land use policy for the area is well-suited to accommodate desirable development forms.
- There are favorable market conditions, with ample residential and retail demand to support infill development.
- No major development incentives are available because of the higher income profile.
- The planned investments in street improvements should help attract developer and property owner interest in redevelopment.
- Given the existing suburban auto-oriented development pattern on the corridor, there is much to be gained in terms of quality of life and safety by making street improvements and pedestrian friendly amenities.

The complete Spokane Grand Boulevard Market Analysis report is provided in the Appendix. It includes details on study area demographics, retail and residential supply and demand, land use and policy summary and specific redevelopment opportunities.

FIGURE 11. LAND USE DESIGNATIONS

3 Planning Process

The 2014 Spokane South Hill Coalition plan provided a wide range of goals with specific strategies for the study area related to corridor planning. These goals and strategies provide guidance to identify potential solutions to address the corridor's challenges.

Goals and Policies

The Code includes a Complete Street Program ordinance which "encourages healthy, active living, reduction of traffic congestion and fossil fuel use, and improvement in the safety and quality of life of residents in the City of Spokane by providing safe, convenient, and comfortable routes for walking, bicycling, and public transportation."

Spokane's community values are strong and clearly documented in the Spokane Comprehensive Plan and Spokane Municipal Code.

RELEVANT COMPREHENSIVE PLAN GOALS:

GOAL 1: ACTIVE DOWNTOWN LINKAGES

- Develop greenways
- Create additional bike routes to close network gaps
- Extend biking and walking trips with safe and convenient access to transit

GOAL 2: COMPLETE NEIGHBORHOODS

- Improve east-west access
- Where business centers are being developed, encourage multimodal access from all directions by planning for street and path connectivity
- Explore opportunities to enhance arterials. Examples include addition of bike lanes, bulbouts, raised crossings, planted medians, bus shelters, street furnishings, trash cans, bike racks, etc.

GOAL 3: CRIME PREVENTION

- Install appropriate lighting
- Encourage foot traffic in public places. Add paths, landscaping, community gardens and activity spaces.

GOAL 4: TRAFFIC SAFETY

- Work with the City to address level of service and traffic flows in order to review speed limits on arterials to improve pedestrian and bicycle safety and reduce noise.
- Improve safety for pedestrians at crossings of high-volume and/or high-speed streets.

Public Engagement

The City developed a plan with input from the community and key stakeholders.

The City hosted an online survey to gather input to help inform the direction of the corridor plan. The project survey responses to specific questions are summarized in **Figure 12**. The highest priorities identified for the corridor were providing access to restaurants and shopping and comfortable walking and biking routes.

A sample of online survey comments are shown in **Figure 13**. Comments submitted ranged from wanting no changes to pedestrian improvements to more green space. Over 400 comments were submitted online.

The project team conducted stakeholder interviews at the beginning of the planning process to discuss their concerns and ideas for improvements. Two separate public open house meetings were held to discuss community needs and get their feedback on the corridor concepts. The project team collected in-person input from over 60 community members.

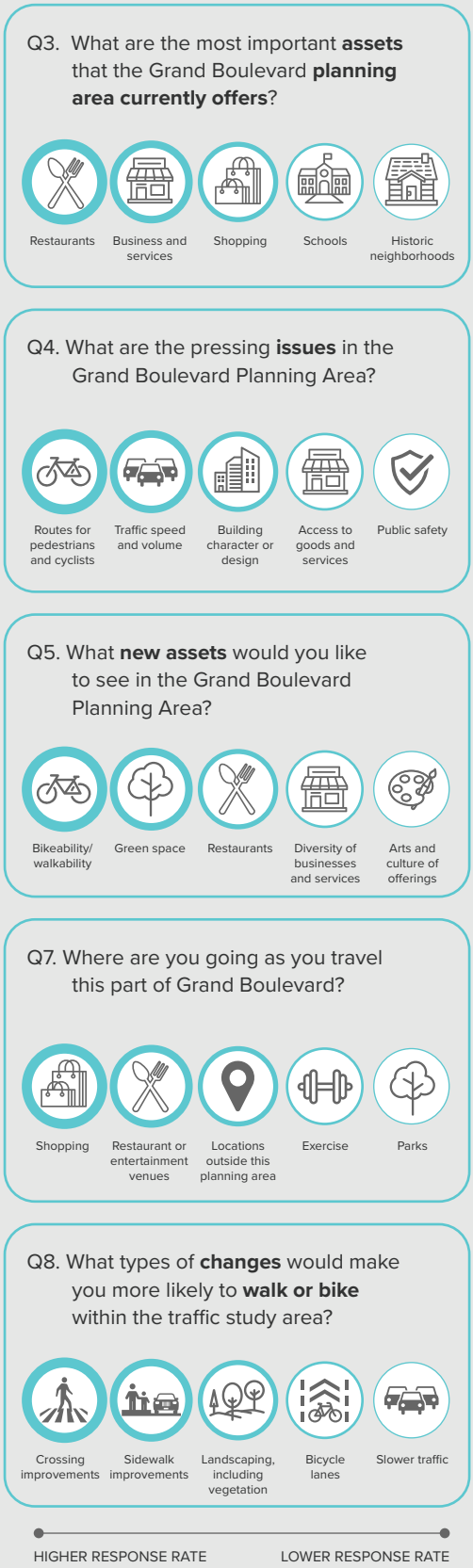


FIGURE 12. PROJECT SURVEY RESPONSE SUMMARY

Project Survey Results

PEDESTRIAN FRIENDLY

"I love this neighborhood! [... I walk a lot! [...] Making this corridor more **walkable** fo me and my 2 year old son would be so wonderful. [...]

"Safety needed for **walking** for **biking** students at Sacajawea."

"I think having more **pedestrian friendly access**, **street buffers**, and **comm unity events** would fit this area well. Building compact developments and convenient stores would take away from the charm of this area."

IDEA FOR VACANT LOTS

"The old Albertson's building [...] would make a good **multi-use facility** for businesses such as co-working spaces, small performance venue, winery or micro-brew, restaurant/pub and coffee shop."

"Albertson's should be used for indoor lacrosse and gym with courts. We need more gym space for **kids athletics** near our homes."

"A grocer like My Fresh Basket or Whole Foods (with Amazon lockers) would be great for the vacant Albertson's store [...]"

SAFETY IMPROVEMENTS

"My biggest concern is **speed** of vehicles and **ability to cross** Grand at sidewalks. My kids are involved in activities at school and at the Methodist church and especially during winter can be **dark** and **dangerous** to try and get across the crosswalk at 33rd and Grand."

"Improve **sidewalks**. Enforce **snow removal** from sidewalks."

"[...] I walk in the street at night often (along 32nd), because I know the **sidewalks** are in poor repair and I can't see them well enough in the **poor lighting**."

NO CHANGE

"Leave it alone! It's **perfect** just the way it is!"

"[...] I think it should pretty much stay the same. It is a **lovely neighborhood**."

"Honestly, I am pretty content with the way it is. Walkability could be improved and some more restaurants would be nice, but the **identity is just fine** the way it is. If I wanted to live in the Perry District, I would move there."

GREENERY

"Mixed-use buildings, more **greenery**, and more **comm unity events** will transform this area."

"More **green spaces**, bike lanes, cool street lamps/lights, and just a better commu nal, engaging feel rather than an arterial thoroughfare. [...]"

TRAFFIC

"Not impressed with vehicles **speeding** through residential areas."

"Whatever is done, we need to make sure it does not add to the traffic level on Grand Blvd.. It is already quite **busy** and **loud**!"

CHARACTER

"Keep it **simple** and keep the **South Hill Charm**. We're not looking for Kendall Yards."

"This seems like an opportunity to pull in the **character of the South Hill** along a prominent part of Grand. Very exciting. I love the walkable, neighborhood retail pics and the idea of compact garden apartments."

"Keeping the character of the South Hill **history**, and finding a **central social gathering area** with retail and restaurants is way overdue. Basic services are there but fostering an **art**, **dining** and select retail space in a walkable park line configuration with a mind on parking would be a huge asset for the city."

HISTORIC IMPORTANCE

"**Preserve the historic fabric** and street trees. Don't allow incompatible architectural types to displace historic structures; infill with sensitivity."

"Please respect the **original architecture**. This is what draws people to this area. It is **distinctive** and would never be confused with any other neighborhood. [...]"

"Grand has a **great history** that is barely recognized with only the old horse trough and the beautiful houses. These houses on South Hill are what attract people to move there, eat there, and visit the parks. New development and transit need to emphasize the beauty of historic South Hill. [...]"

FIGURE 13. SAMPLE OF ONLINE SURVEY COMMENTS

What Is The Vision?

To develop a concept for Grand Boulevard between 29th and 37th Avenue, a number of complete street design and management elements were developed by the project team, then shaped with input from the community.

What Are Complete Streets?

The Grand Boulevard Study identifies complete street elements that can be added both in the short and long term to meet corridor goals. Complete streets accommodate all modes of transportation by planning, designing, and building facilities for walking, biking, transit riding, and driving trips.

GATHERING SPACES

Parks, plazas and courtyards create destinations along the street. These become opportunities for organized events, space to celebrate nature and culture.

CROSSING VISIBILITY

Clearly marked crossings create a safe and comfortable environment for people crossing the street by foot, bike and wheelchair.

BICYCLE ACCOMMODATIONS

Bicycle facilities offer separation from vehicular traffic for cyclists. These can include multi-use paths, on-street buffered and protected bike lanes. A complete street will accommodate a wide range of ages and abilities.

EFFICIENCY

Roadway design and operations should allow people to travel reliably and understand how to safely and efficiently move by bus or motor vehicle.

TRANSIT

A complete street considers every passenger's trip from start to finish. Transit stops should provide shelter, seating, wayfinding and transit information.

WALKING

A complete street should provide a high quality environment where people are safe walking and have natural features and great destinations that make people walk.

Concept Plan

To develop a concept for Grand Boulevard between 29th and 37th Avenue, a number of complete street design and management elements were developed by the project team then shaped with input from the community.

THE LONG-TERM VISION FOR THE CORRIDOR INCLUDES:

- **One northbound and one southbound travel lane,** plus a center turn lane/median area.
- **Enhanced pedestrian crossings** with flashing beacons at 30th Avenue, 32nd Avenue and 33rd Avenue, restricted vehicle turn movements at 30th Avenue
- **Continuous bike lanes** plus a buffer when space is available.
- **Landscape area** to separate sidewalks from traffic lanes.
- **Driveway relocation and consolidation** as opportunities arise.

For more information, see **Appendix A: Existing Conditions Report**

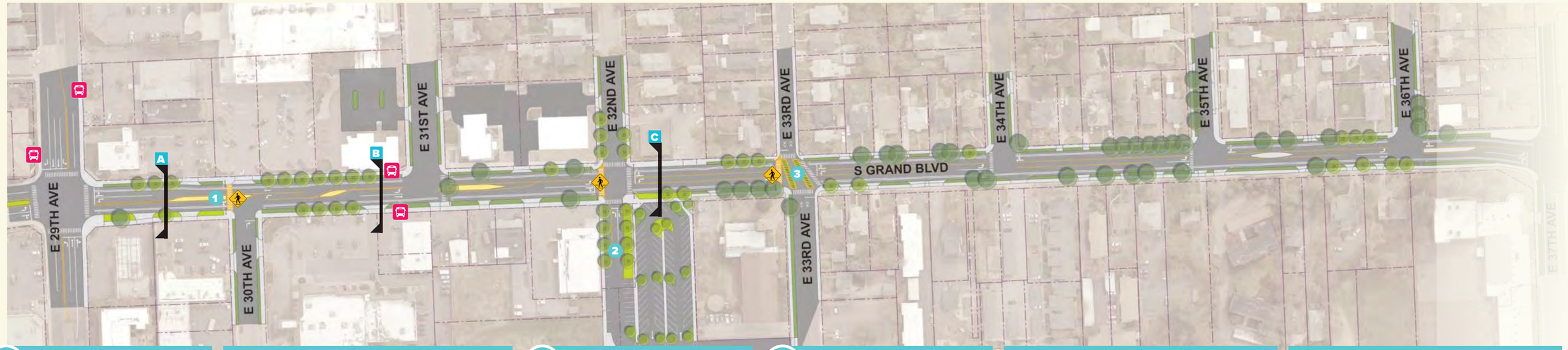
These corridor concepts are shown on the following figures for the north segment (29th Avenue and 33rd Avenue) and south segment (33rd Avenue to 37th Avenue). Improvements would be put in place over time depending on available public funding and private development activity along the frontage. The letters **A**, **B**, **C**, and **D** refer to the phased roadway sections shown on pages 27 and 28. These improvements are conceptual and will be reviewed and refined before final design and construction.

Implementing the concept will have relatively modest impacts to vehicle traffic between 29th Avenue and 33rd Avenue and no impacts to vehicle traffic between 33rd Avenue and 37th Avenue. Reducing the roadway to a three-lane section will require changes at the Grand Boulevard/29th Avenue intersection. The corridor plan would convert the existing southbound through only lane to a left turn lane and close the existing left turn pocket. The northbound through lane against the curb would be removed. The traffic signal phasing and timing would be modified to optimize performance.

The concept street maps on the following pages illustrate how the long-term vision could look along the corridor with the proposed elements in place.

Long-Term Vision

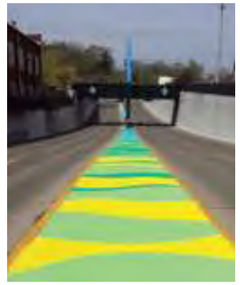
GRAND BOULEVARD POTENTIAL STREETSCAPE IMPROVEMENTS



1 ACCESS RESTRICTIONS

PEDESTRIAN SAFETY ISLAND

RAISED MEDIAN ART



POTENTIAL SHORT-TERM IMPROVEMENTS

Improve safety and bikeability with separated bike lanes and enhanced pedestrian crossings. Reduce vehicle traffic to two through lanes and one center turn lane/median. In remaining open street space, add box planters, bike parking, and other pedestrian amenities.

BUFFERED BIKE LANE

BOX PLANTERS

SNOW STORAGE

TRAFFIC CALMING

2 POTENTIAL 32ND AVE INTERSECTION EXTENSION WEST

Possible intersection extension west and revised parking area to be coordinated with potential future revisions to Sacajawea campus.

ENHANCED PEDESTRIAN CROSSINGS

RAPID FLASH BEACON (RRFB)

3 ENHANCED GREENWAY CROSSING

CYCLIST ACTIVATED RAPID FLASH BEACON (RRFB)

POTENTIAL LONG-TERM IMPROVEMENTS NORTH OF 33RD AVE

Improve safety and walkability with widened sidewalks, landscape buffers, consolidated driveways, pedestrian scale lighting and other pedestrian amenities. Add stormwater planters where feasible.

SEATING/AMENITIES

LIGHTING

GREENSTREET ELEMENTS

WIDE SIDEWALK

POTENTIAL IMPROVEMENTS SOUTH OF 33RD AVE

Improve safety and bikeability with separated bike lanes. Reduce vehicle traffic to two through lanes and one center turn lane/median. Retain existing curb as is, preserving mature trees.

TRAFFIC CALMING

BUFFERED BIKE LANES

MAP LEGEND

- Parcel Lines
- Street
- Sidewalk
- Landscape Buffer
- Tree (New Planting)
- Tree (Existing)
- Stormwater Planting
- Potential Median Art
- Lighting (Pedestrian + Street)
- Crosswalk
- Enhanced Pedestrian Crossing (RRFB)
- Enhanced Bike Crossing (RRFB)
- Separated Bike Lane
- Shared Roadway
- Transit Stop

A Typical Street Improvements, 29th-32nd (see pg 28)
B Street Improvements Adjacent to Recent Development (see pg 28)
C Street Improvements Adjacent to Potential Future Development (see pg 29)
D Typical Street Improvements, 33rd-37th (see pg 29)

N 0 30 60 90 120 feet

AGENDA

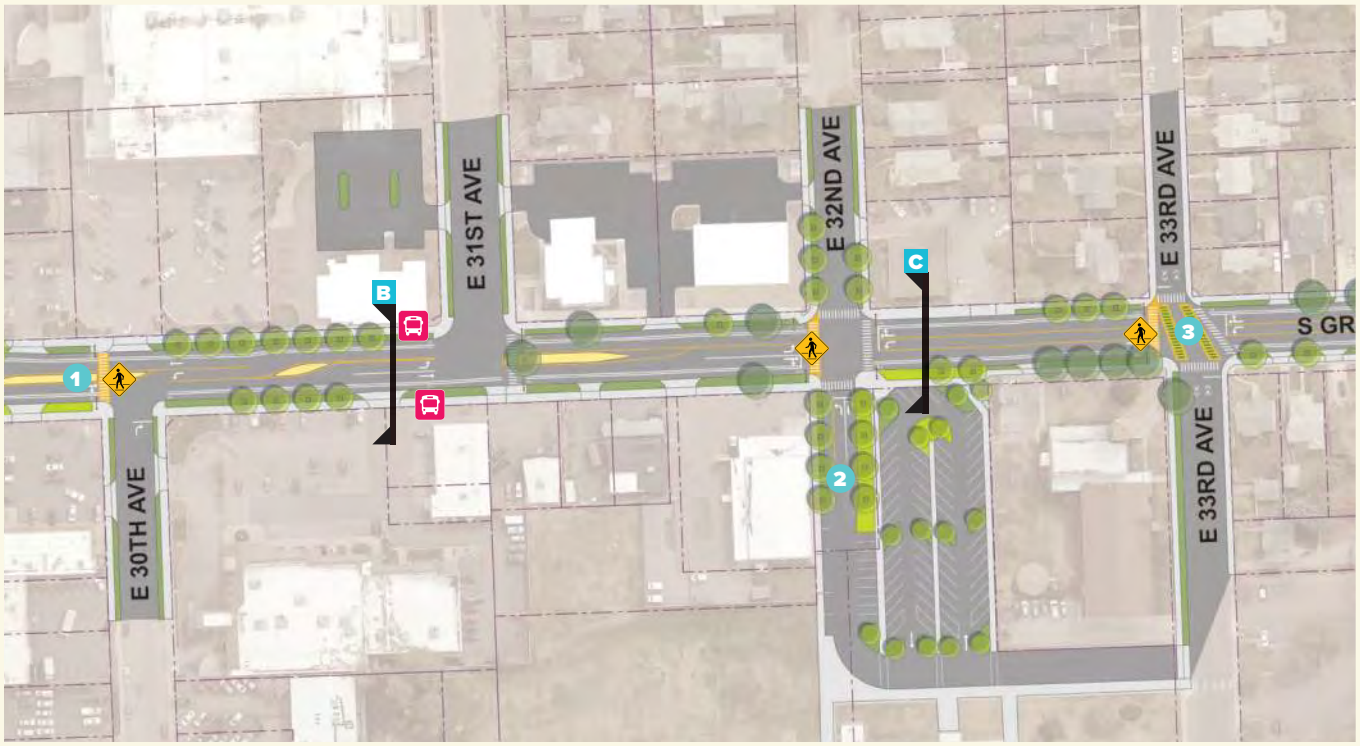
There are two types of pedestrian crossings shown on the concept map – enhanced pedestrian crossings with flashing beacons at high demand locations and marked crossings with striping and signs at other select locations.

Highlighted spot improvements include:

1 There is an opportunity to improve safety and reduce potential driving-walking conflicts at the proposed 30th Avenue enhanced crossing by restricting some vehicle turn movements with a raised center median. This would reroute southbound drivers to access the Manito Shopping Center from 29th Avenue or Garfield Street. If the restriction was not applied, the location of the enhanced crossing should be reevaluated.

2 Sacajawea Middle School is scheduled for a full building replacement in a few years. This provides an opportunity to redesign their corridor frontage to reduce existing driving-walking conflicts. The concept plan would replace the two school driveways with a continuous sidewalk and landscape area. Future access to the school would be provided by the extension of 32nd Avenue to the west, creating a four-leg intersection and clearly defined pedestrian crossings. These improvements will need to consider future use of the post office drive-up mailbox which is currently located in the school parking lot.

3 33rd Avenue is a popular crossing location for pedestrians and cyclists. It is designated as a walking route for Jefferson Elementary School and a City Neighborhood Greenway. The concept plan would add both enhanced pedestrian crossings and bicycle greenway crossings to make crossing Grand Boulevard safer and more comfortable.



AGENDA

ADDITIONAL IMPROVEMENTS

Additional improvements to consider include managing vehicle access onto the corridor to reduce vehicle conflicts and increase walking and biking comfort. As redevelopment occurs along the corridor, there may be an opportunity to consolidate, relocate or close driveways on a case by case basis. The existing raised medians should be retained to help manage vehicle movements. Adding raised medians should be considered along segments with a low number of driveways and near pedestrian crossings to provide additional protection. Raised medians provide a location to add esthetic elements to the corridor – low-height landscaping and painted art are popular examples. Improvements will require future approval prior to construction.

Phasing of Improvements

Potential street cross-sections were developed for key corridor segments (labeled A through D) to show how the changes could be phased over time from existing (Condition 1) to short-term improvements (Condition 2) to the long-term vision (Condition 3).

Condition 1. The existing conditions section represents the general street elements along the corridor today. The dimensions shown are illustrative of the average condition as elements such as vehicle lane widths vary along the corridor.

Condition 2. The short-term improvement sections include elements that are lower cost and easier to install compared to a full reconstruction of the roadway. These elements could be added separately or grouped into a package of projects. Recommended improvements include:

- Restriping the roadway with narrower vehicle lanes
- Adding buffered bike lanes
- Installing enhanced pedestrian crossings at high demand locations
- Adding planter boxes, bike parking and other pedestrian amenities in remaining open spaces
- Relocating bus stops adjacent to the new pedestrian crossings as needed
- Public art elements

Condition 3. The long-term vision sections include higher cost improvements that are more challenging and may require full reconstruction. Potential improvements include widening sidewalks, installing a landscape area, changing the curb location and installing pedestrian scale lighting along the roadway and building greenstreet elements.

The following figures show the potential for each key corridor segment to evolve from existing conditions to the long-range vision.

A-1 Existing Conditions

A-2 Potential Short-Term Improvements

TYPICAL STREET IMPROVEMENTS 29TH TO 32ND

A-3 Proposed Long-Term Vision

A SECTIONS

B-1 Existing Conditions

B-2 Potential Short-Term Improvements

STREET IMPROVEMENTS ADJACENT TO RECENT DEVELOPMENT

B-3 Proposed Long-Term Vision

B SECTIONS

C-1 Existing Conditions

C-2 Potential Short-Term Improvements

C-3 Proposed Long-Term Vision

STREET IMPROVEMENTS ADJACENT TO POTENTIAL FUTURE DEVELOPMENT

C SECTIONS

D-1 Existing Conditions

D-2 Potential Improvements

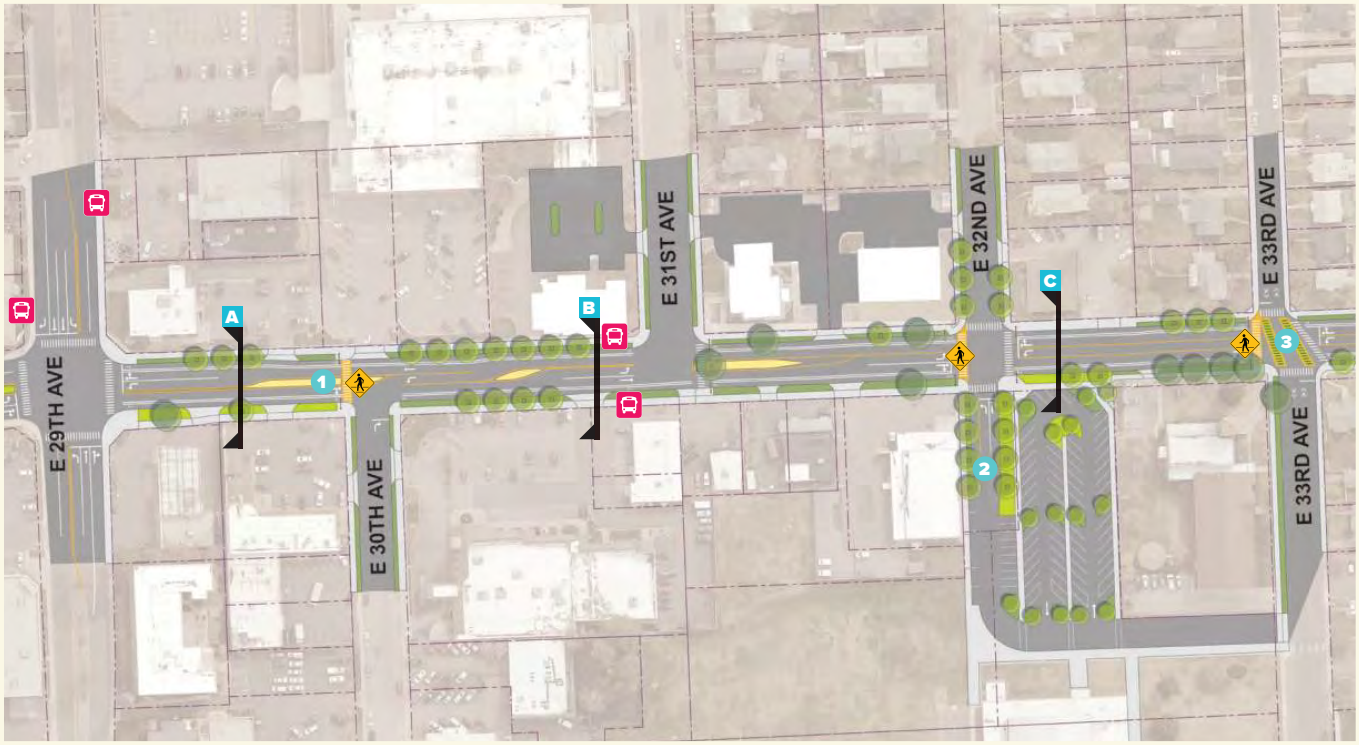
TYPICAL STREET IMPROVEMENTS 33RD TO 37TH

D SECTIONS

Street Trees

The corridor concept includes adding new street trees between 29th Avenue and 33rd Avenue, the segment with the greatest need. Both existing and proposed tree planting locations are shown on the concept map.

Plantings will be more successful if there are long-term considerations for tree planting sites with optimal soil volume. It is recommended to consider incorporating plantings of new trees to resolve possible stormwater issues in this highly impervious area. Trees mitigate stormwater in a number of ways and green infrastructure should be considered such as cell planters and/or structural soil. The presence of trees in a streetscape, neighborhood, and community can decrease the amount of stormwater runoff and pollutants that reach local waters by capturing and storing rainfall. The details of desired landscaping will need to be evaluated by Urban Forestry in future design work to ensure compliance with the City ordinance and ensure long term tree success.



MAP LEGEND

- Parcel Lines
- Street
- Sidewalk
- Landscape Buffer
- Tree (New Planting)
- Tree (Existing)
- Stormwater Planting
- Potential Median Art
- Lighting (Pedestrian + Street)
- Crosswalk
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- Enhanced Bike Crossing (RRFB)
- Separated Bike Lane
- Shared Roadway
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- A Typical Street Improvements, 29th-32nd (see pg 28)
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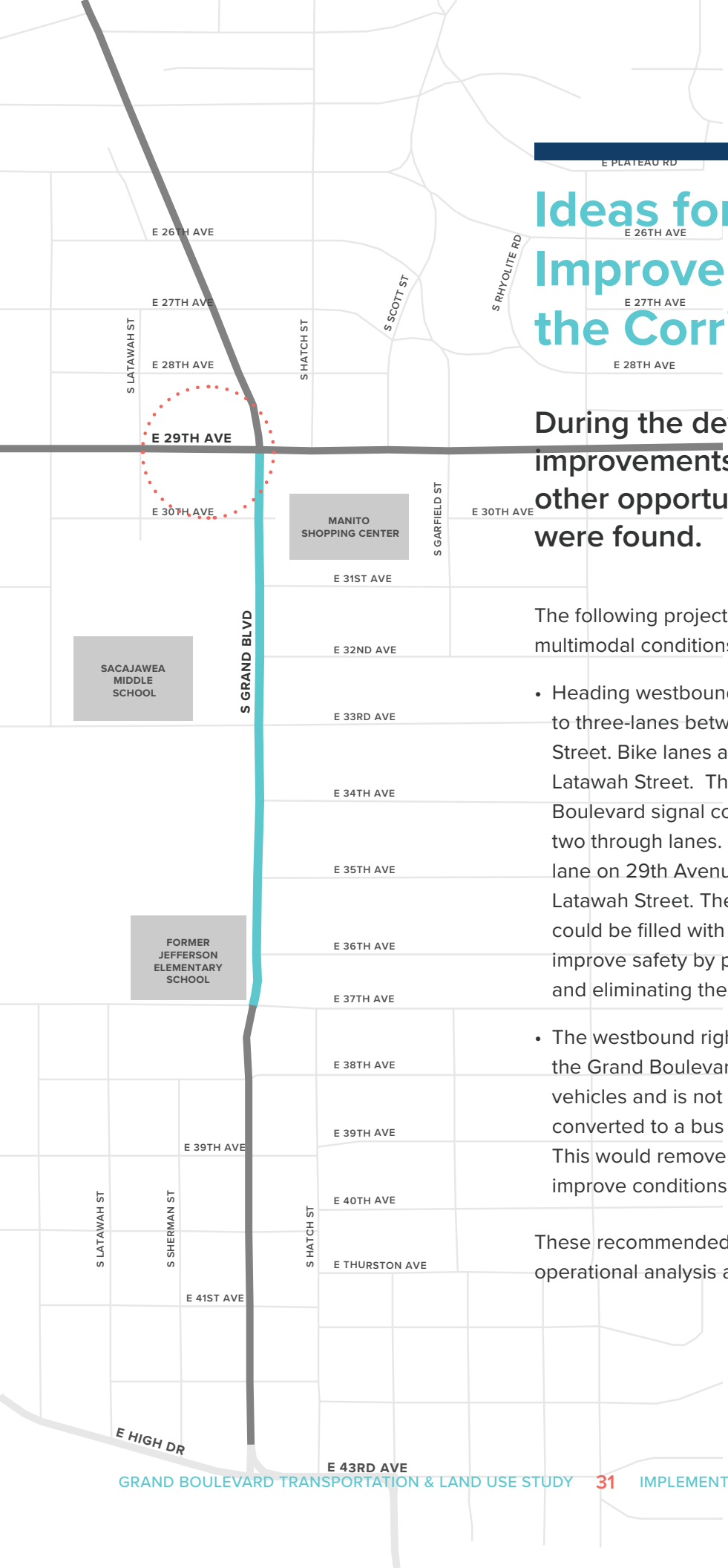
- C Street Improvements Adjacent to Potential Future Development (see pg 29)
- D Typical Street Improvements, 33rd-37th (see pg 29)

0 30 60 90 120 feet

5 Implementation

The development of improvements for Grand Boulevard also yielded other improvement opportunities on 29th Avenue. Implementing these recommended projects would also further encourage multimodal conditions throughout the corridor and surrounding areas.



Ideas for Further Improvements Off the Corridor

During the development of improvements for Grand Boulevard, other opportunities on 29th Avenue were found.

The following projects should be considered to encourage multimodal conditions:

- Heading westbound, 29th Avenue narrows from four-lanes to three-lanes between Grand Boulevard and Latawah Street. Bike lanes are present in both directions west of Latawah Street. The westbound vehicle lanes at the Grand Boulevard signal could be reconfigured to drop one of the two through lanes. This would allow the westbound bike lane on 29th Avenue to start at Grand Boulevard instead of Latawah Street. The extra roadway width on 29th Avenue could be filled with a bike lane buffer. This project would improve safety by proving a designated space for cyclists and eliminating the vehicle lane merge area.
- The westbound right turn-only lane on 29th Avenue at the Grand Boulevard intersection serves a low volume of vehicles and is not needed for capacity. The lane could be converted to a bus lane to serve the adjacent STA stop. This would remove vehicles driving next to the curb to improve conditions for pedestrians.

These recommended improvements will require additional operational analysis and refinements prior to implementation.

FIGURE 14. RECENT PRIVATE DEVELOPMENT IMPROVEMENTS BETWEEN 31ST AND 32ND AVENUE

Funding, Partnerships and Coordination

Creative funding strategies using a variety of sources will be needed to implement the Grand Boulevard vision. There is currently no funding source identified for improvements. Potential sources include local, state and federal programs as well as public-private partnerships. The City will actively pursue available grants, school safety program and traffic calming program. Private developers will help implement the plan's vision for the public realm as infill and redevelopment occurs.

Monitoring

Over time, the City will monitor progress towards the plan vision and goals. Specifically, the City will monitor thresholds for implementing specific types of improvements and evaluate the impacts and benefits to the community. This includes:

- Continue to evaluate vehicle operations and performance over time.
- Continue to collect and evaluate collision data and monitor trends over time.
- Continue to review transit ridership data and monitor trends over time.
- Engage in on-going community feedback to ensure improvements meet the plan vision.

City of Spokane

Grand Boulevard Transportation & Land Use Study

Appendix

AGENDA

Traffic Analysis

A

MEMORANDUM

DKS
720 SW Washington St
Suite 500
Portland, OR 97205
dksassociates.com

DATE: March 11, 2020

TO: Inga Note, City of Spokane

FROM: Reah Flisakowski, PE
Rochelle Starrett, EIT

SUBJECT: Draft Spokane Grand Boulevard Report P 19167-000

A traffic operations analysis was conducted to support the Grand Boulevard Plan and determine if there are opportunities to remove vehicle lanes to develop a comprehensive, multimodal corridor. Traffic operations at key intersections on the corridor were assessed for existing and future 2040 conditions to identify future deficiencies and test several vehicle lane scenarios. Future AM and PM peak hour volumes were projected using the Spokane Regional Transportation Council travel demand models. The Existing scenario intersection operations are summarized in Table 1. The highest vehicle delays today are experienced during the AM peak hour at the Grand Boulevard/33rd Avenue intersection for the minor street approach and during the PM peak hour at the Grand Boulevard/37th Avenue signalized intersection and the Grand Boulevard/30th Avenue intersection minor street approach. All intersections meet current City performance standards.

Table 1: Existing Vehicle Operations

#	Intersection	Control	Mobility Target	Existing AM				Existing PM[1]			
				v/c	Delay	LOS	Exceeds Target	v/c	Delay	LOS	Exceeds Target
1	Grand Boulevard and 29th Avenue	Signal	LOS E	0.58	20.3	C	No	0.75	24.2	C	No
2	Grand Boulevard and 30th Avenue[2]	TWSC	LOS E	0.24/0.17	9.0/24.2	A/C	No	0.25/0.45	9.5/33.4	A/D	No
3	Grand Boulevard and 33rd Avenue[2]	TWSC	LOS E	0.38/0.38	9.3/31.5	A/D	No	0.36/0.29	8.8/20.7	A/C	No
4	Grand Boulevard and 37th Avenue	Signal	LOS E	0.73	25.3	C	No	0.84	39.5	D	No

Notes:

1 Existing PM intersection operations reported for the PM peak hour from 4-6 PM for the intersections of Grand Boulevard and 29th Avenue, 31st Avenue, and 37th Avenue. Existing PM intersection operations reported for the School PM Peak Hour from 2:30-4:30 PM for the intersection of Grand Boulevard and 33rd Avenue.

2 Intersection Operations reported for worst Major Street/Minor Street movement at all TWSC (two-way stop-controlled) intersections

The 2040 AM and PM traffic volumes were used to understand future traffic operations with no changes to Grand Boulevard; Future Baseline traffic operations are summarized below in Table 2. Key intersections on Grand Boulevard, including the traffic signals at 29th Avenue and 37th Avenue, are expected to operate within or approach their mobility target by 2040. However, growth in vehicle volumes along Grand Boulevard will further delay side street traffic at existing two-way stop control intersections, and the minor street approaches at 30th Avenue and 33rd Avenue are expected to exceed their mobility targets by 2040.

Table 2: Future Baseline Vehicle Operations

#	Intersection	Control	Mobility Target	Future No Build (2040) AM				Future No Build (2040) PM[1]			
				v/c	Delay	LOS	Exceeds Target	v/c	Delay	LOS	Exceeds Target
1	Grand Boulevard and 29th Avenue	Signal	LOS E	0.64	21.6	C	No	0.84	29.2	C	No
2	Grand Boulevard and 30th Avenue[2]	TWSC	LOS E	0.29/0.22	9.4/32.8	A/D	No	0.29/0.58	10.0/51.5	A/F	**Yes**
3	Grand Boulevard and 33rd Avenue[2]	TWSC	LOS E	0.46/0.59	9.9/61.9	A/F	**Yes**	0.44/0.44	9.4/33.6	A/D	No
4	Grand Boulevard and 37th Avenue	Signal	LOS E	0.92	50	D	No	0.93	64.8	E	No

Notes:

1 Existing PM intersection operations reported for the PM peak hour from 4-6 PM for the intersections of Grand Boulevard and 29th Avenue, 31st Avenue, and 37th Avenue. Existing PM intersection operations reported for the School PM Peak Hour from 2:30-4:30 PM for the intersection of Grand Boulevard and 33rd Avenue.

2 Intersection Operations reported for worst Major Street/Minor Street movement at all TWSC (two-way stop-controlled) intersections

Since most study intersections operate within their existing mobility standards in the Future Baseline scenario, opportunities exist for improved multimodal transportation facilities on this corridor. These opportunities include reconfiguring existing travel lanes near the intersection of Grand Boulevard/29th Avenue to provide either wider sidewalks or add bike lanes, connecting the commercial district near 29th Avenue to the neighborhood greenway on 33rd Avenue, and new enhanced pedestrian crossings. Identified future improvements include:

- Continue the existing three-lane cross section near 32nd Avenue to the north to 29th Avenue
- Convert 30th Avenue to right in/right out only with a raised median; maintain northbound left turns at 30th Avenue to provide local circulation
- Modify the existing southbound approach at Grand Boulevard/29th Avenue for one southbound through lane; specific opportunities identified in the following section
- Extend 32nd Avenue to the west as a private access serving future plans for Sacajawea Middle School

Future traffic operations were analyzed for Grand Boulevard after modelling these improvements using the previously developed 2040 AM and PM traffic volumes; results are summarized in Table 3. Intersection operations at Grand Boulevard/29th Avenue depend on the preferred modification to convert the southbound through lane to a single through traffic lane and operations under each identified reconfiguration are discussed separately in the following section.

Table 3: Build Vehicle Operations

#	Intersection	Control	Mobility Target	Build (2040) AM				Build (2040) PM[1]			
				v/c	Delay	LOS	Exceeds Target	v/c	Delay	LOS	Exceeds Target
1	Grand Boulevard and 29th Avenue	Signal	LOS E	0.88	32.2	C	No	*See Following Section*			
2	Grand Boulevard and 30th Avenue[2]	TWSC	LOS E	0.45/0.08	9.4/14.1	A/B	No	0.51/0.19	10.1/17	B/C	No
3	Grand Boulevard and 33rd Avenue[2]	TWSC	LOS E	0.46/0.59	9.9/61.9	A/F	**Yes**	0.44/0.44	9.4/33.6	A/D	No
4	Grand Boulevard and 37th Avenue	Signal	LOS E	0.92	50	D	No	0.93	64.8	E	No

Notes:

1 Existing PM intersection operations reported for the PM peak hour from 4-6 PM for the intersections of Grand Boulevard and 29th Avenue, 31st Avenue, and 37th Avenue. Existing PM intersection operations reported for the School PM Peak Hour from 2:30-4:30 PM for the intersection of Grand Boulevard and 33rd Avenue.

2 Intersection Operations reported for worst Major Street/Minor Street movement at all TWSC intersections

Vehicle operations are expected to improve at the intersection of Grand Boulevard and 30th Avenue since high vehicle volumes on Grand Boulevard can significantly delay vehicles turning left from 30th Avenue in the future. The proposed turn restrictions are expected to provide minimal impacts to vehicle circulation. Alternative access to the Manito Shopping Center is provided from both 29th Avenue and 31st Avenue, and northbound left turn access is maintained since this provides a key access point for developments west of Grand Boulevard on 30th Avenue.

Implementing the preferred alternative will have relatively modest impacts to vehicle traffic for improved bicycle and pedestrian facilities between 29th Avenue and 33rd Avenue despite reducing the total number of travel lanes in this portion of Grand Boulevard. No impacts to vehicle traffic are expected between 33rd Avenue and 37th Avenue. The identified improvements provide a key start towards re-developing the Grand Boulevard district into a vibrant urban center in Spokane's South Hill.

Grand Boulevard & 29th Avenue Intersection Opportunities

With the preferred build alternative, one of the existing southbound travel lanes for vehicles is reconfigured to provide more space for pedestrian and bicycle facilities which will require modifications to the southbound approach to Grand Boulevard & 29th Avenue. Three build configurations were tested for the southbound approach, including:

1. **Single Left**: Convert existing through only lane to a left turn lane and close the existing left turn pocket
2. **Dual Southbound Left**: Convert existing through only lane to a left turn lane and maintain the existing left turn pocket
3. **Dual Southbound Left with Split Phasing:** Convert existing through only lane to a left turn lane and maintain the existing left turn pocket; implement northbound/southbound split phasing

Each build configuration was tested using the same cycle length as existing to provide comparable vehicle operations and queueing results. However, notably, some of these build configurations would provide additional opportunities to implement pedestrian-friendly shorter cycle lengths. A summary of build operations for each identified build configuration (PM Peak only) and queueing are detailed below.

Intersection Operations

The intersection of Grand Boulevard/29th Avenue is expected to meet its mobility target with all build configurations; intersection operations for 2040 are summarized below in Table 4. Vehicle delay at this intersection will increase between 15 and 50 seconds depending on the configuration. Using a dual southbound left turn lane minimizes the observed increase in vehicle delay while vehicle delay more than doubles with both a single southbound left turn lane and with dual southbound left turn lanes when north/south traffic is split phased. The intersection v/c ratio is also expected to exceed one when either a single southbound left turn lane or dual southbound left turn lanes with north/south traffic split phased are implemented at this location. However, existing phase lengths were not modified for the single southbound left turn lane or dual southbound left turn lane build configurations. Modifying the existing phase lengths could mitigate some of the observed increase in vehicle delay and intersection v/c ratio compared to the future no build condition.

Table 4: Build Vehicle Operations at Grand Boulevard/29th Avenue

#	Intersection	Control	Mobility Target	Future Build (2040) PM[1]			
				v/c	Delay	LOS	Exceeds Target
0	2040 No Build	Signal	LOS E	0.84	29.2	C	No
1	2040 Build - Single Left	Signal	LOS E	1.04	64.9	E	No
2	2040 Build - Dual SBL	Signal	LOS E	0.85	43.9	D	No
3	2040 Build - Dual SBL with Split Phasing	Signal	LOS E	1.04	76.1	E	No

Notes:

1 Existing PM intersection operations reported for the PM peak hour from 4-6 PM for the intersections of Grand Boulevard and 29th Avenue

Vehicle Queueing

Short term (using existing vehicle volumes) and long term (2040) vehicle queueing analysis in SimTraffic was also used to understand the potential for increased queue lengths on Grand Boulevard under each build scenario immediately after project implementation and in the future. In the short term, summarized in Table 6, vehicle queueing will moderately improve in the Build scenario since high southbound left turn volumes routinely exceed the existing left turn storage and spill back in to one of the through lanes. Increasing the available left turn storage in the Build scenario will allow vehicles to use a larger proportion of the available green time which will reduce queue lengths.

Table 6: Short Term Queueing Analysis

Scenario	SBL (Pocket)*	SBL (Existing SBT Lane)	SBTR
Existing	210	1585	1535
Short Term Build - Single Left	--	825	1050
Short Term Build - Dual SBL	195	820	910
Short Term Build - Dual SBL with Split Phasing	215	1125	1340

*150 feet storage available in SBL pocket

Dual southbound left turn lanes do not provide a significant benefit for vehicle queueing since the existing storage length is short, minimizing the number of vehicles that can use this lane. However, the Build - Dual Southbound Left cycle length could be shortened which would minimize delay for pedestrians. The Build - Dual SBL with Split Phasing has the longest estimated queue lengths of any build scenario since split phasing reduces the available green time for both northbound and southbound vehicles.

By 2040, queueing is expected to be significantly increase, regardless of the scenario, summarized in Table 7. Generally, SimTraffic queues in excess of 2,000 feet indicate severe queueing issues, and this analysis does not account for diversion that could happen with very long vehicle queues on Grand Boulevard. Due to these limitations, queueing will be comparable in each scenario by 2040.

Table 7: Long term (2040) Queueing Analysis

Scenario	SBL (Pocket)*	SBL (Existing SBT Lane)	SBTR
2040 No Build	210	5105	5065
2040 Build - Single Left	--	3675	3805
2040 Build - Dual SBL	200	4365	4515
2040 Build - Dual SBL with Split Phasing	220	4910	4775

*150 feet storage available in SBL pocket

APPENDIX

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

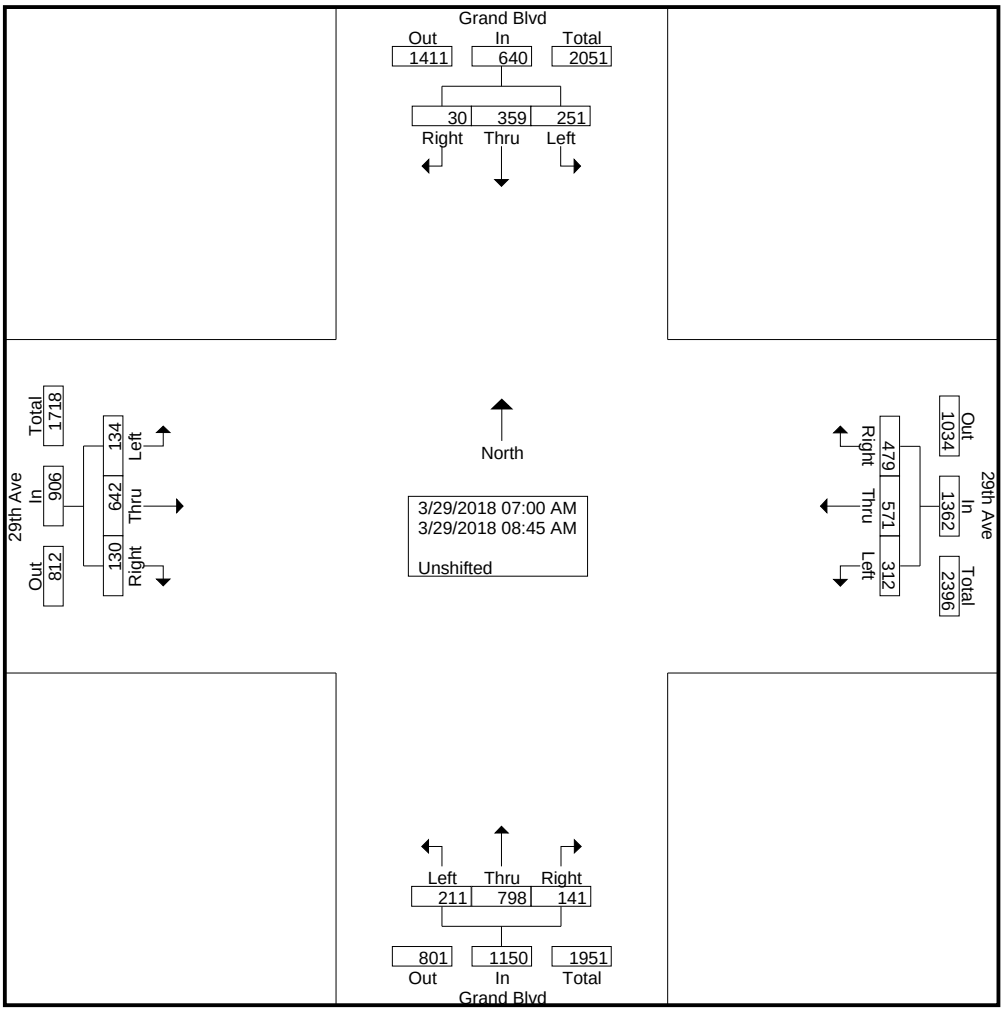
2900 S Grand Blvd
600 E 29th Ave

Peak Hour Data on Page 2

File Name : Grand & 29th INT155 AM
Site Code : INT155
Start Date : 3/29/2018

Groups Printed- Unshifted

	Grand Blvd From North				29th Ave From East				Grand Blvd From South				29th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	23	18	42	41	47	7	95	9	74	17	100	9	36	12	57	294
07:15 AM	2	22	17	41	44	48	21	113	13	101	33	147	10	61	8	79	380
07:30 AM	4	40	40	84	62	85	25	172	5	136	28	169	4	73	15	92	517
07:45 AM	5	48	29	82	87	89	33	209	15	126	31	172	15	77	15	107	570
Total	12	133	104	249	234	269	86	589	42	437	109	588	38	247	50	335	1761
08:00 AM	6	51	24	81	78	87	38	203	14	94	30	138	17	85	17	119	541
08:15 AM	5	56	39	100	53	91	65	209	29	77	26	132	21	112	12	145	586
08:30 AM	3	62	42	107	63	72	57	192	24	103	24	151	26	99	25	150	600
08:45 AM	4	57	42	103	51	52	66	169	32	87	22	141	28	99	30	157	570
Total	18	226	147	391	245	302	226	773	99	361	102	562	92	395	84	571	2297
Grand Total	30	359	251	640	479	571	312	1362	141	798	211	1150	130	642	134	906	4058
Apprch %	4.7	56.1	39.2		35.2	41.9	22.9		12.3	69.4	18.3		14.3	70.9	14.8		
Total %	0.7	8.8	6.2	15.8	11.8	14.1	7.7	33.6	3.5	19.7	5.2	28.3	3.2	15.8	3.3	22.3	



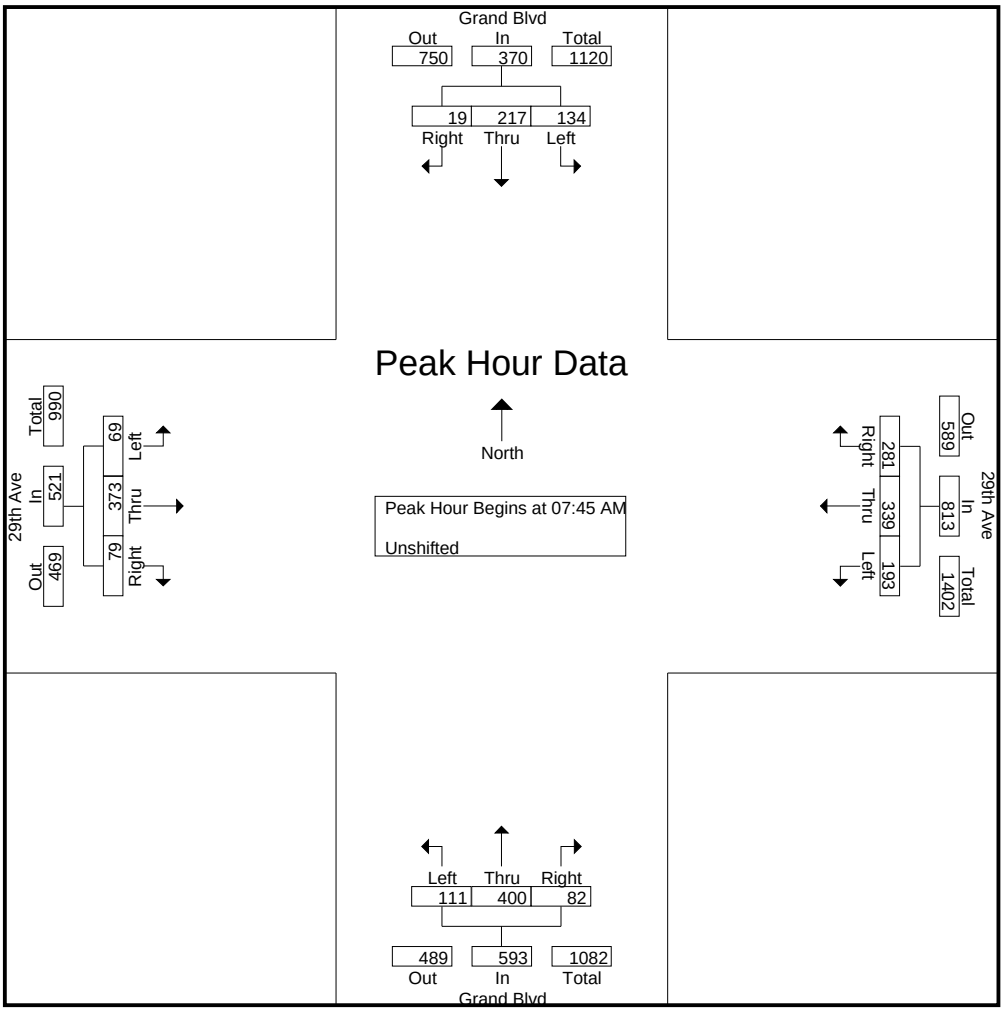
AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

File Name : Grand & 29th INT155 AM
Site Code : INT155
Start Date : 3/29/2018
Page No : 2

	Grand Blvd From North				29th Ave From East				Grand Blvd From South				29th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	5	48	29	82	**87**	89	33	**209**	15	**126**	**31**	**172**	15	77	15	107	570
08:00 AM	**6**	51	24	81	78	87	38	203	14	94	30	138	17	85	17	119	541
08:15 AM	5	56	39	100	53	**91**	**65**	209	**29**	77	26	132	21	**112**	12	145	586
08:30 AM	3	**62**	**42**	**107**	63	72	57	192	24	103	24	151	**26**	99	**25**	**150**	**600**
Total Volume	19	217	134	370	281	339	193	813	82	400	111	593	79	373	69	521	2297
% App. Total	5.1	58.6	36.2		34.6	41.7	23.7		13.8	67.5	18.7		15.2	71.6	13.2		
PHF	.792	.875	.798	.864	.807	.931	.742	.972	.707	.794	.895	.862	.760	.833	.690	.868	.957



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

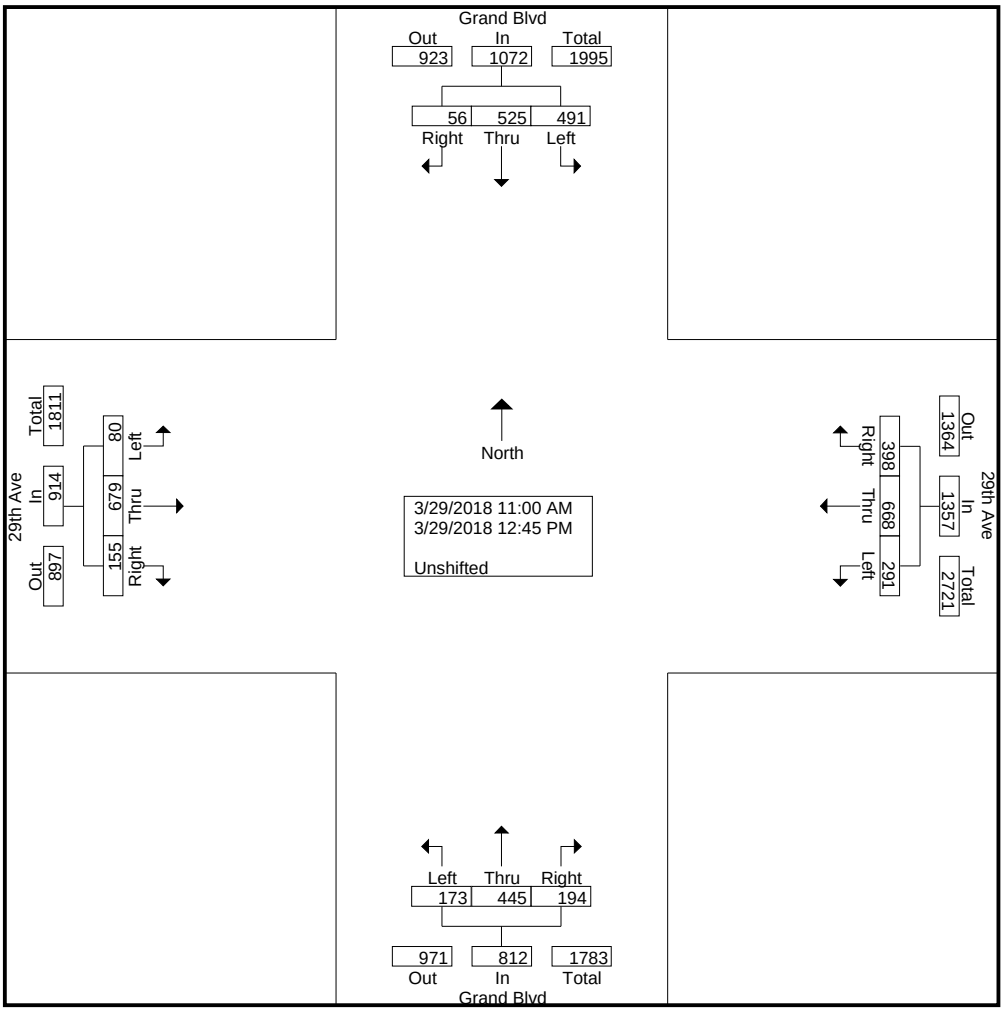
2900 S Grand Blvd
600 E 29th Ave

Peak Hour Data on Page 2

File Name : Grand & 29th INT155 MID
Site Code : INT155
Start Date : 3/29/2018
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North				29th Ave From East				Grand Blvd From South				29th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
11:00 AM	7	48	57	112	46	100	39	185	26	50	18	94	22	78	10	110	501
11:15 AM	9	58	55	122	47	65	37	149	21	60	16	97	20	63	7	90	458
11:30 AM	6	51	54	111	51	75	35	161	23	55	14	92	23	81	15	119	483
11:45 AM	6	66	54	126	53	80	29	162	31	56	18	105	19	97	6	122	515
Total	28	223	220	471	197	320	140	657	101	221	66	388	84	319	38	441	1957
12:00 PM	6	69	53	128	38	73	39	150	28	52	19	99	20	83	8	111	488
12:15 PM	12	77	80	169	45	89	27	161	28	45	30	103	17	87	9	113	546
12:30 PM	4	73	69	146	55	84	36	175	11	58	30	99	12	86	6	104	524
12:45 PM	6	83	69	158	63	102	49	214	26	69	28	123	22	104	19	145	640
Total	28	302	271	601	201	348	151	700	93	224	107	424	71	360	42	473	2198
Grand Total	56	525	491	1072	398	668	291	1357	194	445	173	812	155	679	80	914	4155
Apprch %	5.2	49	45.8		29.3	49.2	21.4		23.9	54.8	21.3		17	74.3	8.8		
Total %	1.3	12.6	11.8	25.8	9.6	16.1	7	32.7	4.7	10.7	4.2	19.5	3.7	16.3	1.9	22	



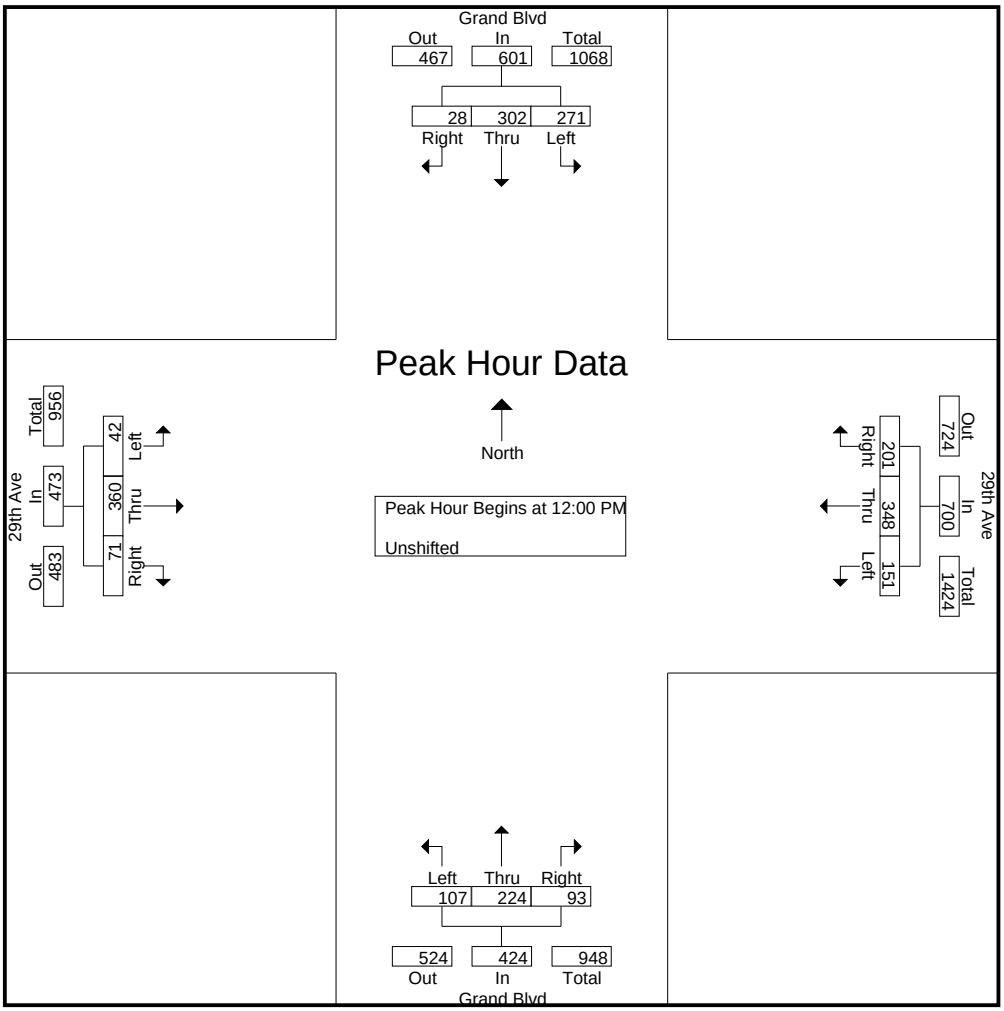
AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

File Name : Grand & 29th INT155 MID
Site Code : INT155
Start Date : 3/29/2018
Page No : 2

	Grand Blvd From North				29th Ave From East				Grand Blvd From South				29th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	6	69	53	128	38	73	39	150	**28**	52	19	99	20	83	8	111	488
12:15 PM	**12**	77	**80**	**169**	45	89	27	161	28	45	**30**	103	17	87	9	113	546
12:30 PM	4	73	69	146	55	84	36	175	11	58	30	99	12	86	6	104	524
12:45 PM	6	**83**	69	158	**63**	**102**	**49**	**214**	26	**69**	28	**123**	**22**	**104**	**19**	**145**	**640**
Total Volume	28	302	271	601	201	348	151	700	93	224	107	424	71	360	42	473	2198
% App. Total	4.7	50.2	45.1		28.7	49.7	21.6		21.9	52.8	25.2		15	76.1	8.9		
PHF	.583	.910	.847	.889	.798	.853	.770	.818	.830	.812	.892	.862	.807	.865	.553	.816	.859



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

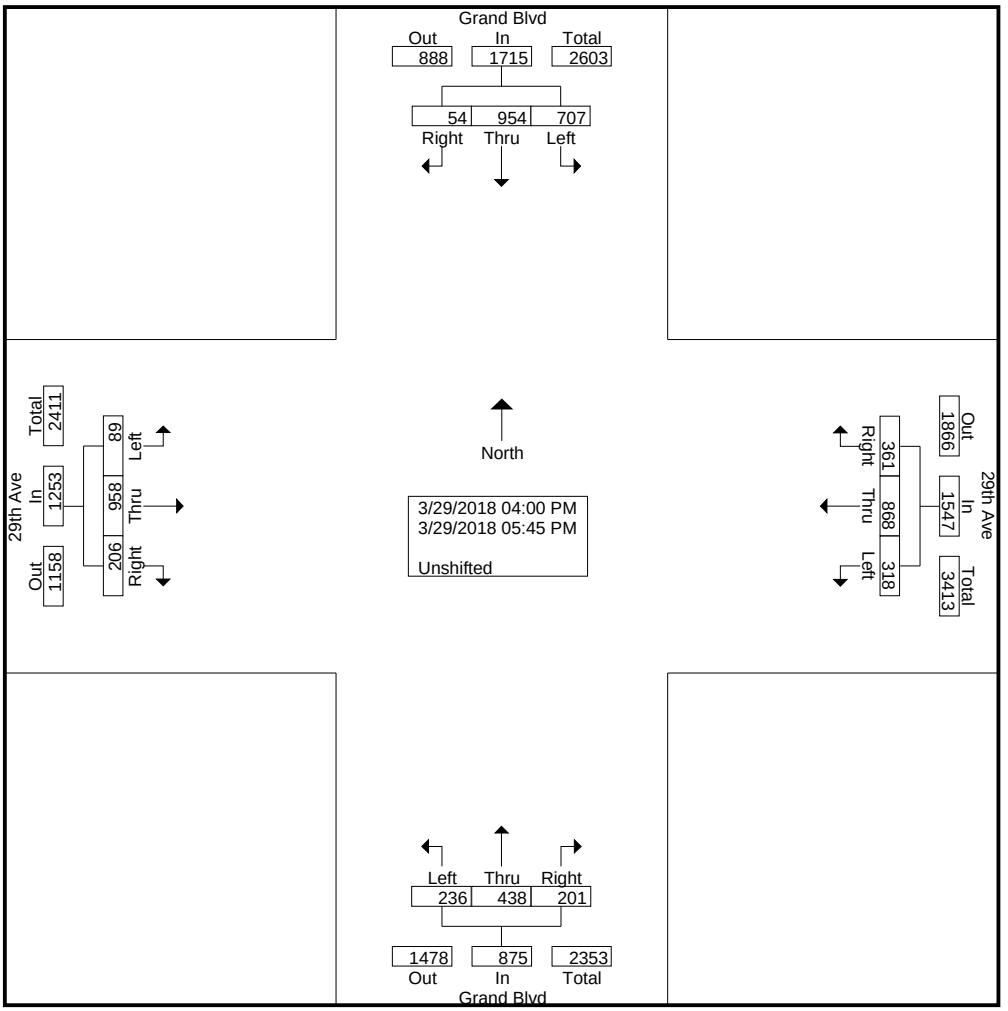
2900 S Grand Blvd
600 E 29th Ave

Peak Hour Data on Page 2

File Name : Grand & 29th INT155 PM
Site Code : INT155
Start Date : 3/29/2018

Groups Printed- Unshifted

	Grand Blvd From North				29th Ave From East				Grand Blvd From South				29th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	9	105	74	188	51	124	49	224	31	53	24	108	33	109	12	154	674
04:15 PM	6	105	92	203	42	106	35	183	20	42	34	96	16	135	9	160	642
04:30 PM	8	112	72	192	44	109	34	187	20	63	30	113	27	122	10	159	651
04:45 PM	7	126	95	228	47	109	44	200	24	58	37	119	29	118	10	157	704
Total	30	448	333	811	184	448	162	794	95	216	125	436	105	484	41	630	2671
05:00 PM	4	126	95	225	48	95	37	180	22	60	26	108	21	137	18	176	689
05:15 PM	10	162	114	286	40	115	38	193	29	51	31	111	32	115	11	158	748
05:30 PM	6	110	84	200	44	106	44	194	29	62	28	119	24	112	11	147	660
05:45 PM	4	108	81	193	45	104	37	186	26	49	26	101	24	110	8	142	622
Total	24	506	374	904	177	420	156	753	106	222	111	439	101	474	48	623	2719
Grand Total	54	954	707	1715	361	868	318	1547	201	438	236	875	206	958	89	1253	5390
Apprch %	3.1	55.6	41.2		23.3	56.1	20.6		23	50.1	27		16.4	76.5	7.1		
Total %	1	17.7	13.1	31.8	6.7	16.1	5.9	28.7	3.7	8.1	4.4	16.2	3.8	17.8	1.7	23.2	



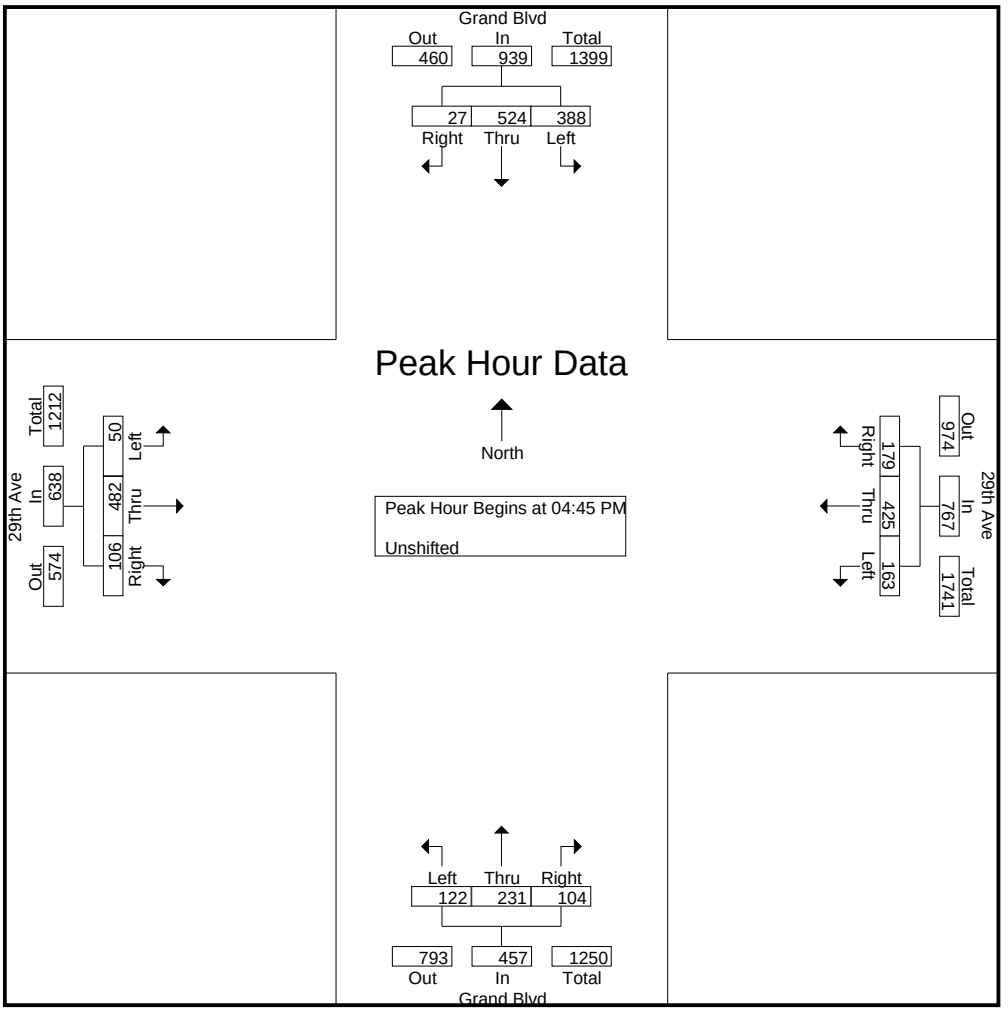
AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

File Name : Grand & 29th INT155 PM
Site Code : INT155
Start Date : 3/29/2018
Page No : 2

	Grand Blvd From North				29th Ave From East				Grand Blvd From South				29th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	7	126	95	228	47	109	**44**	**200**	24	58	**37**	**119**	29	118	10	157	704
05:00 PM	4	126	95	225	**48**	95	37	180	22	60	26	108	21	**137**	**18**	**176**	689
05:15 PM	**10**	**162**	**114**	**286**	40	**115**	38	193	**29**	51	31	111	**32**	115	11	158	**748**
05:30 PM	6	110	84	200	44	106	44	194	29	**62**	28	119	24	112	11	147	660
Total Volume	27	524	388	939	179	425	163	767	104	231	122	457	106	482	50	638	2801
% App. Total	2.9	55.8	41.3		23.3	55.4	21.3		22.8	50.5	26.7		16.6	75.5	7.8		
PHF	.675	.809	.851	.821	.932	.924	.926	.959	.897	.931	.824	.960	.828	.880	.694	.906	.936



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

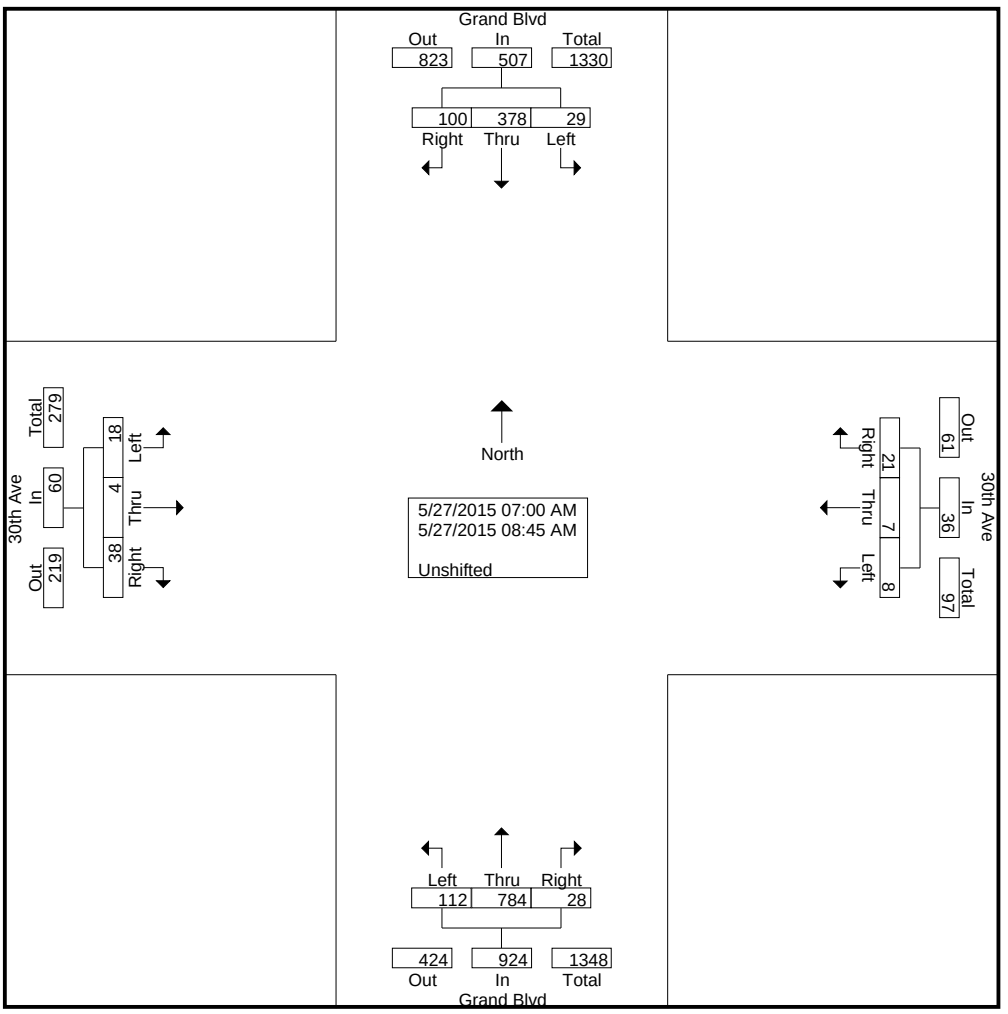
3000 S Grand Blvd
500 E 30th Ave

Peak Hour Data on Page 2

File Name : 30th & Grand AM
Site Code :
Start Date : 5/27/2015
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North				30th Ave From East				Grand Blvd From South				30th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	27	0	29	1	0	0	1	3	81	5	89	1	1	2	4	123
07:15 AM	2	30	4	36	3	0	1	4	0	94	12	106	0	0	1	1	147
07:30 AM	11	37	0	48	2	1	0	3	5	136	11	152	3	0	2	5	208
07:45 AM	13	35	1	49	5	1	0	6	4	112	15	131	2	0	1	3	189
Total	28	129	5	162	11	2	1	14	12	423	43	478	6	1	6	13	667
08:00 AM	14	37	5	56	3	1	1	5	4	86	10	100	7	1	2	10	171
08:15 AM	22	42	8	72	2	1	0	3	4	100	17	121	7	0	6	13	209
08:30 AM	19	83	8	110	1	1	2	4	2	93	18	113	9	2	3	14	241
08:45 AM	17	87	3	107	4	2	4	10	6	82	24	112	9	0	1	10	239
Total	72	249	24	345	10	5	7	22	16	361	69	446	32	3	12	47	860
Grand Total	100	378	29	507	21	7	8	36	28	784	112	924	38	4	18	60	1527
Apprch %	19.7	74.6	5.7		58.3	19.4	22.2		3	84.8	12.1		63.3	6.7	30		
Total %	6.5	24.8	1.9	33.2	1.4	0.5	0.5	2.4	1.8	51.3	7.3	60.5	2.5	0.3	1.2	3.9	



AGENDA

City of Spokane - Street Department

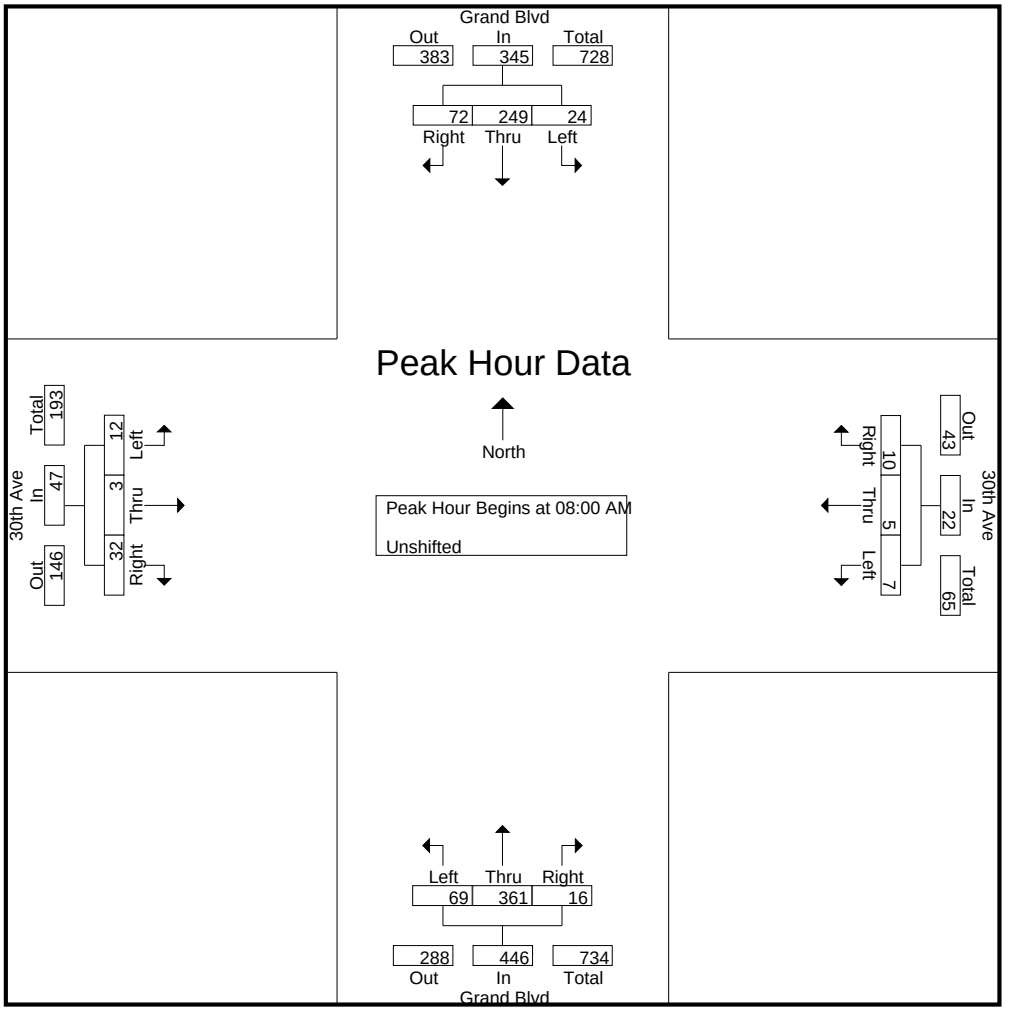
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

3000 S Grand Blvd
500 E 30th Ave

Peak Hour Data on Page 2

File Name : 30th & Grand AM
Site Code :
Start Date : 5/27/2015

	Grand Blvd From North				30th Ave From East				Grand Blvd From South				30th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	14	37	5	56	3	1	1	5	4	86	10	100	7	1	2	10	171
08:15 AM	**22**	42	**8**	72	2	1	0	3	4	**100**	17	**121**	7	0	**6**	13	209
08:30 AM	19	83	8	**110**	1	1	2	4	2	93	18	113	**9**	**2**	3	**14**	**241**
08:45 AM	17	**87**	3	107	**4**	**2**	**4**	**10**	**6**	82	**24**	112	9	0	1	10	239
Total Volume	72	249	24	345	10	5	7	22	16	361	69	446	32	3	12	47	860
% App. Total	20.9	72.2	7		45.5	22.7	31.8		3.6	80.9	15.5		68.1	6.4	25.5		
PHF	.818	.716	.750	.784	.625	.625	.438	.550	.667	.903	.719	.921	.889	.375	.500	.839	.892



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

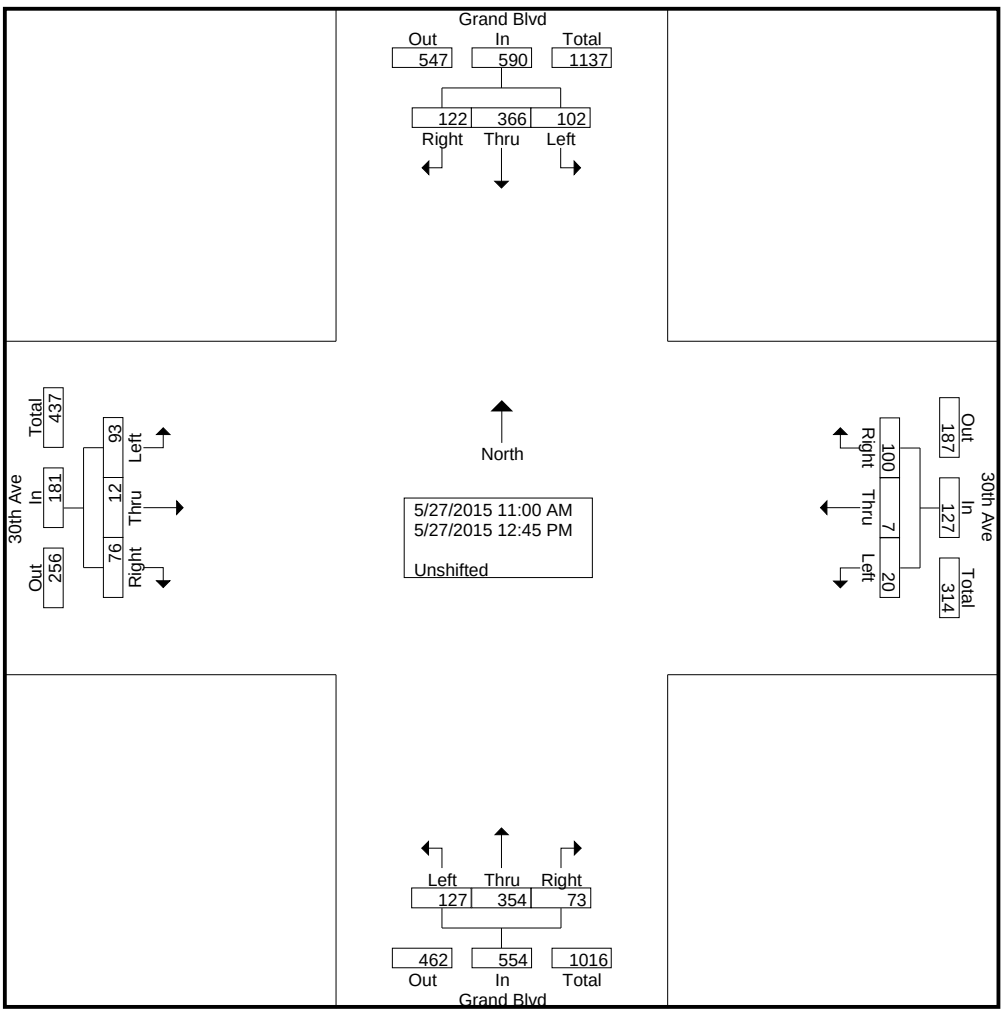
500 E 30th Ave
3000 S Grand Blvd

Peak Hour Data on Page 2

File Name : 30th & Grand MID
Site Code :
Start Date : 5/27/2015
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North				30th Ave From East				Grand Blvd From South				30th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
11:00 AM	17	33	11	61	6	0	2	8	9	39	14	62	4	2	10	16	147
11:15 AM	14	47	10	71	8	0	4	12	12	37	17	66	9	1	10	20	169
11:30 AM	12	45	11	68	13	1	6	20	9	50	12	71	8	3	15	26	185
11:45 AM	11	77	11	99	12	1	2	15	6	59	10	75	14	3	9	26	215
Total	54	202	43	299	39	2	14	55	36	185	53	274	35	9	44	88	716
12:00 PM	14	53	18	85	10	1	0	11	10	34	15	59	8	0	14	22	177
12:15 PM	11	39	11	61	19	3	3	25	9	44	26	79	7	2	11	20	185
12:30 PM	23	28	12	63	14	0	2	16	9	46	18	73	11	1	17	29	181
12:45 PM	20	44	18	82	18	1	1	20	9	45	15	69	15	0	7	22	193
Total	68	164	59	291	61	5	6	72	37	169	74	280	41	3	49	93	736
Grand Total	122	366	102	590	100	7	20	127	73	354	127	554	76	12	93	181	1452
Apprch %	20.7	62	17.3		78.7	5.5	15.7		13.2	63.9	22.9		42	6.6	51.4		
Total %	8.4	25.2	7	40.6	6.9	0.5	1.4	8.7	5	24.4	8.7	38.2	5.2	0.8	6.4	12.5	



AGENDA

City of Spokane - Street Department

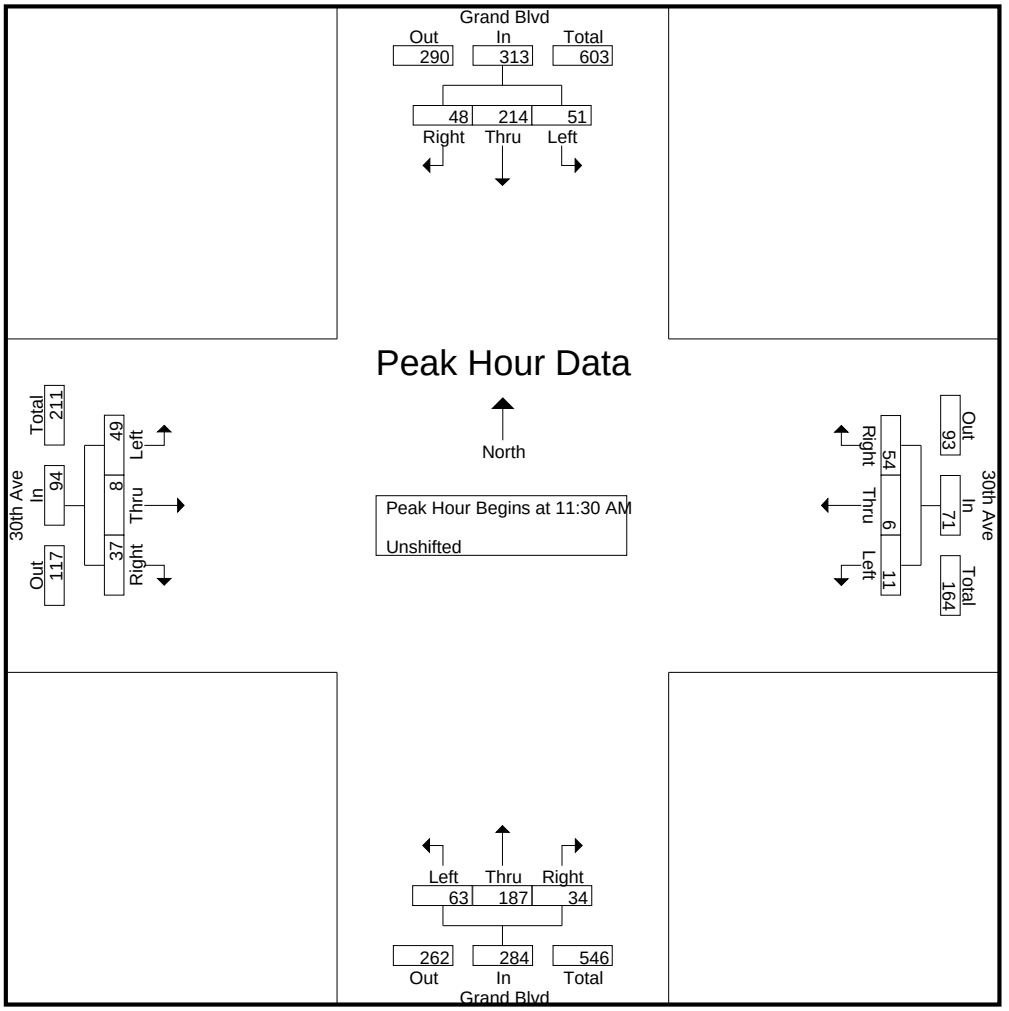
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 30th Ave
3000 S Grand Blvd

Peak Hour Data on Page 2

File Name : 30th & Grand MID
Site Code :
Start Date : 5/27/2015
Page No : 2

	Grand Blvd From North				30th Ave From East				Grand Blvd From South				30th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	12	45	11	68	13	1	**6**	20	9	50	12	71	8	**3**	**15**	**26**	185
11:45 AM	11	**77**	11	**99**	12	1	2	15	6	**59**	10	75	**14**	3	9	26	**215**
12:00 PM	**14**	53	**18**	85	10	1	0	11	**10**	34	15	59	8	0	14	22	177
12:15 PM	11	39	11	61	**19**	**3**	3	**25**	9	44	**26**	**79**	7	2	11	20	185
Total Volume	48	214	51	313	54	6	11	71	34	187	63	284	37	8	49	94	762
% App. Total	15.3	68.4	16.3		76.1	8.5	15.5		12	65.8	22.2		39.4	8.5	52.1		
PHF	.857	.695	.708	.790	.711	.500	.458	.710	.850	.792	.606	.899	.661	.667	.817	.904	.886



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

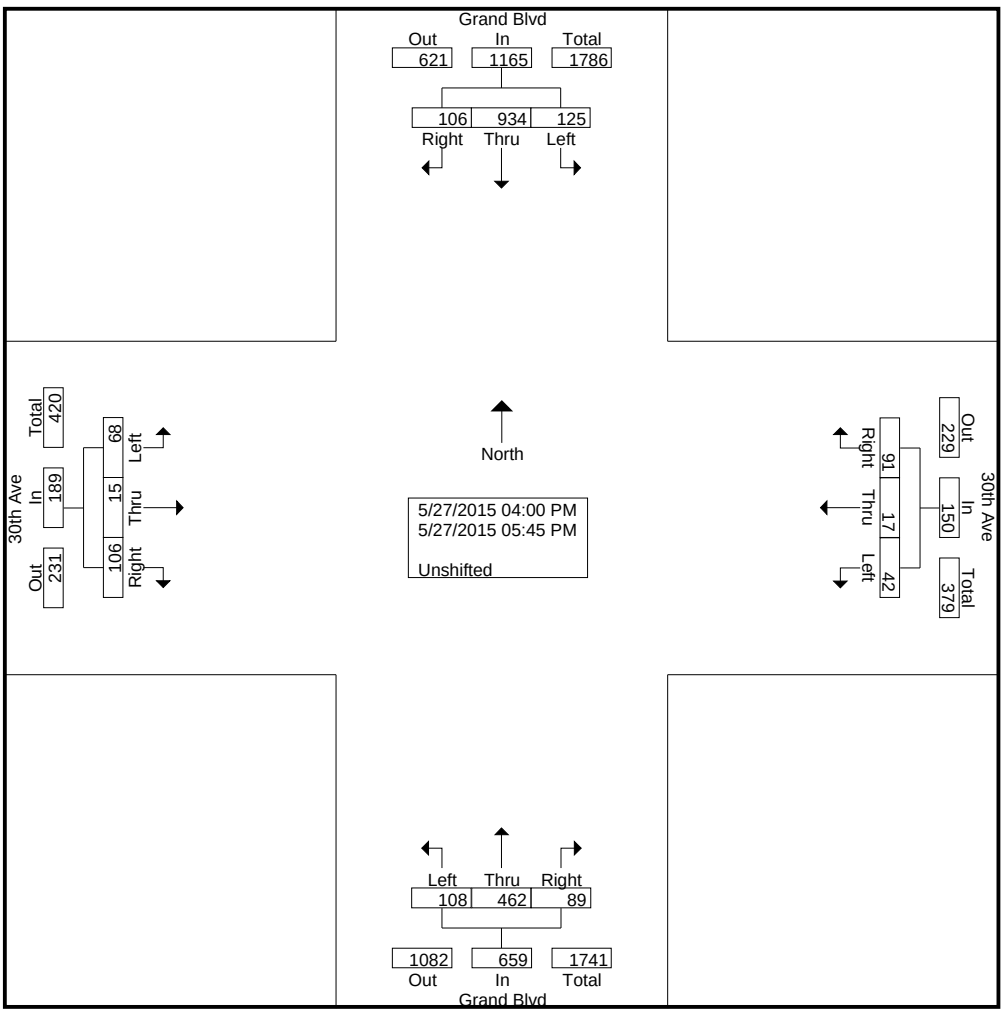
500 E 30th Ave
3000 S Grand Blvd

Peak Hour Data on Page 2

File Name : 30th & Grand PM
Site Code :
Start Date : 5/27/2015

Groups Printed- Unshifted

	Grand Blvd From North				30th Ave From East				Grand Blvd From South				30th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	9	97	10	116	8	2	7	17	13	67	5	85	12	2	9	23	241
04:15 PM	9	107	10	126	14	3	6	23	7	58	13	78	13	5	9	27	254
04:30 PM	16	98	14	128	9	3	4	16	10	64	15	89	13	1	8	22	255
04:45 PM	18	124	14	156	12	1	6	19	14	56	13	83	11	1	9	21	279
Total	52	426	48	526	43	9	23	75	44	245	46	335	49	9	35	93	1029
05:00 PM	8	158	13	179	18	1	8	27	6	72	11	89	14	2	8	24	319
05:15 PM	15	136	24	175	9	4	3	16	16	57	12	85	23	1	5	29	305
05:30 PM	19	104	21	144	12	1	4	17	8	65	11	84	13	2	5	20	265
05:45 PM	12	110	19	141	9	2	4	15	15	23	28	66	7	1	15	23	245
Total	54	508	77	639	48	8	19	75	45	217	62	324	57	6	33	96	1134
Grand Total	106	934	125	1165	91	17	42	150	89	462	108	659	106	15	68	189	2163
Apprch %	9.1	80.2	10.7		60.7	11.3	28		13.5	70.1	16.4		56.1	7.9	36		
Total %	4.9	43.2	5.8	53.9	4.2	0.8	1.9	6.9	4.1	21.4	5	30.5	4.9	0.7	3.1	8.7	



AGENDA

City of Spokane - Street Department

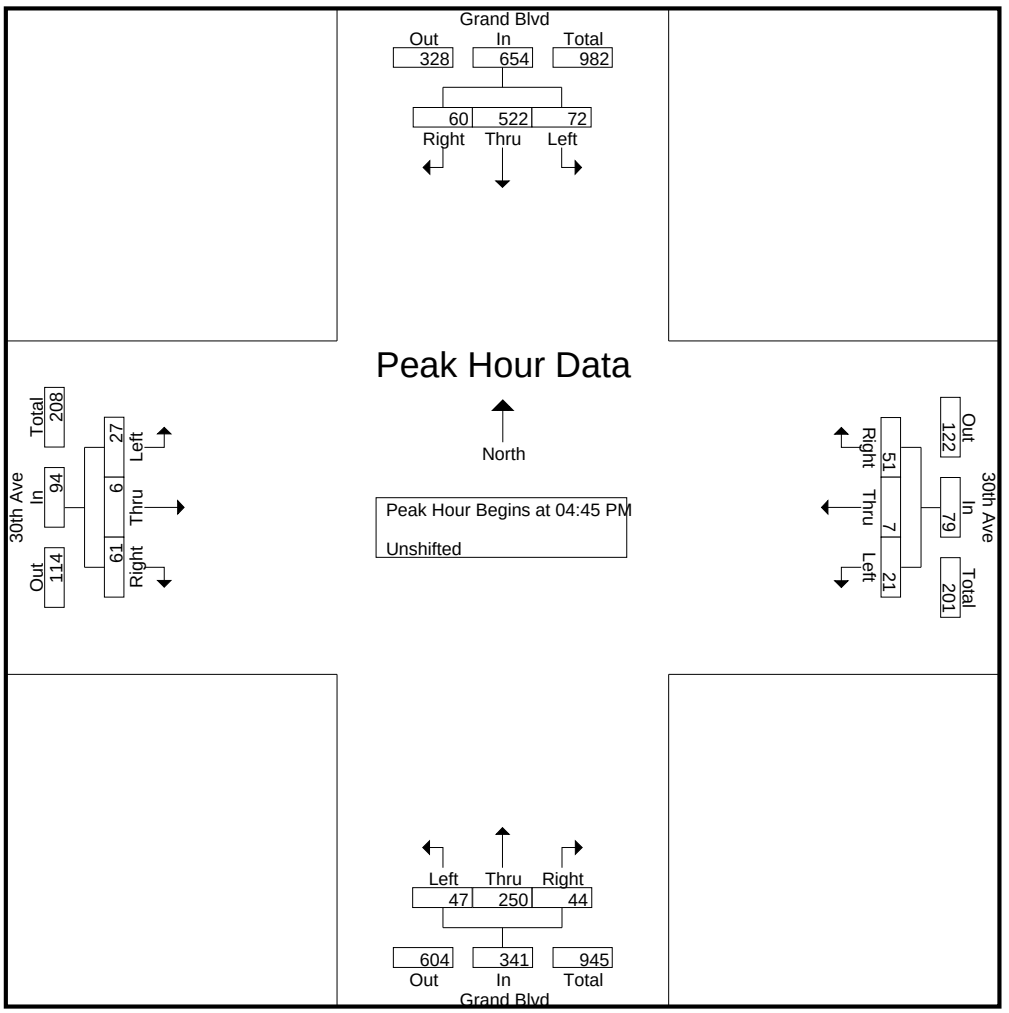
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 30th Ave
3000 S Grand Blvd

Peak Hour Data on Page 2

File Name : 30th & Grand PM
Site Code :
Start Date : 5/27/2015

	Grand Blvd From North				30th Ave From East				Grand Blvd From South				30th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	18	124	14	156	12	1	6	19	14	56	**13**	83	11	1	**9**	21	279
05:00 PM	8	**158**	13	**179**	**18**	1	**8**	**27**	6	**72**	11	**89**	14	**2**	8	24	**319**
05:15 PM	15	136	**24**	175	9	**4**	3	16	**16**	57	12	85	**23**	1	5	**29**	305
05:30 PM	**19**	104	21	144	12	1	4	17	8	65	11	84	13	2	5	20	265
Total Volume	60	522	72	654	51	7	21	79	44	250	47	341	61	6	27	94	1168
% App. Total	9.2	79.8	11		64.6	8.9	26.6		12.9	73.3	13.8		64.9	6.4	28.7		
PHF	.789	.826	.750	.913	.708	.438	.656	.731	.688	.868	.904	.958	.663	.750	.750	.810	.915



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

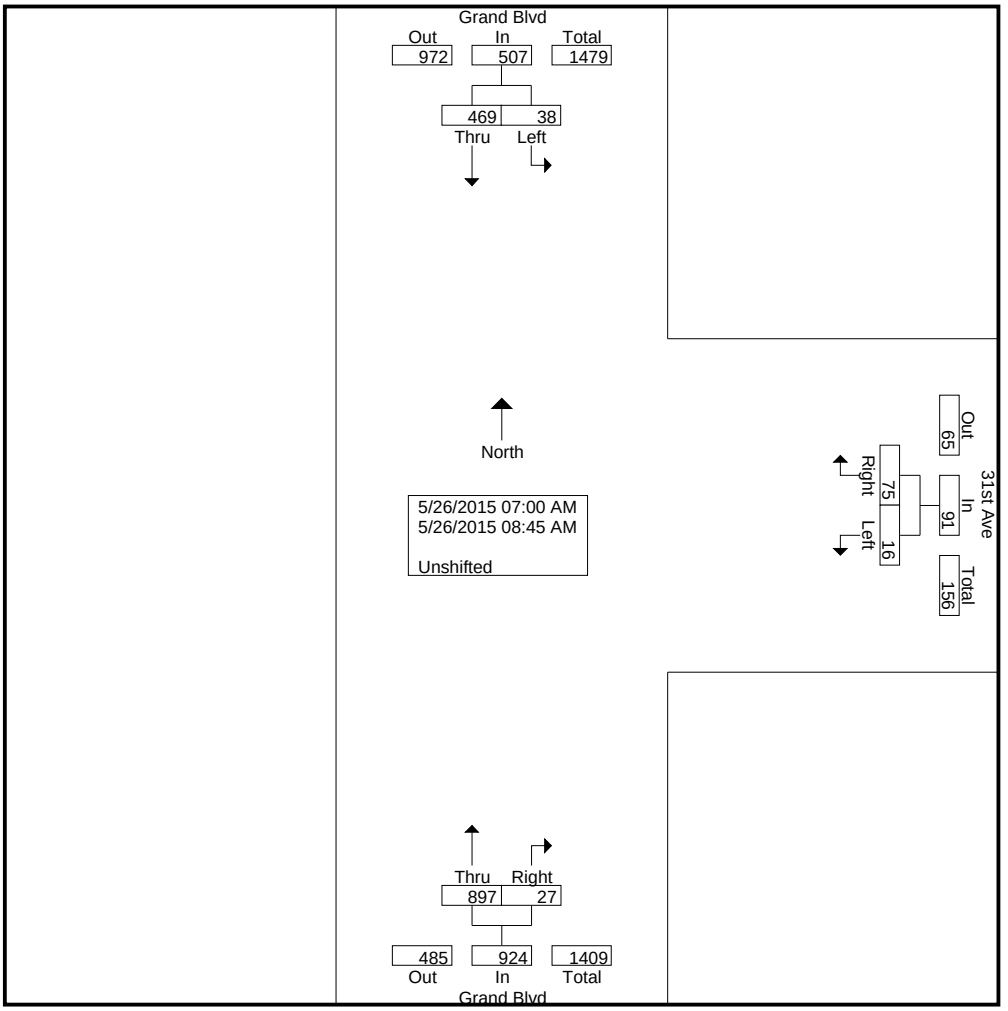
500 E 31st Ave
3100 S Grand Blvd

Peak Hour Data on Page 2

File Name : 31st & Grand AM
Site Code :
Start Date : 5/26/2015

Groups Printed- Unshifted

	Grand Blvd From North			31st Ave From East			Grand Blvd From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
07:00 AM	26	3	29	7	0	7	2	87	89	125
07:15 AM	36	0	36	13	2	15	3	103	106	157
07:30 AM	42	6	48	11	5	16	6	146	152	216
07:45 AM	44	5	49	7	1	8	4	127	131	188
Total	148	14	162	38	8	46	15	463	478	686
08:00 AM	54	2	56	7	1	8	1	99	100	164
08:15 AM	66	6	72	13	1	14	3	118	121	207
08:30 AM	101	9	110	5	4	9	4	109	113	232
08:45 AM	100	7	107	12	2	14	4	108	112	233
Total	321	24	345	37	8	45	12	434	446	836
Grand Total	469	38	507	75	16	91	27	897	924	1522
Apprch %	92.5	7.5		82.4	17.6		2.9	97.1		
Total %	30.8	2.5	33.3	4.9	1.1	6	1.8	58.9	60.7	



AGENDA

City of Spokane - Street Department

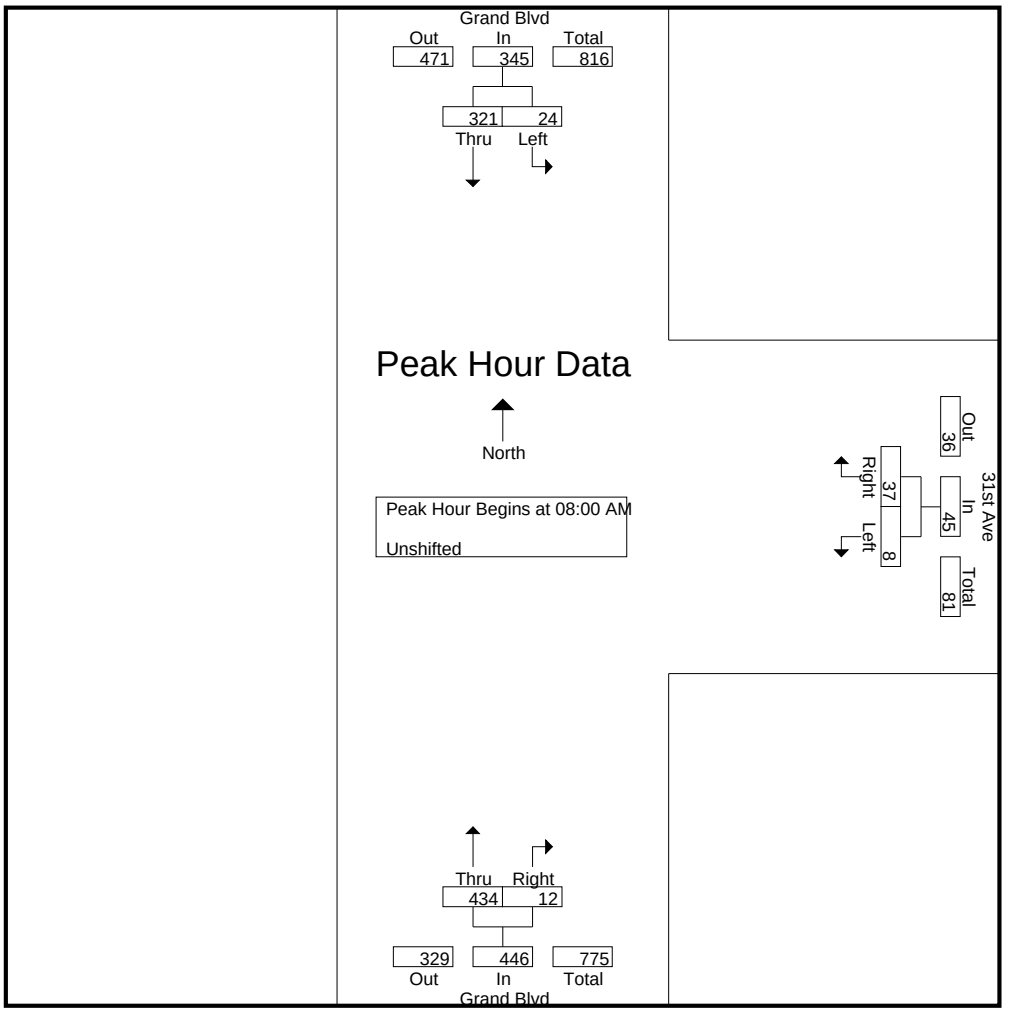
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 31st Ave
3100 S Grand Blvd

Peak Hour Data on Page 2

File Name : 31st & Grand AM
Site Code :
Start Date : 5/26/2015

	Grand Blvd From North			31st Ave From East			Grand Blvd From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	54	2	56	7	1	8	1	99	100	164
08:15 AM	66	6	72	**13**	1	**14**	3	**118**	**121**	207
08:30 AM	**101**	**9**	**110**	5	**4**	9	**4**	109	113	232
08:45 AM	100	7	107	12	2	14	4	108	112	**233**
Total Volume	321	24	345	37	8	45	12	434	446	836
% App. Total	93	7		82.2	17.8		2.7	97.3		
PHF	.795	.667	.784	.712	.500	.804	.750	.919	.921	.897



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City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

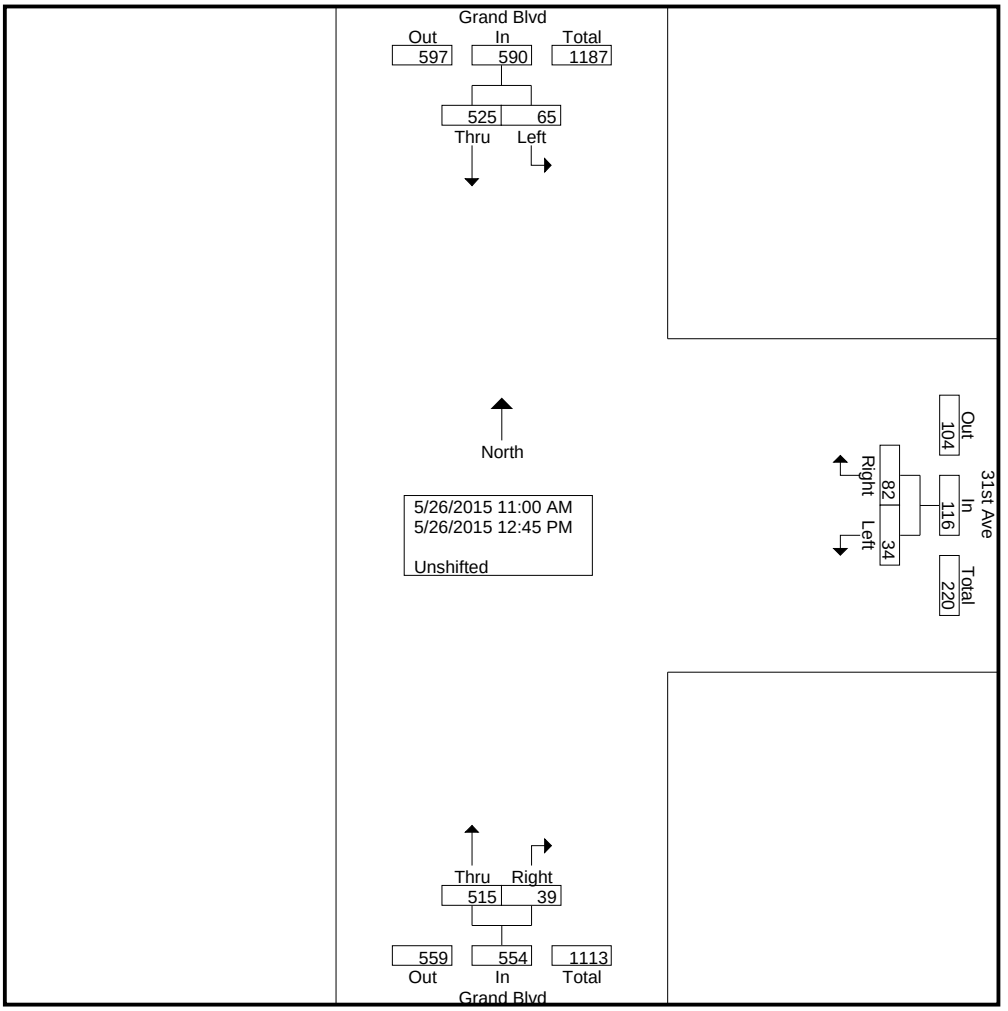
500 E 31st Ave
3100 S Grand Blvd

Peak Hour Data on Page 2

File Name : 31st & Grand MID
Site Code :
Start Date : 5/26/2015
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North			31st Ave From East			Grand Blvd From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
11:00 AM	55	6	61	9	4	13	6	56	62	136
11:15 AM	67	4	71	9	2	11	5	61	66	148
11:30 AM	60	8	68	7	1	8	4	67	71	147
11:45 AM	94	5	99	11	3	14	6	69	75	188
Total	276	23	299	36	10	46	21	253	274	619
12:00 PM	74	11	85	11	8	19	6	53	59	163
12:15 PM	47	14	61	10	8	18	8	71	79	158
12:30 PM	52	11	63	10	4	14	1	72	73	150
12:45 PM	76	6	82	15	4	19	3	66	69	170
Total	249	42	291	46	24	70	18	262	280	641
Grand Total	525	65	590	82	34	116	39	515	554	1260
Apprch %	89	11		70.7	29.3		7	93		
Total %	41.7	5.2	46.8	6.5	2.7	9.2	3.1	40.9	44	



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City of Spokane - Street Department

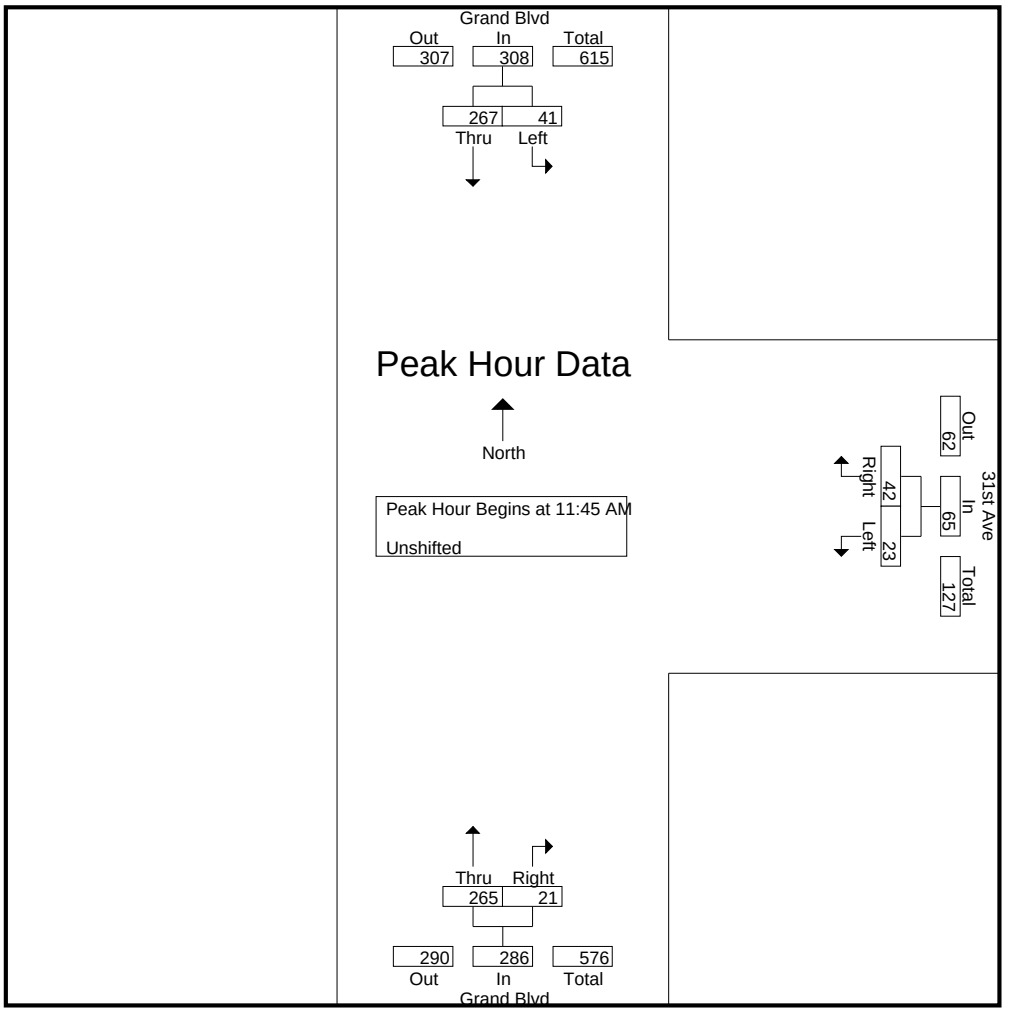
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 31st Ave
3100 S Grand Blvd

Peak Hour Data on Page 2

File Name : 31st & Grand MID
Site Code :
Start Date : 5/26/2015
Page No : 2

	Grand Blvd From North			31st Ave From East			Grand Blvd From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 11:45 AM										
11:45 AM	**94**	5	**99**	**11**	3	14	6	69	75	**188**
12:00 PM	74	11	85	11	**8**	**19**	6	53	59	163
12:15 PM	47	**14**	61	10	8	18	**8**	71	**79**	158
12:30 PM	52	11	63	10	4	14	1	**72**	73	150
Total Volume	267	41	308	42	23	65	21	265	286	659
% App. Total	86.7	13.3		64.6	35.4		7.3	92.7		
PHF	.710	.732	.778	.955	.719	.855	.656	.920	.905	.876



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City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

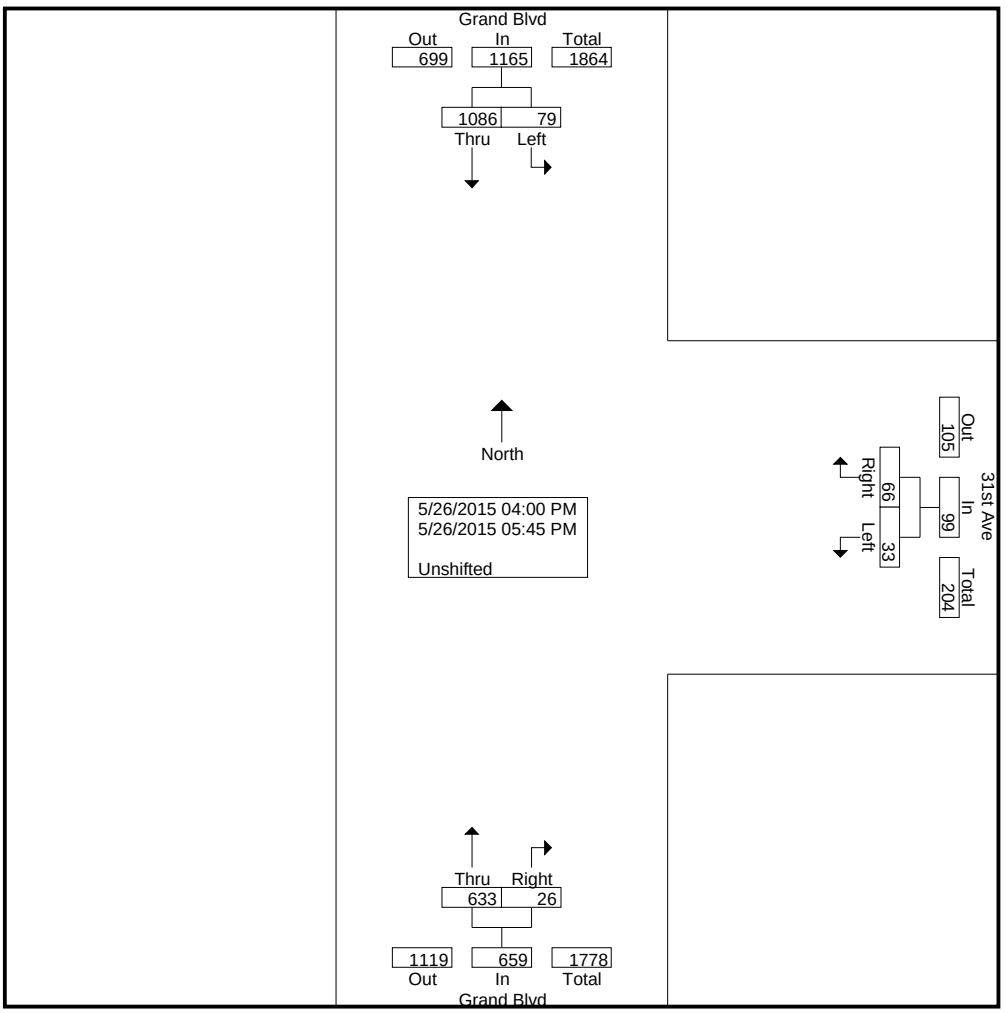
500 E 31st Ave
3100 S Grand Blvd

Peak Hour Data on Page 2

File Name : 31st & Grand PM
Site Code :
Start Date : 5/26/2015

Groups Printed- Unshifted

	Grand Blvd From North			31st Ave From East			Grand Blvd From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
04:00 PM	110	6	116	8	2	10	4	81	85	211
04:15 PM	117	9	126	9	7	16	3	75	78	220
04:30 PM	116	12	128	10	1	11	3	86	89	228
04:45 PM	148	8	156	11	8	19	4	79	83	258
Total	491	35	526	38	18	56	14	321	335	917
05:00 PM	169	10	179	9	1	10	2	87	89	278
05:15 PM	160	15	175	7	5	12	4	81	85	272
05:30 PM	133	11	144	6	6	12	2	82	84	240
05:45 PM	133	8	141	6	3	9	4	62	66	216
Total	595	44	639	28	15	43	12	312	324	1006
Grand Total	1086	79	1165	66	33	99	26	633	659	1923
Apprch %	93.2	6.8		66.7	33.3		3.9	96.1		
Total %	56.5	4.1	60.6	3.4	1.7	5.1	1.4	32.9	34.3	



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City of Spokane - Street Department

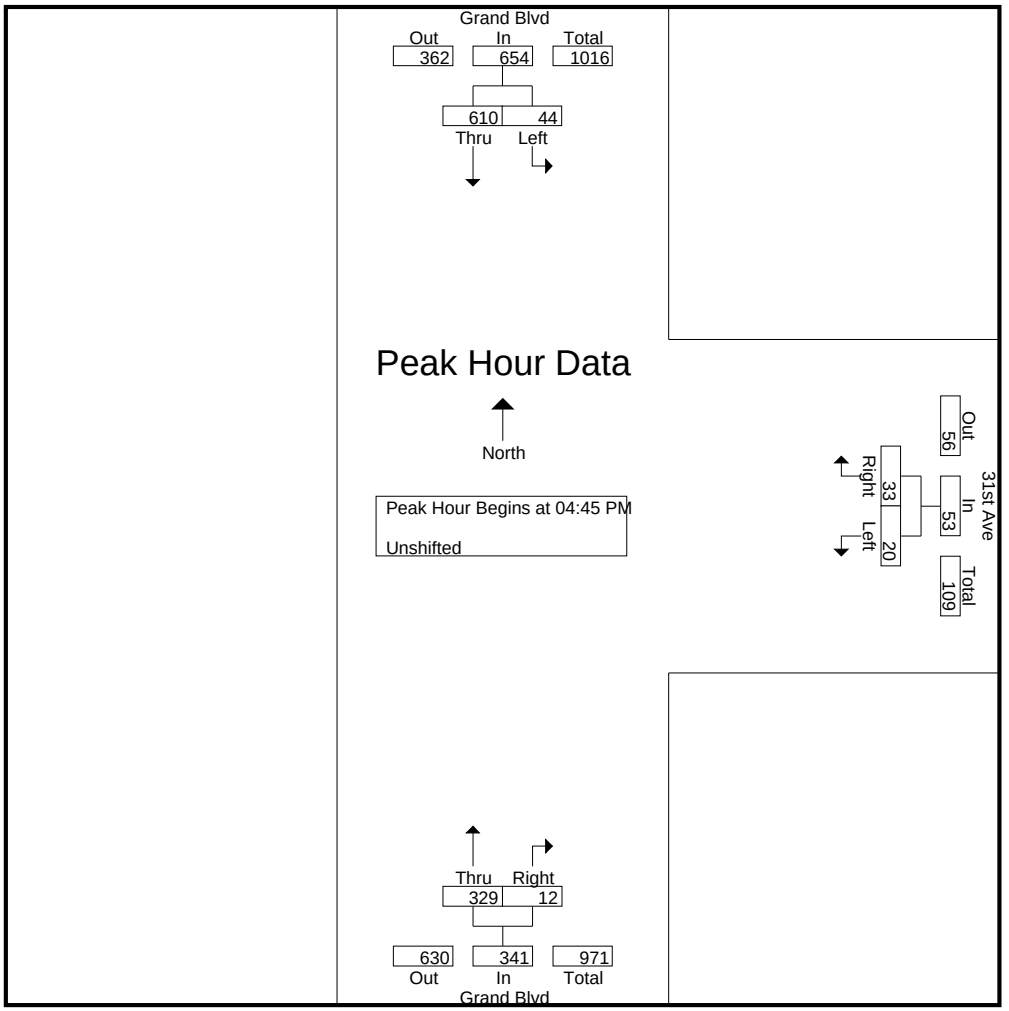
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 31st Ave
3100 S Grand Blvd

Peak Hour Data on Page 2

File Name : 31st & Grand PM
Site Code :
Start Date : 5/26/2015

	Grand Blvd From North			31st Ave From East			Grand Blvd From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	148	8	156	**11**	**8**	**19**	**4**	79	83	258
05:00 PM	**169**	10	**179**	9	1	10	2	**87**	**89**	**278**
05:15 PM	160	**15**	175	7	5	12	4	81	85	272
05:30 PM	133	11	144	6	6	12	2	82	84	240
Total Volume	610	44	654	33	20	53	12	329	341	1048
% App. Total	93.3	6.7		62.3	37.7		3.5	96.5		
PHF	.902	.733	.913	.750	.625	.697	.750	.945	.958	.942



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City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

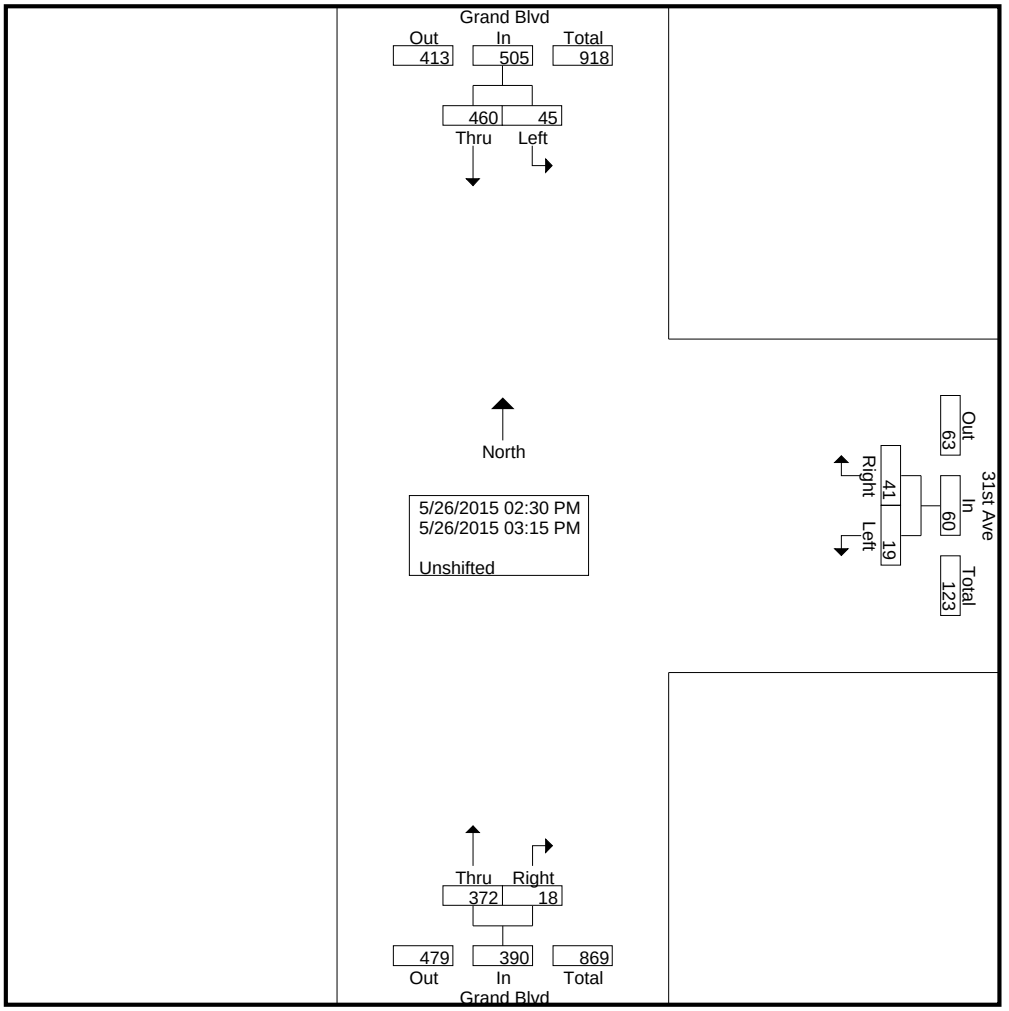
500 E 31st Ave
3100 S Grand Blvd

Peak Hour Data on Page 2

File Name : 31st & Grand School Out
Site Code :
Start Date : 5/26/2015
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North			31st Ave From East			Grand Blvd From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
02:30 PM	85	7	92	5	6	11	5	52	57	160
02:45 PM	159	10	169	13	4	17	2	63	65	251
Total	244	17	261	18	10	28	7	115	122	411
03:00 PM	89	12	101	9	5	14	9	126	135	250
03:15 PM	127	16	143	14	4	18	2	131	133	294
Grand Total	460	45	505	41	19	60	18	372	390	955
Apprch %	91.1	8.9		68.3	31.7		4.6	95.4		
Total %	48.2	4.7	52.9	4.3	2	6.3	1.9	39	40.8	



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City of Spokane - Street Department

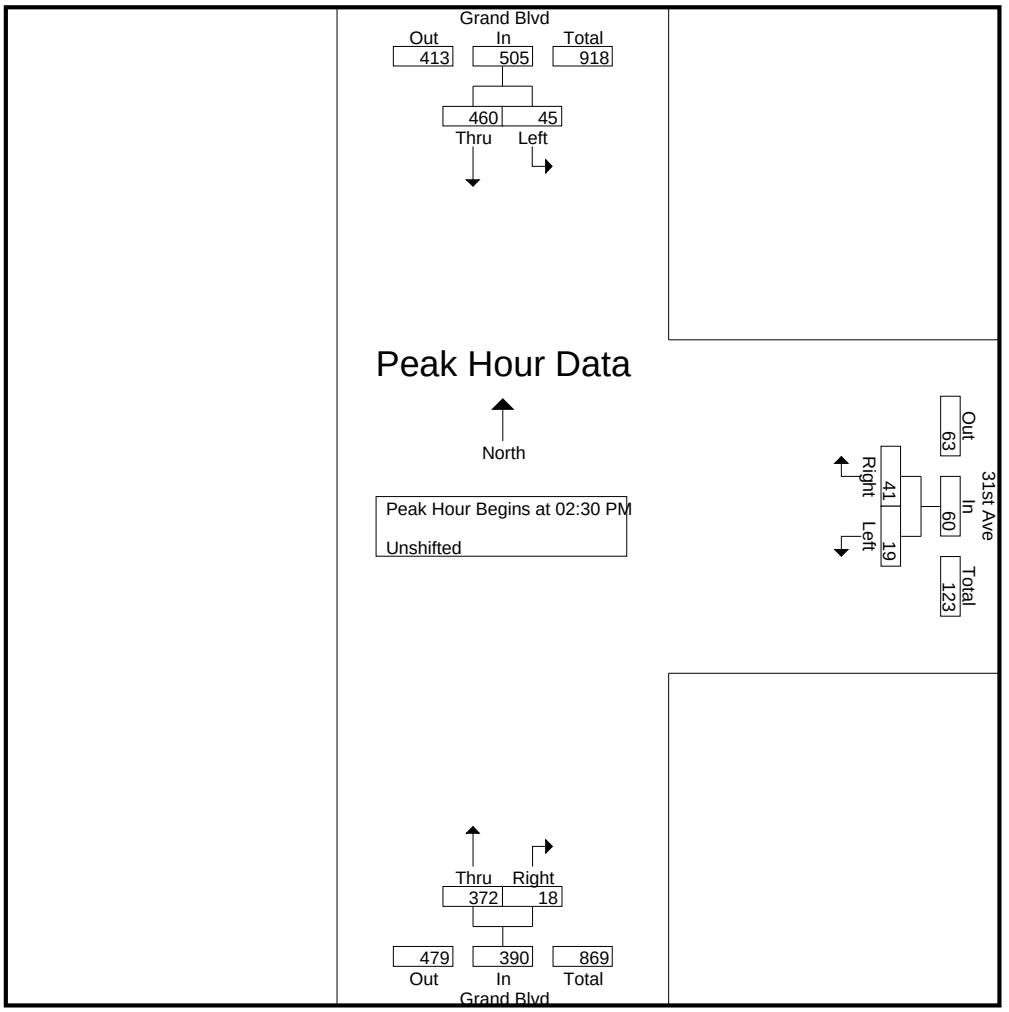
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 31st Ave
3100 S Grand Blvd

Peak Hour Data on Page 2

File Name : 31st & Grand School Out
Site Code :
Start Date : 5/26/2015

	Grand Blvd From North			31st Ave From East			Grand Blvd From South			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 03:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:30 PM										
02:30 PM	85	7	92	5	**6**	11	5	52	57	160
02:45 PM	**159**	10	**169**	13	4	17	2	63	65	251
03:00 PM	89	12	101	9	5	14	**9**	126	**135**	250
03:15 PM	127	**16**	143	**14**	4	**18**	2	**131**	133	**294**
Total Volume	460	45	505	41	19	60	18	372	390	955
% App. Total	91.1	8.9		68.3	31.7		4.6	95.4		
PHF	.723	.703	.747	.732	.792	.833	.500	.710	.722	.812



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

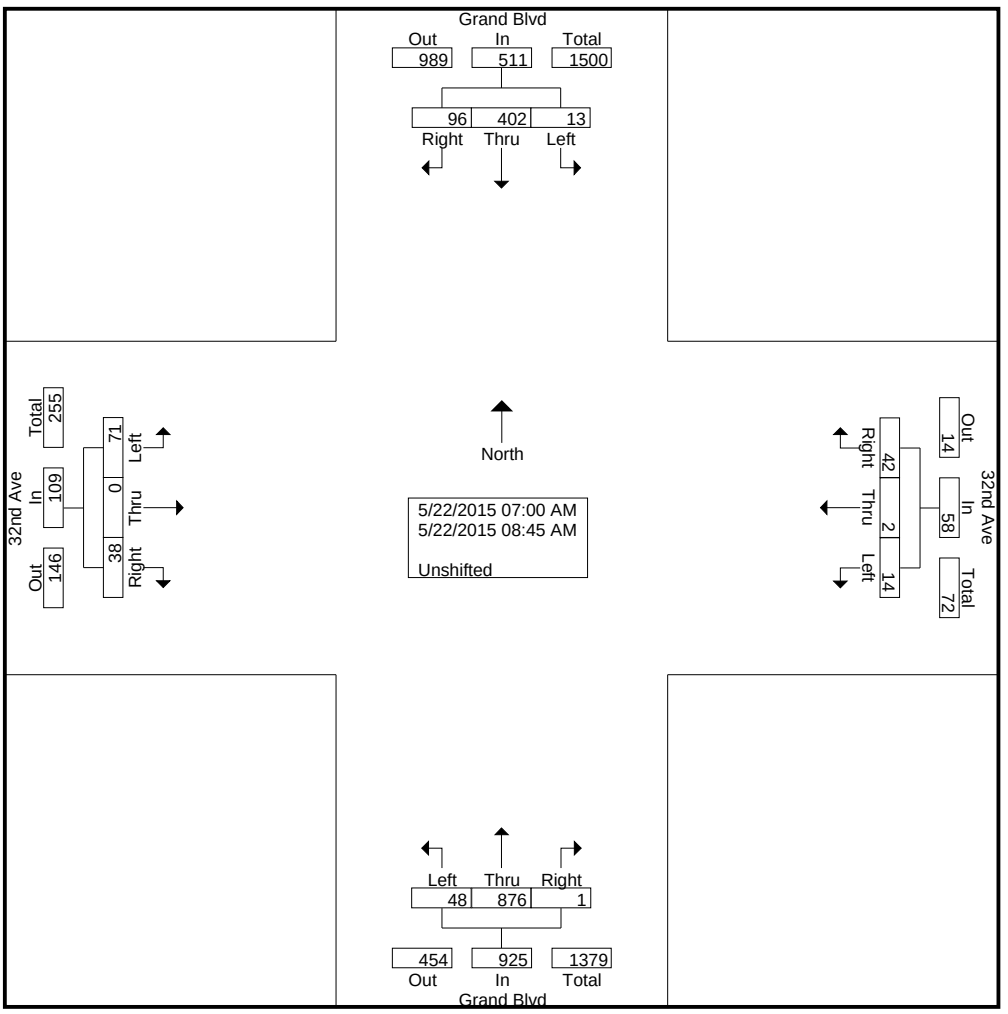
500 E 32nd Ave
3200 S Grand Blvd

Peak Hour Data on Page 2

File Name : 32nd & Grand AM
Site Code :
Start Date : 5/22/2015
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North				32nd Ave From East				Grand Blvd From South				32nd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	7	22	0	29	2	0	1	3	0	87	2	89	4	0	3	7	128
07:15 AM	4	31	1	36	3	0	2	5	0	105	1	106	1	0	3	4	151
07:30 AM	6	41	1	48	5	0	0	5	0	149	3	152	2	0	6	8	213
07:45 AM	7	40	2	49	8	0	1	9	0	128	3	131	0	0	5	5	194
Total	24	134	4	162	18	0	4	22	0	469	9	478	7	0	17	24	686
08:00 AM	12	40	4	56	7	0	1	8	1	93	7	101	1	0	5	6	171
08:15 AM	22	45	5	72	4	2	3	9	0	113	8	121	11	0	10	21	223
08:30 AM	29	81	0	110	8	0	2	10	0	96	17	113	16	0	29	45	278
08:45 AM	9	102	0	111	5	0	4	9	0	105	7	112	3	0	10	13	245
Total	72	268	9	349	24	2	10	36	1	407	39	447	31	0	54	85	917
Grand Total	96	402	13	511	42	2	14	58	1	876	48	925	38	0	71	109	1603
Apprch %	18.8	78.7	2.5		72.4	3.4	24.1		0.1	94.7	5.2		34.9	0	65.1		
Total %	6	25.1	0.8	31.9	2.6	0.1	0.9	3.6	0.1	54.6	3	57.7	2.4	0	4.4	6.8	



AGENDA

City of Spokane - Street Department

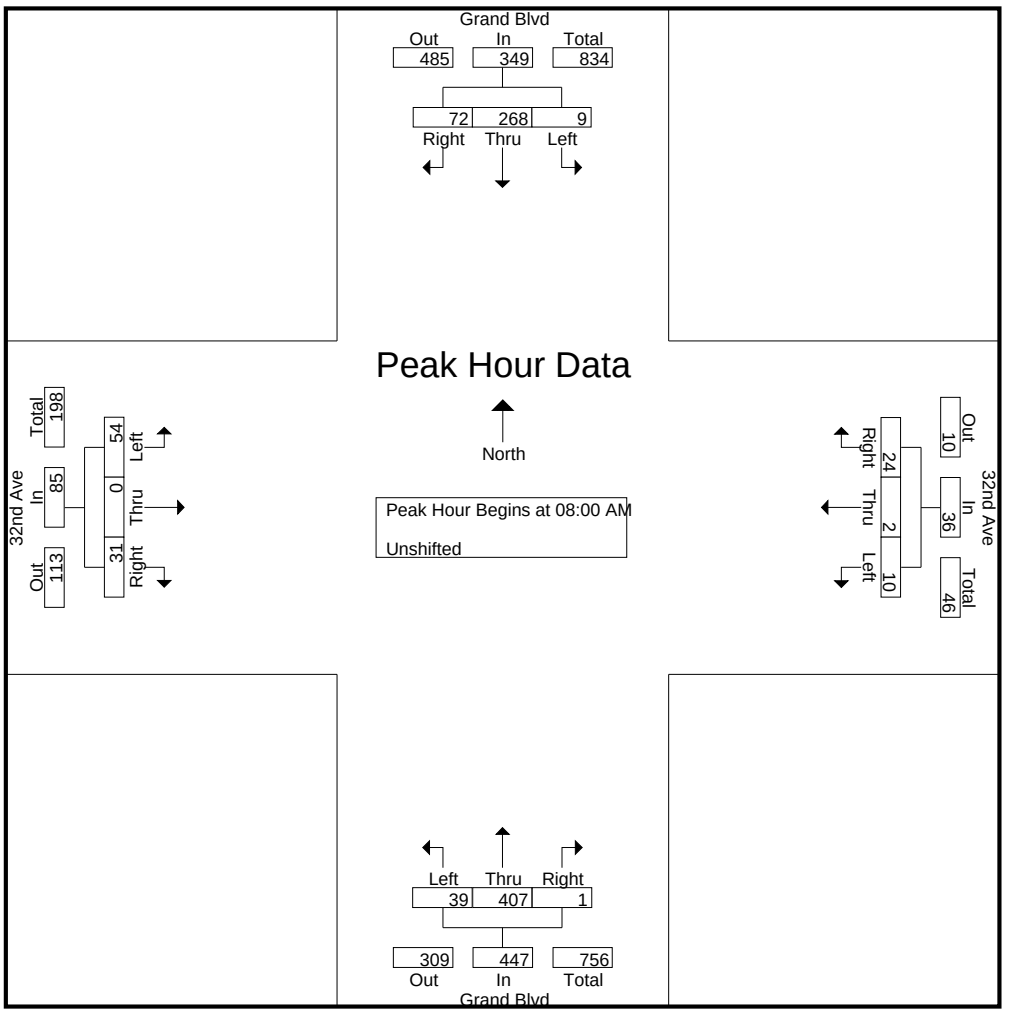
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 32nd Ave
3200 S Grand Blvd

Peak Hour Data on Page 2

File Name : 32nd & Grand AM
Site Code :
Start Date : 5/22/2015

	Grand Blvd From North				32nd Ave From East				Grand Blvd From South				32nd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	12	40	4	56	7	0	1	8	**1**	93	7	101	1	0	5	6	171
08:15 AM	22	45	**5**	72	4	**2**	3	9	0	**113**	8	**121**	11	0	10	21	223
08:30 AM	**29**	81	0	110	**8**	0	2	**10**	0	96	**17**	113	**16**	0	**29**	**45**	**278**
08:45 AM	9	**102**	0	**111**	5	0	**4**	9	0	105	7	112	3	0	10	13	245
Total Volume	72	268	9	349	24	2	10	36	1	407	39	447	31	0	54	85	917
% App. Total	20.6	76.8	2.6		66.7	5.6	27.8		0.2	91.1	8.7		36.5	0	63.5		
PHF	.621	.657	.450	.786	.750	.250	.625	.900	.250	.900	.574	.924	.484	.000	.466	.472	.825



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

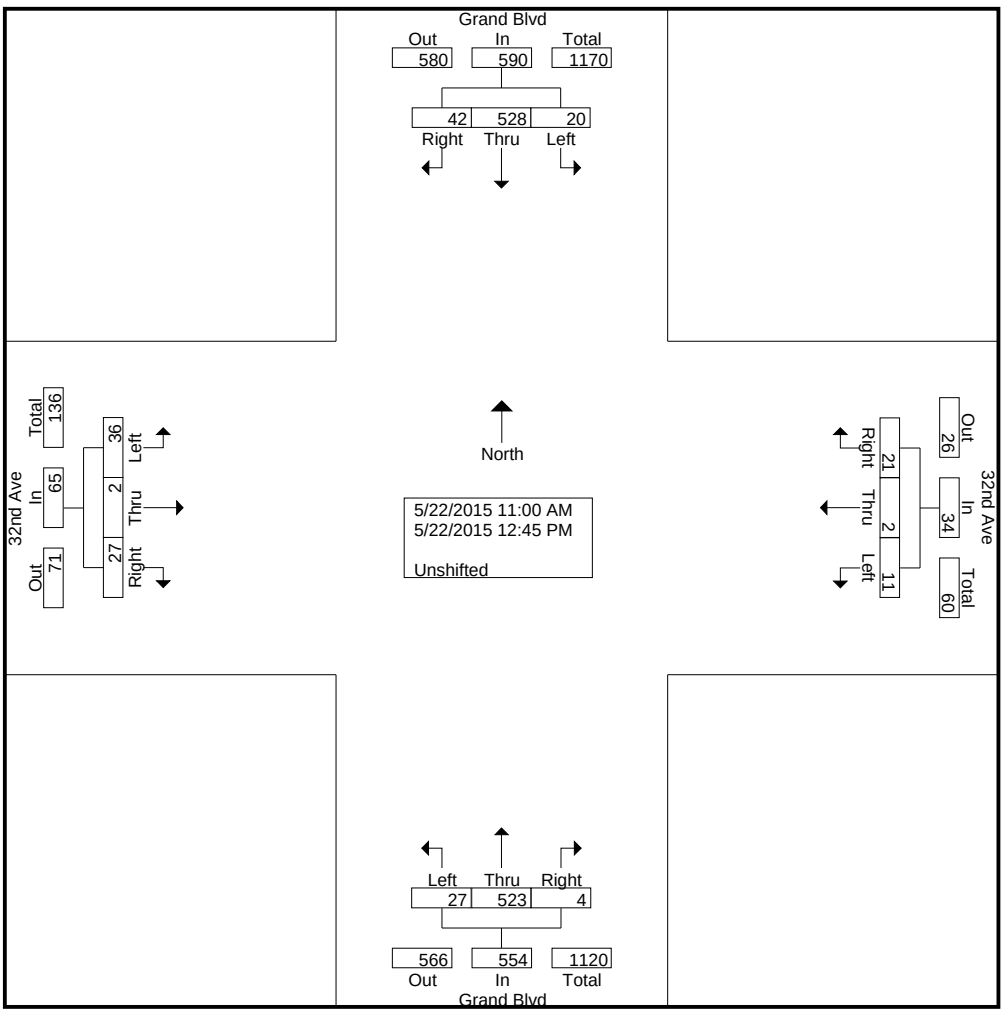
500 E 32nd Ave
3200 S Grand Blvd

Peak Hour Data on Page 2

File Name : 32nd & Grand MID
Site Code :
Start Date : 5/22/2015
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North				32nd Ave From East				Grand Blvd From South				32nd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
11:00 AM	4	56	1	61	0	0	3	3	2	54	6	62	4	0	2	6	132
11:15 AM	5	63	3	71	3	1	3	7	0	62	4	66	3	2	7	12	156
11:30 AM	6	59	3	68	5	0	1	6	0	70	1	71	5	0	1	6	151
11:45 AM	4	91	4	99	4	0	0	4	1	72	2	75	5	0	4	9	187
Total	19	269	11	299	12	1	7	20	3	258	13	274	17	2	14	33	626
12:00 PM	6	77	2	85	0	0	1	1	0	55	4	59	5	0	2	7	152
12:15 PM	2	57	2	61	4	0	2	6	1	73	5	79	2	0	7	9	155
12:30 PM	8	50	5	63	3	0	0	3	0	71	2	73	3	0	2	5	144
12:45 PM	7	75	0	82	2	1	1	4	0	66	3	69	0	0	11	11	166
Total	23	259	9	291	9	1	4	14	1	265	14	280	10	0	22	32	617
Grand Total	42	528	20	590	21	2	11	34	4	523	27	554	27	2	36	65	1243
Apprch %	7.1	89.5	3.4		61.8	5.9	32.4		0.7	94.4	4.9		41.5	3.1	55.4		
Total %	3.4	42.5	1.6	47.5	1.7	0.2	0.9	2.7	0.3	42.1	2.2	44.6	2.2	0.2	2.9	5.2	



AGENDA

City of Spokane - Street Department

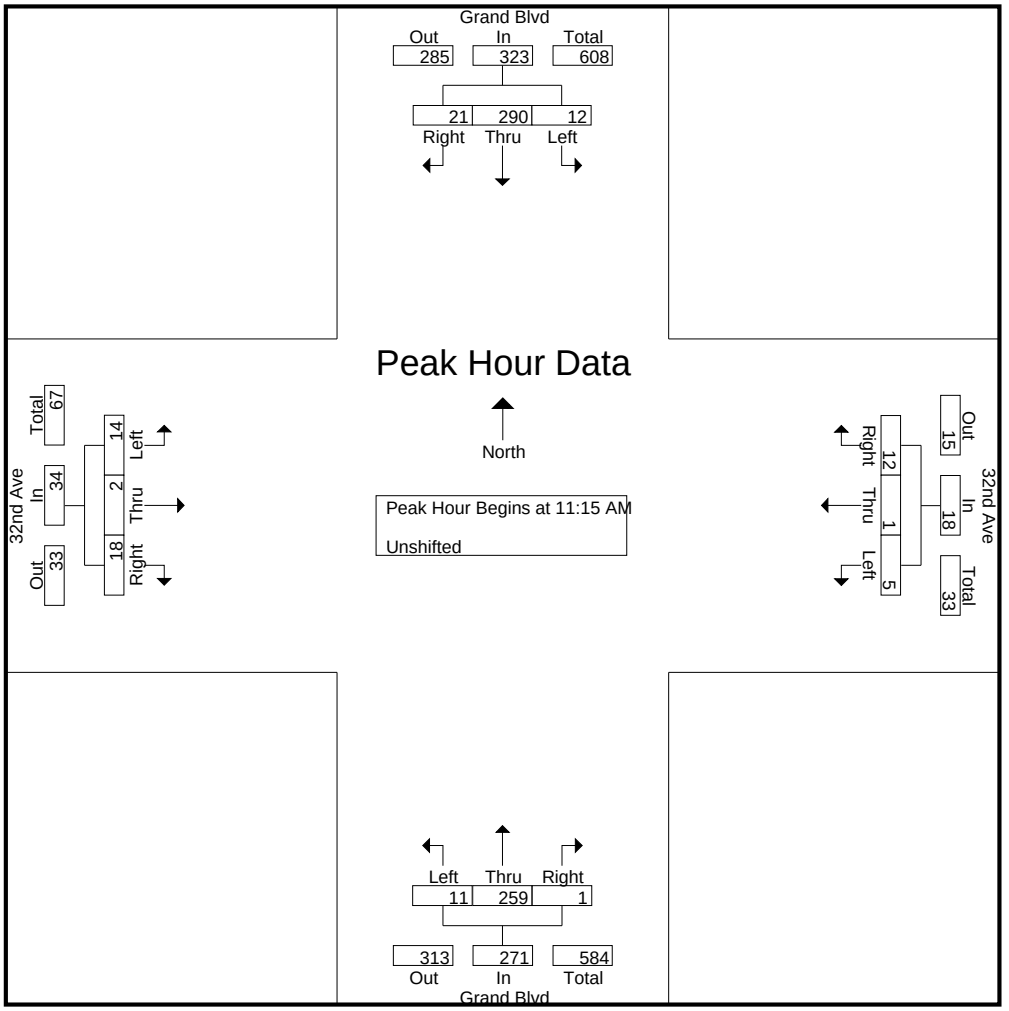
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 32nd Ave
3200 S Grand Blvd

Peak Hour Data on Page 2

File Name : 32nd & Grand MID
Site Code :
Start Date : 5/22/2015

	Grand Blvd From North				32nd Ave From East				Grand Blvd From South				32nd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:15 AM																	
11:15 AM	5	63	3	71	3	**1**	**3**	**7**	0	62	**4**	66	3	**2**	**7**	**12**	156
11:30 AM	**6**	59	3	68	**5**	0	1	6	0	70	1	71	**5**	0	1	6	151
11:45 AM	4	**91**	**4**	**99**	4	0	0	4	**1**	**72**	2	**75**	5	0	4	9	**187**
12:00 PM	6	77	2	85	0	0	1	1	0	55	4	59	5	0	2	7	152
Total Volume	21	290	12	323	12	1	5	18	1	259	11	271	18	2	14	34	646
% App. Total	6.5	89.8	3.7		66.7	5.6	27.8		0.4	95.6	4.1		52.9	5.9	41.2		
PHF	.875	.797	.750	.816	.600	.250	.417	.643	.250	.899	.688	.903	.900	.250	.500	.708	.864



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

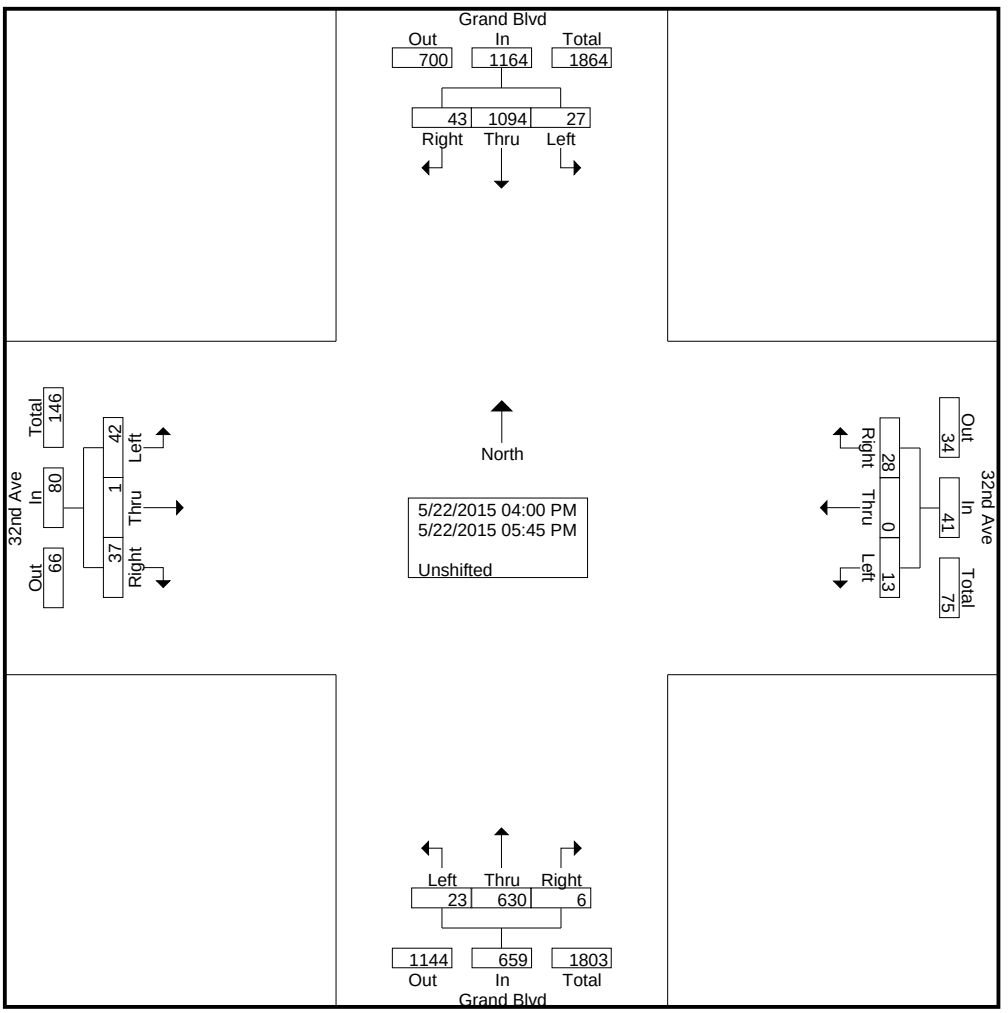
500 E 32nd Ave
3200 S Grand Blvd

Peak Hour Data on Page 2

File Name : 32nd & Grand PM
Site Code :
Start Date : 5/22/2015
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North				32nd Ave From East				Grand Blvd From South				32nd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	6	107	3	116	3	0	1	4	0	81	4	85	9	0	6	15	220
04:15 PM	8	115	3	126	2	0	1	3	1	70	7	78	8	0	10	18	225
04:30 PM	5	120	3	128	3	0	1	4	0	88	1	89	1	1	9	11	232
04:45 PM	4	149	3	156	1	0	4	5	2	78	3	83	6	0	5	11	255
Total	23	491	12	526	9	0	7	16	3	317	15	335	24	1	30	55	932
05:00 PM	5	167	7	179	10	0	2	12	0	85	4	89	4	0	6	10	290
05:15 PM	7	165	3	175	3	0	1	4	0	81	4	85	4	0	1	5	269
05:30 PM	5	137	2	144	4	0	1	5	2	82	0	84	3	0	3	6	239
05:45 PM	3	134	3	140	2	0	2	4	1	65	0	66	2	0	2	4	214
Total	20	603	15	638	19	0	6	25	3	313	8	324	13	0	12	25	1012
Grand Total	43	1094	27	1164	28	0	13	41	6	630	23	659	37	1	42	80	1944
Apprch %	3.7	94	2.3		68.3	0	31.7		0.9	95.6	3.5		46.2	1.2	52.5		
Total %	2.2	56.3	1.4	59.9	1.4	0	0.7	2.1	0.3	32.4	1.2	33.9	1.9	0.1	2.2	4.1	



AGENDA

City of Spokane - Street Department

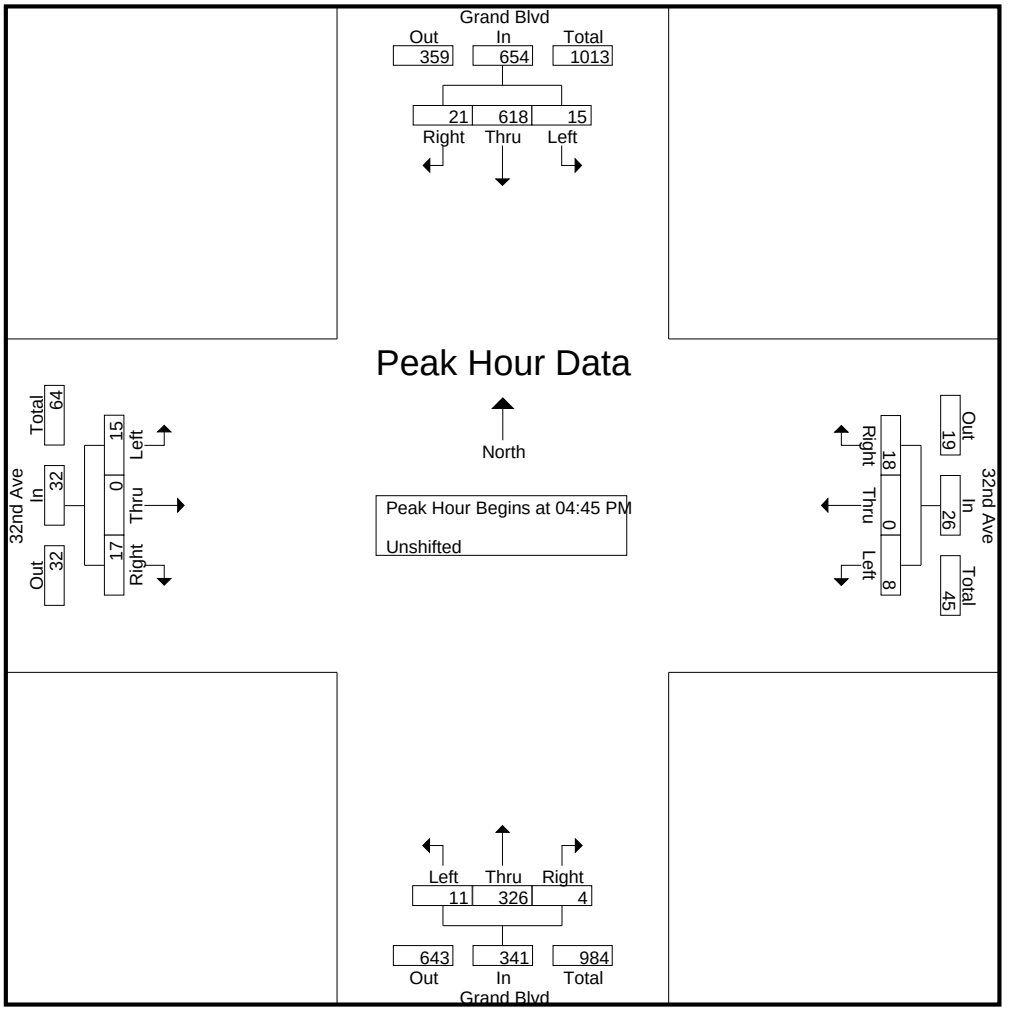
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 32nd Ave
3200 S Grand Blvd

Peak Hour Data on Page 2

File Name : 32nd & Grand PM
Site Code :
Start Date : 5/22/2015
Page No : 2

	Grand Blvd From North				32nd Ave From East				Grand Blvd From South				32nd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	4	149	3	156	1	0	**4**	5	**2**	78	3	83	**6**	0	5	**11**	255
05:00 PM	5	**167**	**7**	**179**	**10**	0	2	**12**	0	**85**	**4**	**89**	4	0	**6**	10	**290**
05:15 PM	**7**	165	3	175	3	0	1	4	0	81	4	85	4	0	1	5	269
05:30 PM	5	137	2	144	4	0	1	5	2	82	0	84	3	0	3	6	239
Total Volume	21	618	15	654	18	0	8	26	4	326	11	341	17	0	15	32	1053
% App. Total	3.2	94.5	2.3		69.2	0	30.8		1.2	95.6	3.2		53.1	0	46.9		
PHF	.750	.925	.536	.913	.450	.000	.500	.542	.500	.959	.688	.958	.708	.000	.625	.727	.908



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

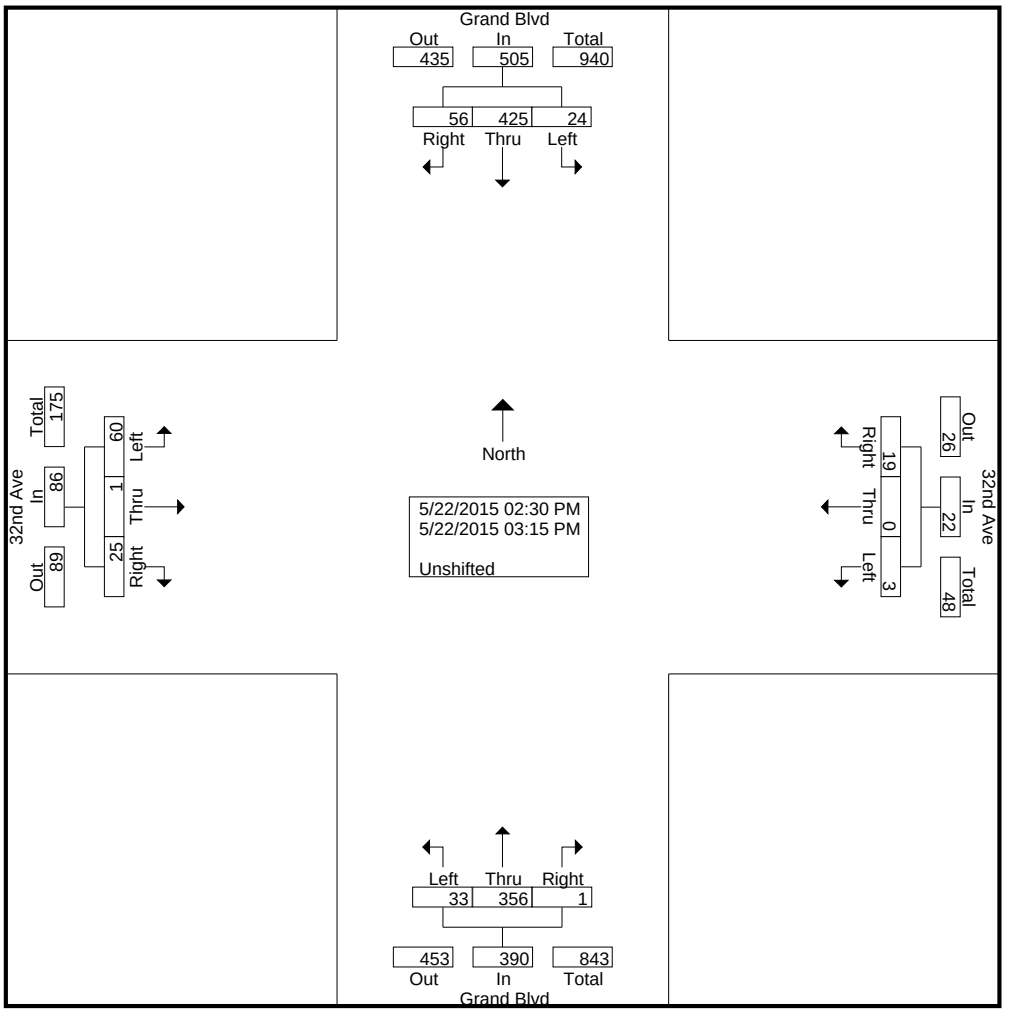
500 E 32nd Ave
3200 S Grand Blvd

Peak Hour Data on Page 2

File Name : 32nd & Grand School Out
Site Code :
Start Date : 5/22/2015
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North				32nd Ave From East				Grand Blvd From South				32nd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
02:30 PM	7	82	3	92	3	0	1	4	0	54	3	57	4	0	8	12	165
02:45 PM	6	158	5	169	7	0	1	8	0	58	7	65	2	0	7	9	251
Total	13	240	8	261	10	0	2	12	0	112	10	122	6	0	15	21	416
03:00 PM	16	77	8	101	4	0	0	4	0	123	12	135	4	0	7	11	251
03:15 PM	27	108	8	143	5	0	1	6	1	121	11	133	15	1	38	54	336
Grand Total	56	425	24	505	19	0	3	22	1	356	33	390	25	1	60	86	1003
Apprch %	11.1	84.2	4.8		86.4	0	13.6		0.3	91.3	8.5		29.1	1.2	69.8		
Total %	5.6	42.4	2.4	50.3	1.9	0	0.3	2.2	0.1	35.5	3.3	38.9	2.5	0.1	6	8.6	



AGENDA

City of Spokane - Street Department

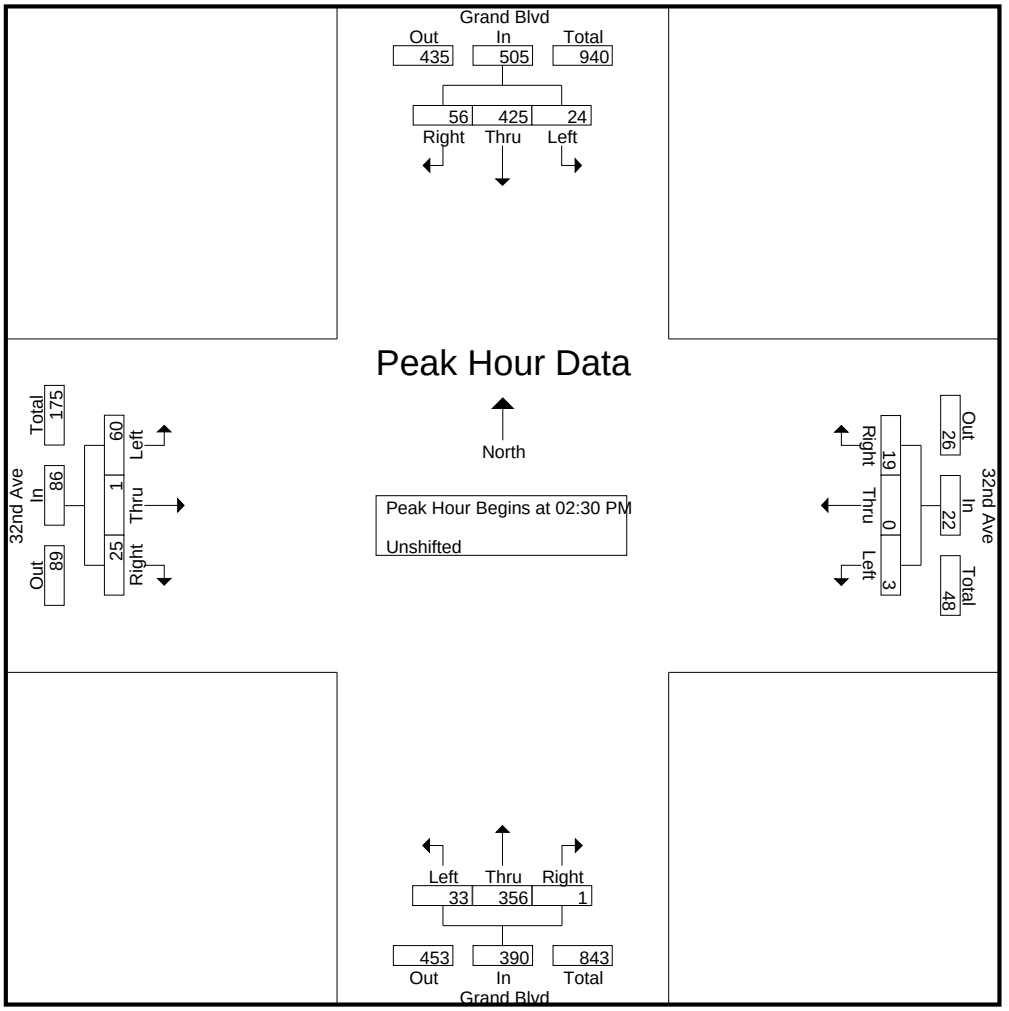
901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

500 E 32nd Ave
3200 S Grand Blvd

Peak Hour Data on Page 2

File Name : 32nd & Grand School Out
Site Code :
Start Date : 5/22/2015
Page No : 2

	Grand Blvd From North				32nd Ave From East				Grand Blvd From South				32nd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 03:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:30 PM																	
02:30 PM	7	82	3	92	3	0	**1**	4	0	54	3	57	4	0	8	12	165
02:45 PM	6	**158**	5	**169**	**7**	0	1	**8**	0	58	7	65	2	0	7	9	251
03:00 PM	16	77	**8**	101	4	0	0	4	0	**123**	**12**	**135**	4	0	7	11	251
03:15 PM	**27**	108	8	143	5	0	1	6	**1**	121	11	133	**15**	**1**	**38**	**54**	**336**
Total Volume	56	425	24	505	19	0	3	22	1	356	33	390	25	1	60	86	1003
% App. Total	11.1	84.2	4.8		86.4	0	13.6		0.3	91.3	8.5		29.1	1.2	69.8		
PHF	.519	.672	.750	.747	.679	.000	.750	.688	.250	.724	.688	.722	.417	.250	.395	.398	.746



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

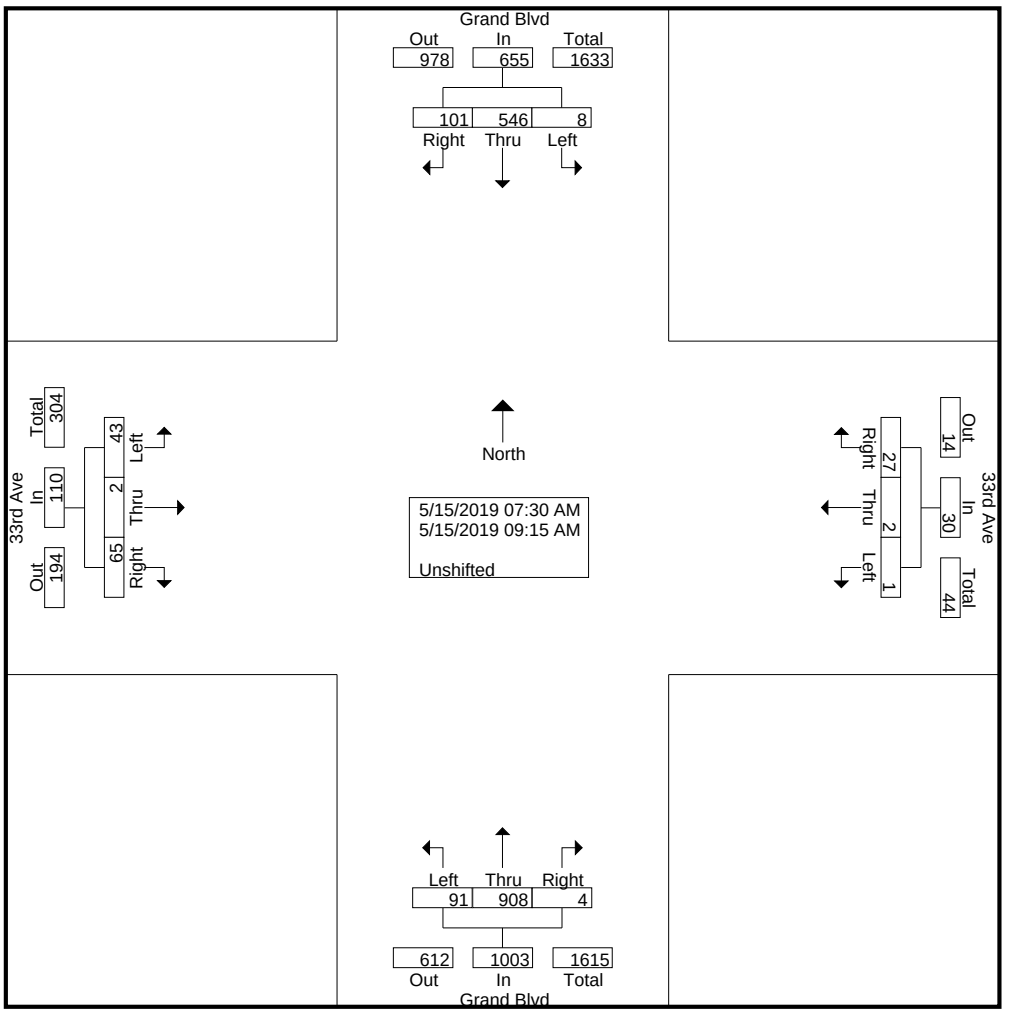
3300 S Grand Blvd
600 E 33rd Ave

Peak hour data on page 2

File Name : Grand & 33rd School Let in
Site Code :
Start Date : 5/15/2019

Groups Printed- Unshifted

	Grand Blvd From North				33rd Ave From East				Grand Blvd From South				33rd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:30 AM	4	52	3	59	9	1	0	10	1	185	5	191	7	0	12	19	279
07:45 AM	2	56	0	58	5	0	0	5	0	118	4	122	2	0	2	4	189
Total	6	108	3	117	14	1	0	15	1	303	9	313	9	0	14	23	468
08:00 AM	11	67	0	78	2	0	0	2	0	122	9	131	9	0	3	12	223
08:15 AM	17	78	1	96	0	0	1	1	0	106	13	119	13	1	3	17	233
08:30 AM	36	80	0	116	3	0	0	3	2	117	22	141	18	0	2	20	280
08:45 AM	14	77	2	93	4	0	0	4	0	101	32	133	11	0	14	25	255
Total	78	302	3	383	9	0	1	10	2	446	76	524	51	1	22	74	991
09:00 AM	4	82	0	86	0	0	0	0	0	79	4	83	2	0	1	3	172
09:15 AM	13	54	2	69	4	1	0	5	1	80	2	83	3	1	6	10	167
Grand Total	101	546	8	655	27	2	1	30	4	908	91	1003	65	2	43	110	1798
Apprch %	15.4	83.4	1.2		90	6.7	3.3		0.4	90.5	9.1		59.1	1.8	39.1		
Total %	5.6	30.4	0.4	36.4	1.5	0.1	0.1	1.7	0.2	50.5	5.1	55.8	3.6	0.1	2.4	6.1	



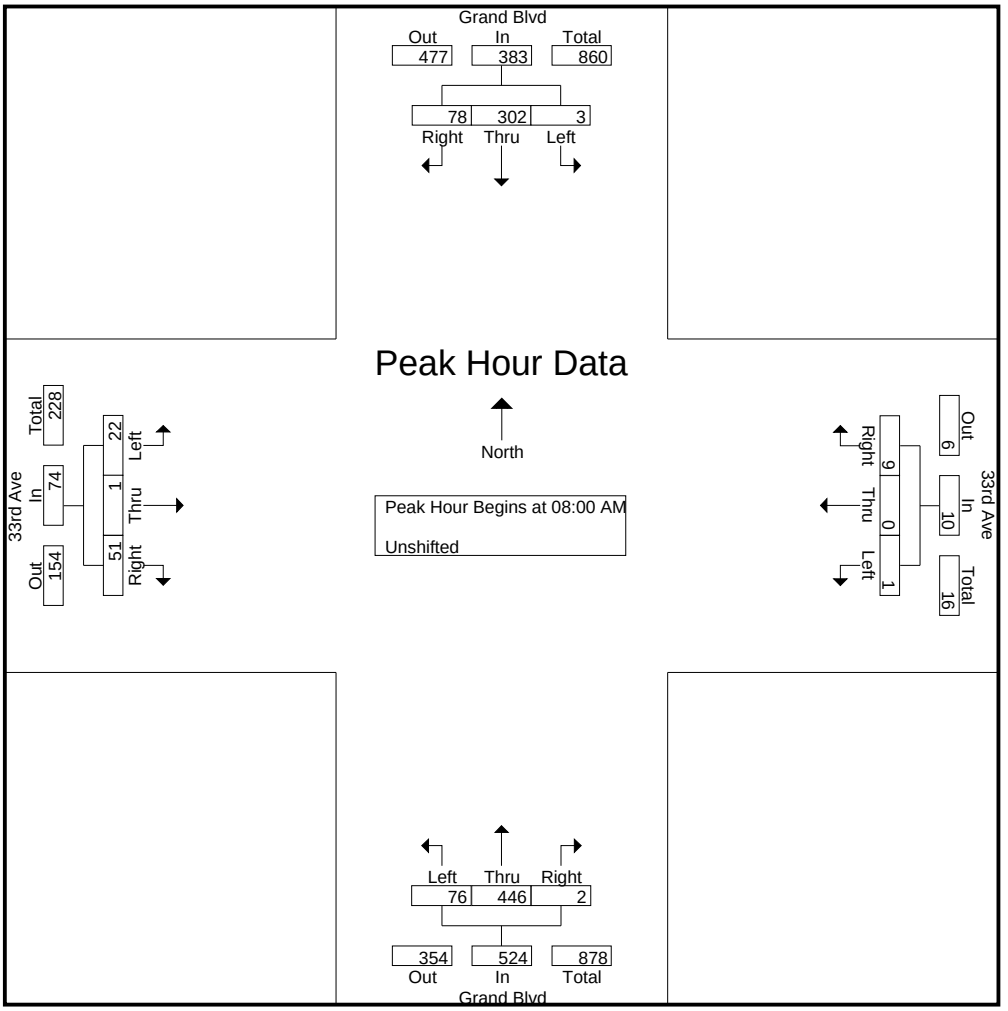
AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

File Name : Grand & 33rd School Let in
Site Code :
Start Date : 5/15/2019
Page No : 2

	Grand Blvd From North				33rd Ave From East				Grand Blvd From South				33rd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	11	67	0	78	2	0	0	2	0	**122**	9	131	9	0	3	12	223
08:15 AM	17	78	1	96	0	0	**1**	1	0	106	13	119	13	**1**	3	17	233
08:30 AM	**36**	**80**	0	**116**	3	0	0	3	**2**	117	22	**141**	**18**	0	2	20	**280**
08:45 AM	14	77	**2**	93	**4**	0	0	**4**	0	101	**32**	133	11	0	**14**	**25**	255
Total Volume	78	302	3	383	9	0	1	10	2	446	76	524	51	1	22	74	991
% App. Total	20.4	78.9	0.8		90	0	10		0.4	85.1	14.5		68.9	1.4	29.7		
PHF	.542	.944	.375	.825	.563	.000	.250	.625	.250	.914	.594	.929	.708	.250	.393	.740	.885



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

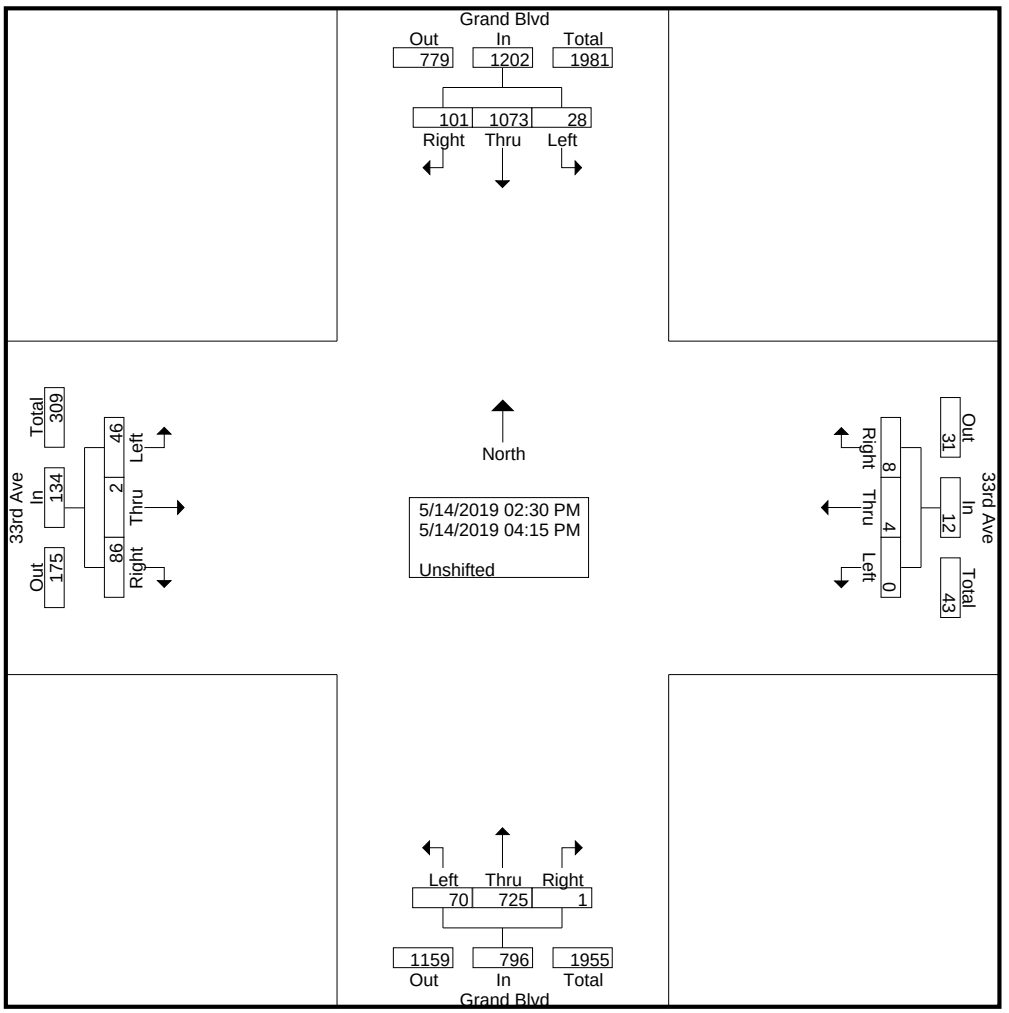
3300 S Grand Blvd
600 E 33rd Ave

Peak hour data on page 2

File Name : Grand & 33rd School Let out
Site Code :
Start Date : 5/14/2019

Groups Printed- Unshifted

	Grand Blvd From North				33rd Ave From East				Grand Blvd From South				33rd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
02:30 PM	9	129	2	140	2	0	0	2	0	74	11	85	3	0	6	9	236
02:45 PM	13	122	2	137	0	0	0	0	0	79	11	90	4	0	3	7	234
Total	22	251	4	277	2	0	0	2	0	153	22	175	7	0	9	16	470
03:00 PM	11	117	3	131	0	0	0	0	0	110	6	116	19	0	7	26	273
03:15 PM	24	130	10	164	0	0	0	0	1	113	18	132	5	0	3	8	304
03:30 PM	13	124	4	141	3	0	0	3	0	82	7	89	24	1	7	32	265
03:45 PM	7	142	2	151	2	3	0	5	0	95	2	97	11	0	7	18	271
Total	55	513	19	587	5	3	0	8	1	400	33	434	59	1	24	84	1113
04:00 PM	11	137	2	150	0	1	0	1	0	87	6	93	10	0	4	14	258
04:15 PM	13	172	3	188	1	0	0	1	0	85	9	94	10	1	9	20	303
Grand Total	101	1073	28	1202	8	4	0	12	1	725	70	796	86	2	46	134	2144
Apprch %	8.4	89.3	2.3		66.7	33.3	0		0.1	91.1	8.8		64.2	1.5	34.3		
Total %	4.7	50	1.3	56.1	0.4	0.2	0	0.6	0	33.8	3.3	37.1	4	0.1	2.1	6.2	



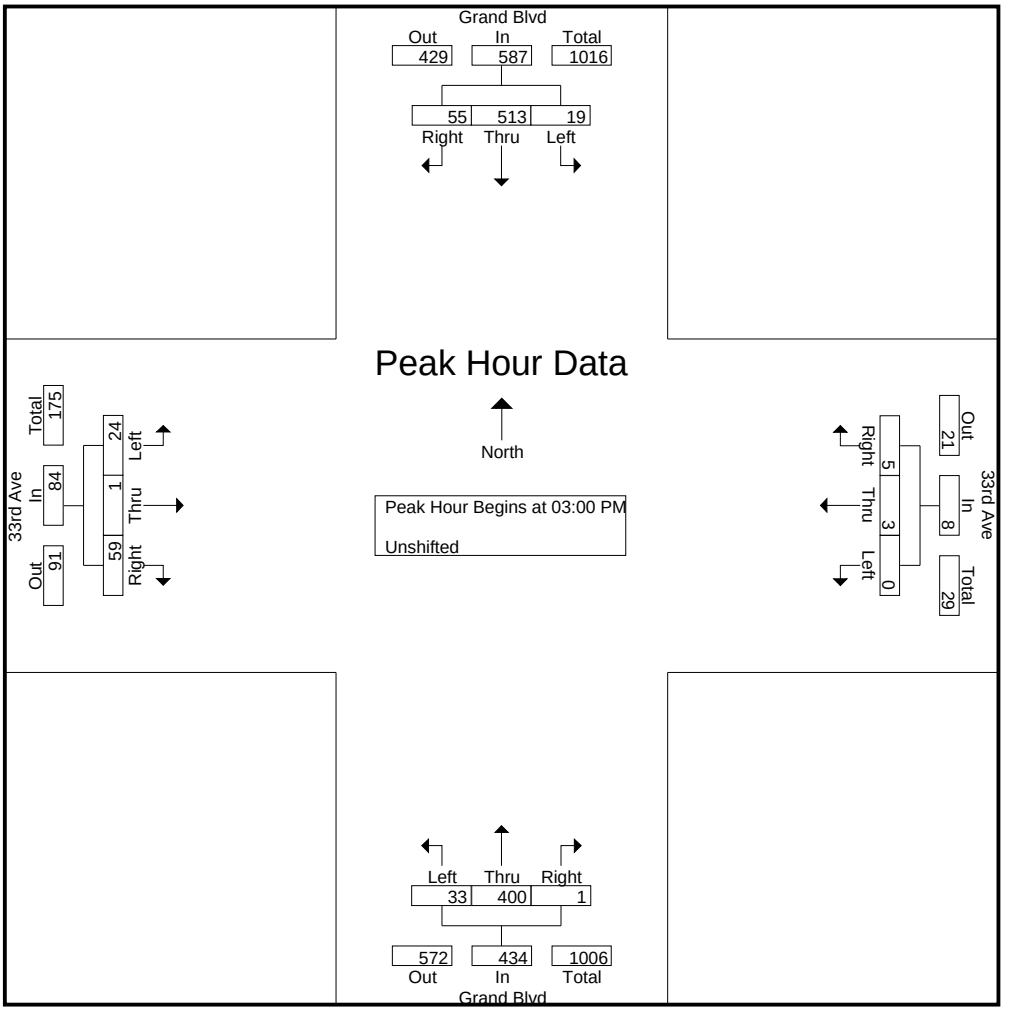
AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

File Name : Grand & 33rd School Let out
Site Code :
Start Date : 5/14/2019
Page No : 2

	Grand Blvd From North				33rd Ave From East				Grand Blvd From South				33rd Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	11	117	3	131	0	0	0	0	0	110	6	116	19	0	**7**	26	273
03:15 PM	**24**	130	**10**	**164**	0	0	0	0	**1**	**113**	**18**	**132**	5	0	3	8	**304**
03:30 PM	13	124	4	141	**3**	0	0	3	0	82	7	89	**24**	**1**	7	**32**	265
03:45 PM	7	**142**	2	151	2	**3**	0	**5**	0	95	2	97	11	0	7	18	271
Total Volume	55	513	19	587	5	3	0	8	1	400	33	434	59	1	24	84	1113
% App. Total	9.4	87.4	3.2		62.5	37.5	0		0.2	92.2	7.6		70.2	1.2	28.6		
PHF	.573	.903	.475	.895	.417	.250	.000	.400	.250	.885	.458	.822	.615	.250	.857	.656	.915



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

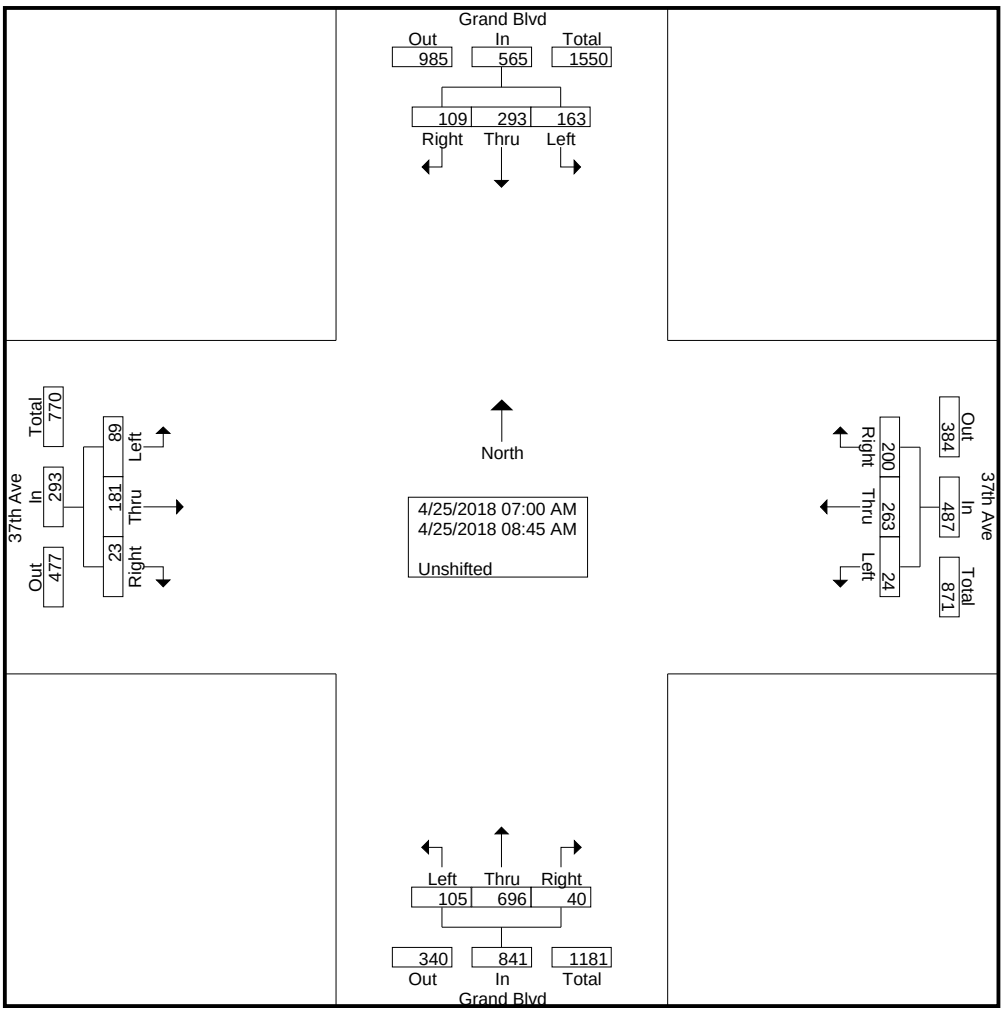
3700 S Grand Blvd
600 E 37th Ave

Peak Hour Data on Page 2

File Name : Grand & 37th INT255 AM
Site Code : INT255
Start Date : 4/25/2018

Groups Printed- Unshifted

	Grand Blvd From North				37th Ave From East				Grand Blvd From South				37th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	3	15	13	31	12	19	2	33	2	55	14	71	0	18	2	20	155
07:15 AM	11	21	15	47	17	34	5	56	4	82	11	97	3	28	6	37	237
07:30 AM	9	40	12	61	28	47	1	76	1	107	8	116	1	20	8	29	282
07:45 AM	10	37	25	72	20	37	3	60	5	90	21	116	2	17	8	27	275
Total	33	113	65	211	77	137	11	225	12	334	54	400	6	83	24	113	949
08:00 AM	25	39	24	88	27	37	0	64	3	68	15	86	1	19	13	33	271
08:15 AM	27	38	24	89	29	39	7	75	5	81	24	110	8	32	24	64	338
08:30 AM	15	50	27	92	31	29	2	62	6	119	6	131	1	29	19	49	334
08:45 AM	9	53	23	85	36	21	4	61	14	94	6	114	7	18	9	34	294
Total	76	180	98	354	123	126	13	262	28	362	51	441	17	98	65	180	1237
Grand Total	109	293	163	565	200	263	24	487	40	696	105	841	23	181	89	293	2186
Apprch %	19.3	51.9	28.8		41.1	54	4.9		4.8	82.8	12.5		7.8	61.8	30.4		
Total %	5	13.4	7.5	25.8	9.1	12	1.1	22.3	1.8	31.8	4.8	38.5	1.1	8.3	4.1	13.4	



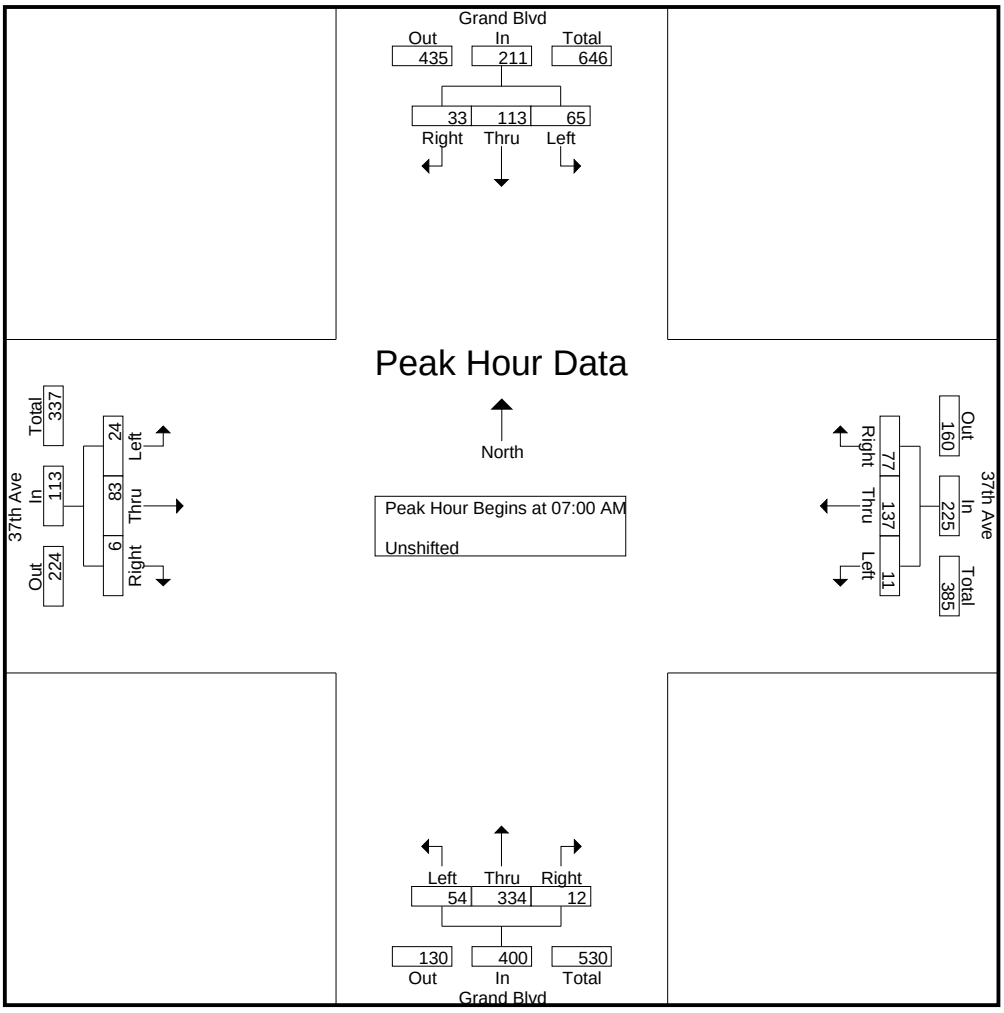
AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

File Name : Grand & 37th INT255 AM
Site Code : INT255
Start Date : 4/25/2018
Page No : 2

	Grand Blvd From North				37th Ave From East				Grand Blvd From South				37th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	15	13	31	12	19	2	33	2	55	14	71	0	18	2	20	155
07:15 AM	**11**	21	15	47	17	34	**5**	56	4	82	11	97	**3**	**28**	6	**37**	237
07:30 AM	9	**40**	12	61	**28**	**47**	1	**76**	1	**107**	8	**116**	1	20	**8**	29	**282**
07:45 AM	10	37	**25**	**72**	20	37	3	60	**5**	90	**21**	116	2	17	8	27	275
Total Volume	33	113	65	211	77	137	11	225	12	334	54	400	6	83	24	113	949
% App. Total	15.6	53.6	30.8		34.2	60.9	4.9		3	83.5	13.5		5.3	73.5	21.2		
PHF	.750	.706	.650	.733	.688	.729	.550	.740	.600	.780	.643	.862	.500	.741	.750	.764	.841



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

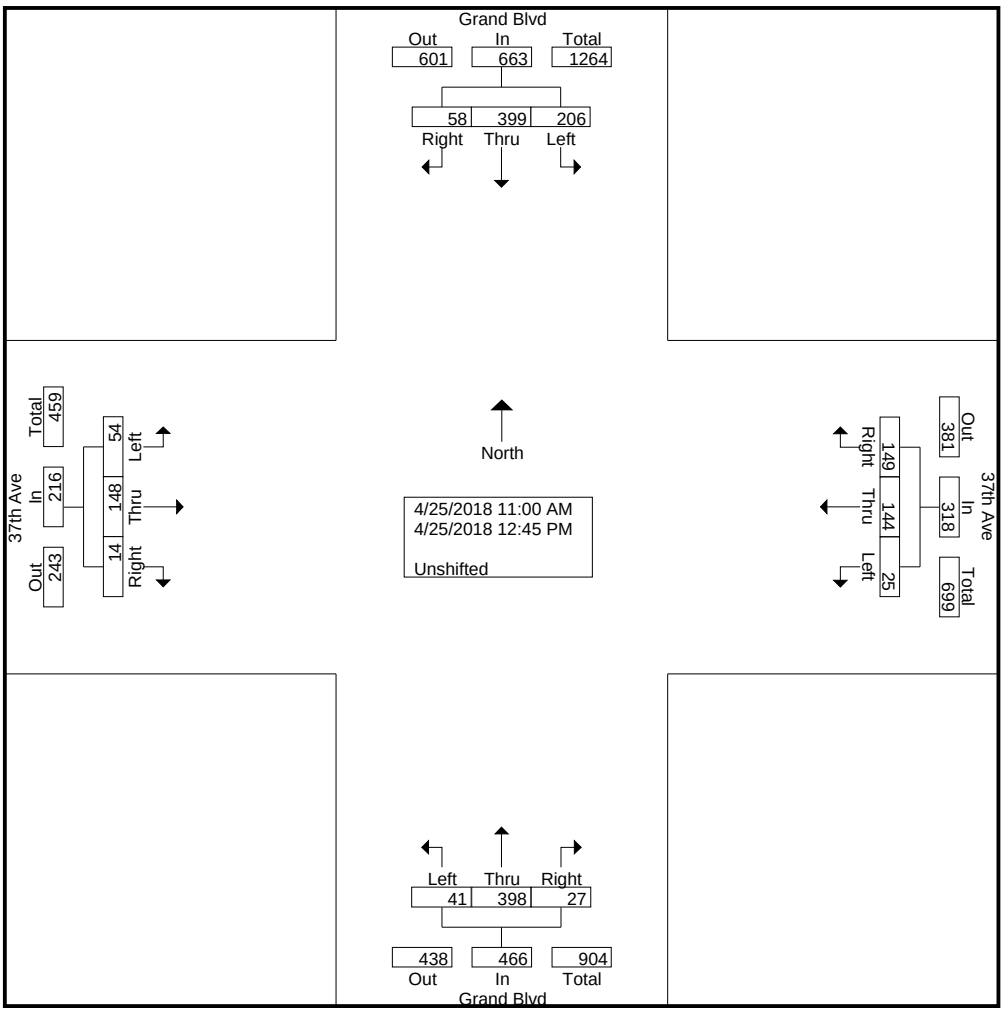
3700 S Grand Blvd
600 E 37th Ave

Peak Hour Data on Page 2

File Name : Grand & 37th INT255 MID
Site Code : INT255
Start Date : 4/25/2018
Page No : 1

Groups Printed- Unshifted

	Grand Blvd From North				37th Ave From East				Grand Blvd From South				37th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
11:00 AM	6	42	17	65	23	12	4	39	7	45	1	53	4	17	7	28	185
11:15 AM	3	43	23	69	17	18	4	39	2	52	5	59	1	17	7	25	192
11:30 AM	6	60	32	98	24	11	0	35	5	53	6	64	2	15	4	21	218
11:45 AM	12	49	29	90	19	17	2	38	2	57	6	65	1	22	10	33	226
Total	27	194	101	322	83	58	10	151	16	207	18	241	8	71	28	107	821
12:00 PM	6	51	28	85	8	18	3	29	3	46	9	58	2	21	10	33	205
12:15 PM	11	53	24	88	17	20	2	39	1	51	4	56	2	22	7	31	214
12:30 PM	4	44	27	75	23	21	8	52	3	42	5	50	0	19	5	24	201
12:45 PM	10	57	26	93	18	27	2	47	4	52	5	61	2	15	4	21	222
Total	31	205	105	341	66	86	15	167	11	191	23	225	6	77	26	109	842
Grand Total	58	399	206	663	149	144	25	318	27	398	41	466	14	148	54	216	1663
Apprch %	8.7	60.2	31.1		46.9	45.3	7.9		5.8	85.4	8.8		6.5	68.5	25		
Total %	3.5	24	12.4	39.9	9	8.7	1.5	19.1	1.6	23.9	2.5	28	0.8	8.9	3.2	13	



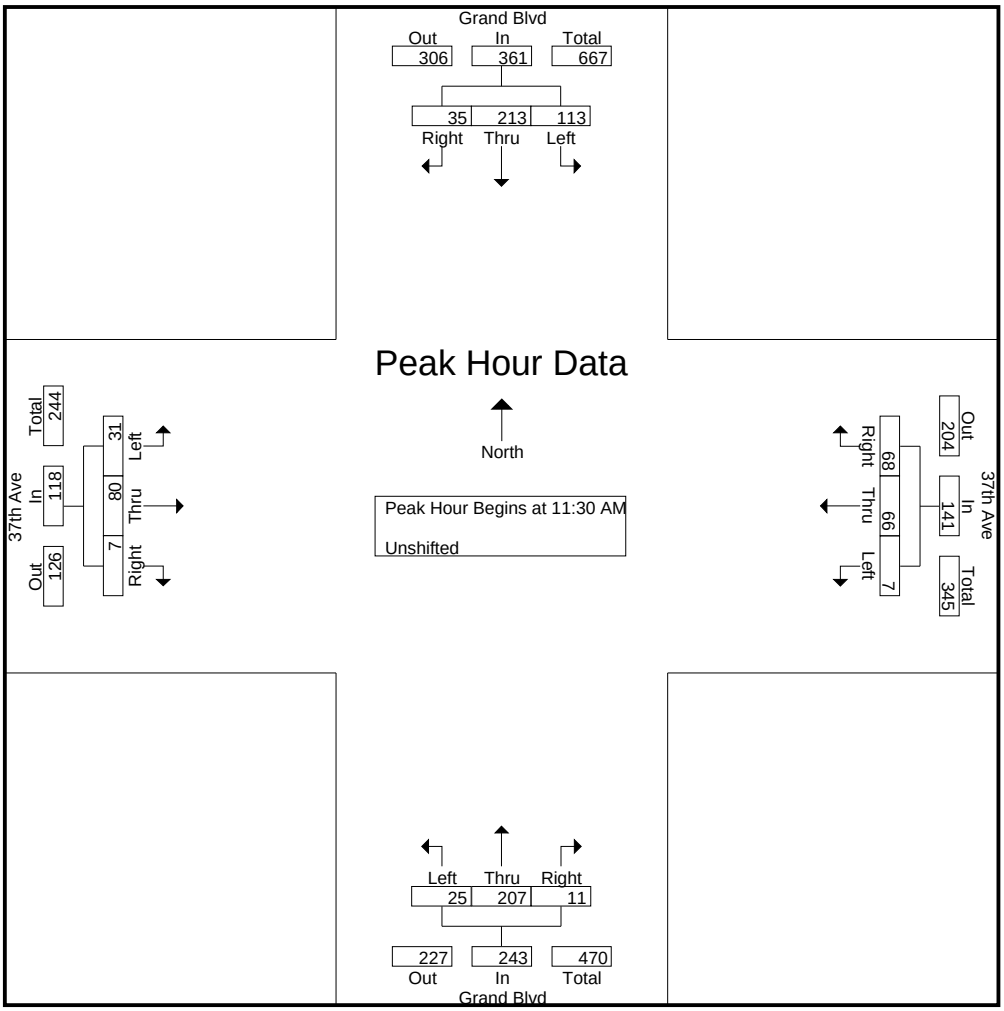
AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

File Name : Grand & 37th INT255 MID
Site Code : INT255
Start Date : 4/25/2018
Page No : 2

	Grand Blvd From North				37th Ave From East				Grand Blvd From South				37th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	6	**60**	**32**	**98**	**24**	11	0	35	**5**	53	6	64	**2**	15	4	21	218
11:45 AM	**12**	49	29	90	19	17	2	38	2	**57**	6	**65**	1	**22**	**10**	**33**	**226**
12:00 PM	6	51	28	85	8	18	**3**	29	3	46	**9**	58	2	21	10	33	205
12:15 PM	11	53	24	88	17	**20**	2	**39**	1	51	4	56	2	22	7	31	214
Total Volume	35	213	113	361	68	66	7	141	11	207	25	243	7	80	31	118	863
% App. Total	9.7	59	31.3		48.2	46.8	5		4.5	85.2	10.3		5.9	67.8	26.3		
PHF	.729	.888	.883	.921	.708	.825	.583	.904	.550	.908	.694	.935	.875	.909	.775	.894	.955



AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

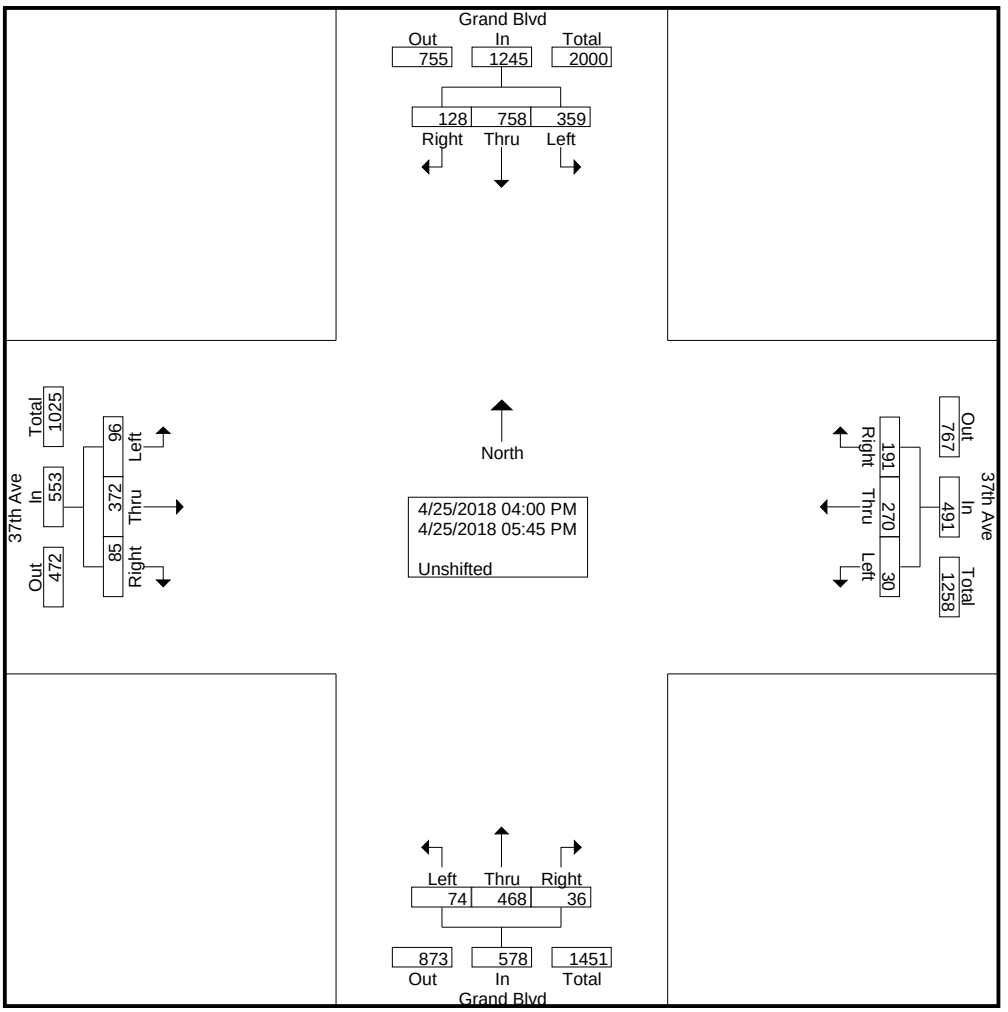
3700 S Grand Blvd
600 E 37th Ave

Peak Hour Data on Page 2

File Name : Grand & 37th INT255 PM
Site Code : INT255
Start Date : 4/25/2018

Groups Printed- Unshifted

	Grand Blvd From North				37th Ave From East				Grand Blvd From South				37th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	18	79	49	146	24	37	5	66	3	59	14	76	5	38	10	53	341
04:15 PM	12	83	39	134	19	32	2	53	1	49	6	56	7	41	11	59	302
04:30 PM	14	99	43	156	20	40	3	63	7	53	11	71	12	44	7	63	353
04:45 PM	16	83	42	141	24	30	2	56	5	57	3	65	13	49	11	73	335
Total	60	344	173	577	87	139	12	238	16	218	34	268	37	172	39	248	1331
05:00 PM	18	112	41	171	31	34	9	74	4	51	10	65	8	50	9	67	377
05:15 PM	21	114	56	191	32	31	8	71	7	69	15	91	10	63	16	89	442
05:30 PM	18	108	52	178	23	31	0	54	5	78	6	89	13	58	17	88	409
05:45 PM	11	80	37	128	18	35	1	54	4	52	9	65	17	29	15	61	308
Total	68	414	186	668	104	131	18	253	20	250	40	310	48	200	57	305	1536
Grand Total	128	758	359	1245	191	270	30	491	36	468	74	578	85	372	96	553	2867
Apprch %	10.3	60.9	28.8		38.9	55	6.1		6.2	81	12.8		15.4	67.3	17.4		
Total %	4.5	26.4	12.5	43.4	6.7	9.4	1	17.1	1.3	16.3	2.6	20.2	3	13	3.3	19.3	



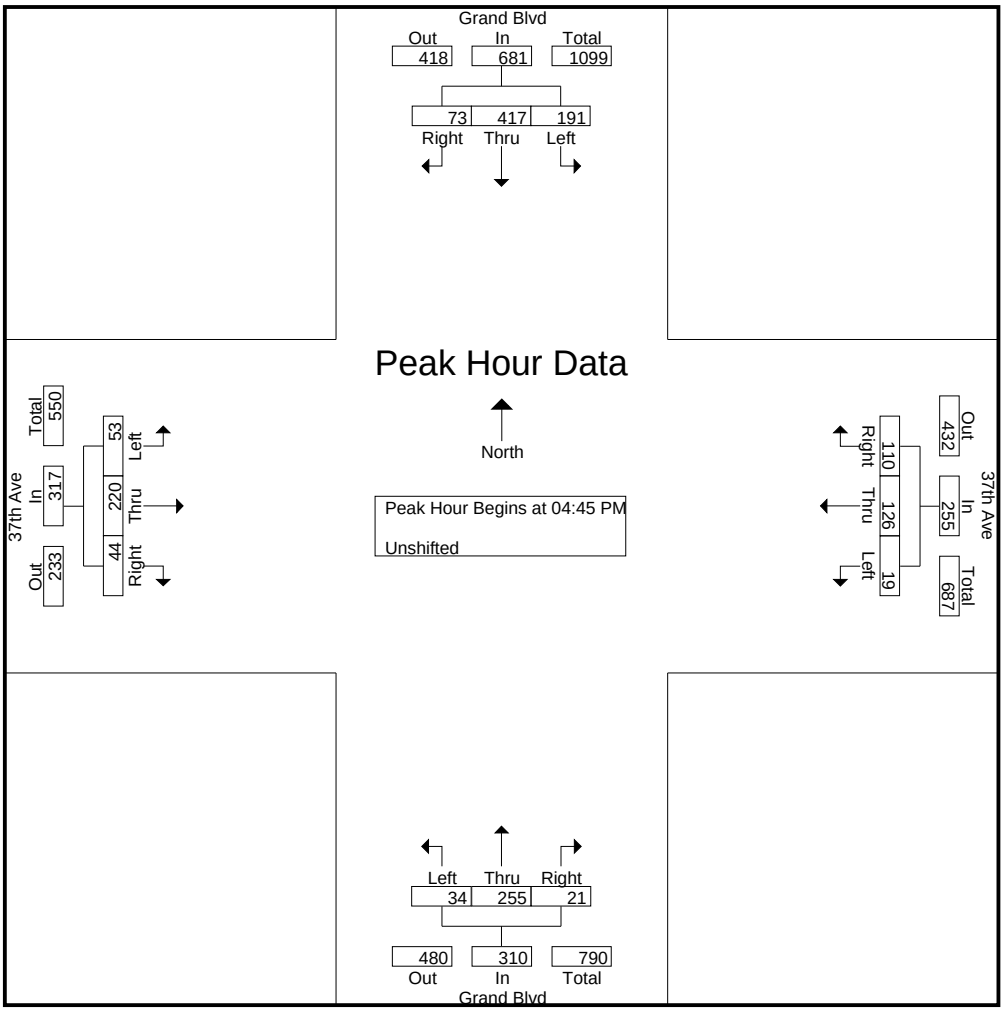
AGENDA

City of Spokane - Street Department

901 N. Nelson Street
Spokane, WA 99202-3769
509-232-8800

File Name : Grand & 37th INT255 PM
Site Code : INT255
Start Date : 4/25/2018

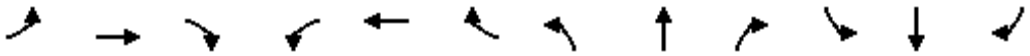
	Grand Blvd From North				37th Ave From East				Grand Blvd From South				37th Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	16	83	42	141	24	30	2	56	5	57	3	65	**13**	49	11	73	335
05:00 PM	18	112	41	171	31	**34**	**9**	**74**	4	51	10	65	8	50	9	67	377
05:15 PM	**21**	**114**	**56**	**191**	**32**	31	8	71	**7**	69	**15**	**91**	10	**63**	16	**89**	**442**
05:30 PM	18	108	52	178	23	31	0	54	5	**78**	6	89	13	58	**17**	88	409
Total Volume	73	417	191	681	110	126	19	255	21	255	34	310	44	220	53	317	1563
% App. Total	10.7	61.2	28		43.1	49.4	7.5		6.8	82.3	11		13.9	69.4	16.7		
PHF	.869	.914	.853	.891	.859	.926	.528	.861	.750	.817	.567	.852	.846	.873	.779	.890	.884



AGENDA

HCM 6th Signalized Intersection Summary
1: Grand Blvd & 29th Ave

2018 Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	302	245	84	395	92	102	361	99	147	226	18
Future Volume (veh/h)	226	302	245	84	395	92	102	361	99	147	226	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	235	315	255	88	411	96	106	376	103	153	235	19
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	454	500	395	370	819	365	492	624	169	397	790	63
Arrive On Green	0.14	0.29	0.28	0.10	0.25	0.25	0.11	0.25	0.23	0.12	0.26	0.25
Sat Flow, veh/h	1641	1738	1374	1641	3273	1460	1641	2546	689	1641	3069	246
Grp Volume(v), veh/h	235	296	274	88	411	96	106	240	239	153	125	129
Grp Sat Flow(s),veh/h/ln	1641	1637	1475	1641	1637	1460	1641	1637	1599	1641	1637	1678
Q Serve(g_s), s	6.6	10.1	10.5	2.4	6.9	3.4	2.9	8.3	8.5	4.3	3.9	4.0
Cycle Q Clear(g_c), s	6.6	10.1	10.5	2.4	6.9	3.4	2.9	8.3	8.5	4.3	3.9	4.0
Prop In Lane	1.00		0.93	1.00		1.00	1.00		0.43	1.00		0.15
Lane Grp Cap(c), veh/h	454	471	425	370	819	365	492	401	392	397	421	432
V/C Ratio(X)	0.52	0.63	0.64	0.24	0.50	0.26	0.22	0.60	0.61	0.39	0.30	0.30
Avail Cap(c_a), veh/h	742	938	846	720	1876	837	882	1040	1016	769	1043	1069
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	19.8	20.2	15.4	20.6	19.3	15.0	21.4	21.6	15.6	19.1	19.2
Incr Delay (d2), s/veh	0.3	2.0	2.3	0.1	0.7	0.5	0.1	2.0	2.2	0.2	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	3.8	3.6	0.8	2.5	1.1	1.0	3.2	3.2	1.5	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	21.8	22.6	15.5	21.3	19.8	15.1	23.4	23.8	15.8	19.7	19.7
LnGrp LOS	B	C	C	B	C	B	B	C	C	B	B	B
Approach Vol, veh/h		805			595			585			407	
Approach Delay, s/veh		20.1			20.2			22.0			18.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	19.8	12.7	20.0	10.8	20.5	10.3	22.4
Change Period (Y+Rc), s	4.0	* 4.8	4.0	* 4.7	4.0	* 4.8	4.0	* 4.7
Max Green Setting (Gmax), s	22.0	* 40	20.0	* 36	22.0	* 40	20.0	* 36
Max Q Clear Time (g_c+I1), s	6.3	10.5	8.6	8.9	4.9	6.0	4.4	12.5
Green Ext Time (p_c), s	0.2	4.5	0.3	4.5	0.1	2.2	0.1	5.3

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

AGENDA

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	3	32	7	5	10	69	536	16	24	424	97
Future Vol, veh/h	12	3	32	7	5	10	69	536	16	24	424	97
Conflicting Peds, #/hr	4	0	17	17	0	4	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	-	-	-	-	-	-	125	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	3	36	8	6	11	78	602	18	27	476	109

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1050	1362	311	1078	1407	314	586	0	0	620	0	0
Stage 1	586	586	-	767	767	-	-	-	-	-	-	-
Stage 2	464	776	-	311	640	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	181	147	685	173	138	682	985	-	-	956	-	-
Stage 1	463	495	-	361	410	-	-	-	-	-	-	-
Stage 2	548	406	-	674	468	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	157	131	673	145	123	679	984	-	-	956	-	-
Mov Cap-2 Maneuver	157	131	-	145	123	-	-	-	-	-	-	-
Stage 1	426	481	-	332	378	-	-	-	-	-	-	-
Stage 2	487	374	-	606	454	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.5	24.2	1	0.4
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	984	-	-	320	212	956	-	-
HCM Lane V/C Ratio	0.079	-	-	0.165	0.117	0.028	-	-
HCM Control Delay (s)	9	-	-	18.5	24.2	8.9	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.6	0.4	0.1	-	-

AGENDA

Intersection	
Int Delay, s/veh	2.7

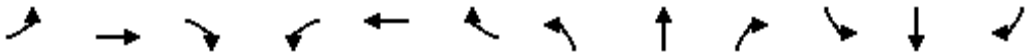
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	1	51	1	0	9	76	571	2	3	377	78
Future Vol, veh/h	22	1	51	1	0	9	76	571	2	3	377	78
Conflicting Peds, #/hr	44	0	6	6	0	44	69	0	6	6	0	69
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	1	57	1	0	10	85	642	2	3	424	88

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1405	1363	543	1328	1406	693	581	0	0	650	0	0
Stage 1	543	543	-	819	819	-	-	-	-	-	-	-
Stage 2	862	820	-	509	587	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	117	148	540	132	139	443	993	-	-	936	-	-
Stage 1	524	520	-	369	389	-	-	-	-	-	-	-
Stage 2	350	389	-	547	497	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	95	124	502	107	117	422	928	-	-	931	-	-
Mov Cap-2 Maneuver	95	124	-	107	117	-	-	-	-	-	-	-
Stage 1	445	484	-	333	351	-	-	-	-	-	-	-
Stage 2	297	351	-	479	463	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.5	16.4	1.1	0.1
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	928	-	-	217	326	931	-	-
HCM Lane V/C Ratio	0.092	-	-	0.383	0.034	0.004	-	-
HCM Control Delay (s)	9.3	-	-	31.5	16.4	8.9	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.7	0.1	0	-	-

AGENDA



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	98	17	13	126	148	51	412	28	113	230	86
Future Volume (veh/h)	65	98	17	13	126	148	51	412	28	113	230	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	71	108	19	14	138	163	56	453	31	124	253	95
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	135	24	16	162	191	352	530	36	264	419	157
Arrive On Green	0.15	0.15	0.15	0.23	0.23	0.23	0.05	0.33	0.32	0.07	0.35	0.34
Sat Flow, veh/h	597	908	160	70	689	814	1641	1594	109	1641	1194	448
Grp Volume(v), veh/h	198	0	0	315	0	0	56	0	484	124	0	348
Grp Sat Flow(s),veh/h/ln	1664	0	0	1573	0	0	1641	0	1703	1641	0	1642
Q Serve(g_s), s	8.7	0.0	0.0	14.5	0.0	0.0	1.7	0.0	20.1	3.8	0.0	13.3
Cycle Q Clear(g_c), s	8.7	0.0	0.0	14.5	0.0	0.0	1.7	0.0	20.1	3.8	0.0	13.3
Prop In Lane	0.36		0.10	0.04		0.52	1.00		0.06	1.00		0.27
Lane Grp Cap(c), veh/h	248	0	0	370	0	0	352	0	566	264	0	576
V/C Ratio(X)	0.80	0.00	0.00	0.85	0.00	0.00	0.16	0.00	0.86	0.47	0.00	0.60
Avail Cap(c_a), veh/h	877	0	0	828	0	0	587	0	1144	468	0	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.2	0.0	0.0	27.8	0.0	0.0	16.4	0.0	23.7	18.3	0.0	20.4
Incr Delay (d2), s/veh	2.3	0.0	0.0	2.2	0.0	0.0	0.2	0.0	1.5	1.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0	5.4	0.0	0.0	0.6	0.0	7.8	1.4	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.5	0.0	0.0	30.0	0.0	0.0	16.6	0.0	25.2	19.6	0.0	20.8
LnGrp LOS	C	A	A	C	A	A	B	A	C	B	A	C
Approach Vol, veh/h		198			315			540			472	
Approach Delay, s/veh		33.5			30.0			24.3			20.5	
Approach LOS		C			C			C			C	

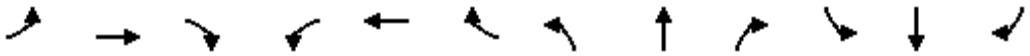
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	29.2		15.3	8.2	30.6		21.8				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	15.0	50.0		40.0	15.0	50.0		40.0				
Max Q Clear Time (g_c+I1), s	5.8	22.1		10.7	3.7	15.3		16.5				
Green Ext Time (p_c), s	0.2	2.1		0.7	0.1	1.5		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			25.5									
HCM 6th LOS			C									

AGENDA

HCM 6th Signalized Intersection Summary
1: Grand Blvd & 29th Ave

2018 Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	482	106	163	425	179	122	231	104	388	524	27
Future Volume (veh/h)	50	482	106	163	425	179	122	231	104	388	524	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	53	513	113	173	452	190	130	246	111	413	557	29
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	361	745	163	339	1017	454	382	407	178	533	985	51
Arrive On Green	0.07	0.28	0.27	0.10	0.31	0.31	0.10	0.18	0.17	0.22	0.31	0.30
Sat Flow, veh/h	1641	2669	585	1641	3273	1460	1641	2215	970	1641	3165	165
Grp Volume(v), veh/h	53	314	312	173	452	190	130	180	177	413	288	298
Grp Sat Flow(s),veh/h/ln	1641	1637	1617	1641	1637	1460	1641	1637	1548	1641	1637	1693
Q Serve(g_s), s	1.7	13.1	13.2	5.6	8.4	7.9	4.8	7.7	8.1	14.8	11.2	11.3
Cycle Q Clear(g_c), s	1.7	13.1	13.2	5.6	8.4	7.9	4.8	7.7	8.1	14.8	11.2	11.3
Prop In Lane	1.00		0.36	1.00		1.00	1.00		0.63	1.00		0.10
Lane Grp Cap(c), veh/h	361	457	452	339	1017	454	382	301	284	533	509	527
V/C Ratio(X)	0.15	0.69	0.69	0.51	0.44	0.42	0.34	0.60	0.62	0.78	0.56	0.57
Avail Cap(c_a), veh/h	674	786	777	601	1572	701	694	871	824	637	874	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	24.6	24.7	18.1	21.1	20.9	22.0	28.6	29.0	18.0	22.0	22.0
Incr Delay (d2), s/veh	0.1	2.6	2.7	0.4	0.4	0.9	0.2	2.7	3.2	4.0	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.1	5.2	2.0	3.1	2.7	1.8	3.1	3.2	5.7	4.3	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	27.2	27.4	18.6	21.5	21.8	22.2	31.3	32.1	21.9	23.4	23.4
LnGrp LOS	B	C	C	B	C	C	C	C	C	C	C	C
Approach Vol, veh/h		679			815			487			999	
Approach Delay, s/veh		26.5			20.9			29.2			22.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	18.1	9.4	27.7	11.5	27.8	11.8	25.4
Change Period (Y+Rc), s	4.0	* 4.8	4.0	* 4.7	4.0	* 4.8	4.0	* 4.7
Max Green Setting (Gmax), s	22.0	* 40	20.0	* 36	22.0	* 40	20.0	* 36
Max Q Clear Time (g_c+I1), s	16.8	10.1	3.7	10.4	6.8	13.3	7.6	15.2
Green Ext Time (p_c), s	0.4	3.3	0.0	5.5	0.1	5.4	0.2	5.4

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

AGENDA

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	6	61	21	7	76	47	350	44	97	597	85
Future Vol, veh/h	27	6	61	21	7	76	47	350	44	97	597	85
Conflicting Peds, #/hr	9	0	6	6	0	9	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	125	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	7	66	23	8	83	51	380	48	105	649	92

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1213	1438	380	1050	1460	223	744	0	0	428	0	0
Stage 1	908	908	-	506	506	-	-	-	-	-	-	-
Stage 2	305	530	-	544	954	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	138	132	618	181	128	780	859	-	-	1128	-	-
Stage 1	296	352	-	517	538	-	-	-	-	-	-	-
Stage 2	680	525	-	491	335	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	103	112	613	136	109	773	857	-	-	1128	-	-
Mov Cap-2 Maneuver	103	112	-	136	109	-	-	-	-	-	-	-
Stage 1	278	318	-	486	506	-	-	-	-	-	-	-
Stage 2	558	494	-	387	303	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.4	21.6	1	1.1
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	857	-	-	226	328	1128	-	-
HCM Lane V/C Ratio	0.06	-	-	0.452	0.345	0.093	-	-
HCM Control Delay (s)	9.5	-	-	33.4	21.6	8.5	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2.2	1.5	0.3	-	-

AGENDA

Intersection	
Int Delay, s/veh	2.1

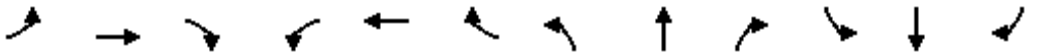
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	1	59	0	3	5	33	400	1	19	513	55
Future Vol, veh/h	24	1	59	0	3	5	33	400	1	19	513	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	26	1	64	0	3	5	36	435	1	21	558	60

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1142	1138	588	1171	1168	436	618	0	0	436	0	0
Stage 1	630	630	-	508	508	-	-	-	-	-	-	-
Stage 2	512	508	-	663	660	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	179	203	513	171	195	625	972	-	-	1134	-	-
Stage 1	473	478	-	551	542	-	-	-	-	-	-	-
Stage 2	548	542	-	454	463	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	168	192	513	143	184	625	972	-	-	1134	-	-
Mov Cap-2 Maneuver	168	192	-	143	184	-	-	-	-	-	-	-
Stage 1	455	469	-	531	522	-	-	-	-	-	-	-
Stage 2	520	522	-	389	454	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.7	16.2	0.7	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	972	-	-	319	329	1134	-	-
HCM Lane V/C Ratio	0.037	-	-	0.286	0.026	0.018	-	-
HCM Control Delay (s)	8.8	-	-	20.7	16.2	8.2	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0.1	0.1	-	-

AGENDA



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	220	44	19	126	110	34	255	21	191	417	73
Future Volume (veh/h)	53	220	44	19	126	110	34	255	21	191	417	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	60	250	50	22	143	125	39	290	24	217	474	83
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	278	56	25	162	141	165	460	38	380	520	91
Arrive On Green	0.24	0.24	0.24	0.21	0.21	0.21	0.04	0.29	0.28	0.11	0.36	0.36
Sat Flow, veh/h	278	1158	232	121	786	687	1641	1569	130	1641	1428	250
Grp Volume(v), veh/h	360	0	0	290	0	0	39	0	314	217	0	557
Grp Sat Flow(s),veh/h/ln	1667	0	0	1593	0	0	1641	0	1699	1641	0	1678
Q Serve(g_s), s	22.2	0.0	0.0	18.8	0.0	0.0	1.8	0.0	17.0	9.5	0.0	33.6
Cycle Q Clear(g_c), s	22.2	0.0	0.0	18.8	0.0	0.0	1.8	0.0	17.0	9.5	0.0	33.6
Prop In Lane	0.17		0.14	0.08		0.43	1.00		0.08	1.00		0.15
Lane Grp Cap(c), veh/h	401	0	0	328	0	0	165	0	498	380	0	612
V/C Ratio(X)	0.90	0.00	0.00	0.88	0.00	0.00	0.24	0.00	0.63	0.57	0.00	0.91
Avail Cap(c_a), veh/h	627	0	0	600	0	0	333	0	815	431	0	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.1	0.0	0.0	41.0	0.0	0.0	28.3	0.0	32.6	23.3	0.0	32.2
Incr Delay (d2), s/veh	7.4	0.0	0.0	3.2	0.0	0.0	0.7	0.0	0.5	1.4	0.0	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.0	7.6	0.0	0.0	0.7	0.0	7.0	3.8	0.0	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.5	0.0	0.0	44.1	0.0	0.0	29.1	0.0	33.1	24.7	0.0	42.5
LnGrp LOS	D	A	A	D	A	A	C	A	C	C	A	D
Approach Vol, veh/h		360			290			353			774	
Approach Delay, s/veh		46.5			44.1			32.7			37.5	
Approach LOS		D			D			C			D	

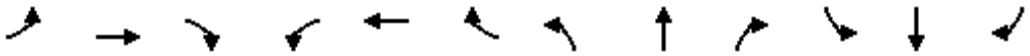
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	35.1		29.5	8.1	42.7		25.9				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	15.0	50.0		40.0	15.0	50.0		40.0				
Max Q Clear Time (g_c+I1), s	11.5	19.0		24.2	3.8	35.6		20.8				
Green Ext Time (p_c), s	0.2	1.3		1.3	0.0	2.2		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			39.5									
HCM 6th LOS			D									

AGENDA

HCM 6th Signalized Intersection Summary
1: Grand Blvd & 29th Ave

2040 Future No Build AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	300	245	85	395	90	125	440	120	180	275	20
Future Volume (veh/h)	225	300	245	85	395	90	125	440	120	180	275	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	234	312	255	89	411	94	130	458	125	188	286	21
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	482	385	348	781	348	497	711	193	381	888	65
Arrive On Green	0.14	0.28	0.27	0.10	0.24	0.24	0.11	0.28	0.27	0.11	0.29	0.28
Sat Flow, veh/h	1641	1730	1381	1641	3273	1460	1641	2546	690	1641	3093	226
Grp Volume(v), veh/h	234	295	272	89	411	94	130	293	290	188	151	156
Grp Sat Flow(s),veh/h/ln	1641	1637	1474	1641	1637	1460	1641	1637	1599	1641	1637	1682
Q Serve(g_s), s	7.2	10.9	11.3	2.7	7.5	3.6	3.7	10.8	11.0	5.5	5.0	5.0
Cycle Q Clear(g_c), s	7.2	10.9	11.3	2.7	7.5	3.6	3.7	10.8	11.0	5.5	5.0	5.0
Prop In Lane	1.00		0.94	1.00		1.00	1.00		0.43	1.00		0.13
Lane Grp Cap(c), veh/h	433	456	411	348	781	348	497	457	447	381	470	483
V/C Ratio(X)	0.54	0.65	0.66	0.26	0.53	0.27	0.26	0.64	0.65	0.49	0.32	0.32
Avail Cap(c_a), veh/h	688	873	786	669	1745	778	846	968	945	720	970	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	21.8	22.3	17.3	22.8	21.3	14.7	21.8	22.0	16.0	19.3	19.3
Incr Delay (d2), s/veh	0.4	2.2	2.6	0.1	0.8	0.6	0.1	2.1	2.3	0.4	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	4.2	4.0	1.0	2.8	1.2	1.3	4.2	4.2	1.9	1.9	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	24.0	24.9	17.4	23.6	21.9	14.8	23.9	24.2	16.3	19.8	19.9
LnGrp LOS	B	C	C	B	C	C	B	C	C	B	B	B
Approach Vol, veh/h		801			594			713			495	
Approach Delay, s/veh		22.2			22.4			22.4			18.5	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	23.3	13.3	20.4	11.3	23.8	10.5	23.2
Change Period (Y+Rc), s	4.0	* 4.8	4.0	* 4.7	4.0	* 4.8	4.0	* 4.7
Max Green Setting (Gmax), s	22.0	* 40	20.0	* 36	22.0	* 40	20.0	* 36
Max Q Clear Time (g_c+I1), s	7.5	13.0	9.2	9.5	5.7	7.0	4.7	13.3
Green Ext Time (p_c), s	0.2	5.5	0.3	4.5	0.1	2.7	0.1	5.2

Intersection Summary	
HCM 6th Ctrl Delay	21.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

AGENDA

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	5	30	5	5	10	85	655	20	30	495	100
Future Vol, veh/h	10	5	30	5	5	10	85	655	20	30	495	100
Conflicting Peds, #/hr	4	0	17	17	0	4	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	-	-	-	-	-	-	125	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	6	34	6	6	11	96	736	22	34	556	112

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1248	1631	352	1305	1676	383	669	0	0	758	0	0
Stage 1	681	681	-	939	939	-	-	-	-	-	-	-
Stage 2	567	950	-	366	737	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	130	101	644	118	94	615	917	-	-	849	-	-
Stage 1	407	448	-	284	341	-	-	-	-	-	-	-
Stage 2	476	337	-	626	423	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	107	87	633	93	81	613	916	-	-	849	-	-
Mov Cap-2 Maneuver	107	87	-	93	81	-	-	-	-	-	-	-
Stage 1	364	430	-	254	305	-	-	-	-	-	-	-
Stage 2	409	302	-	552	406	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.3	32.8	1	0.5
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	916	-	-	227	152	849	-	-
HCM Lane V/C Ratio	0.104	-	-	0.223	0.148	0.04	-	-
HCM Control Delay (s)	9.4	-	-	25.3	32.8	9.4	-	-
HCM Lane LOS	A	-	-	D	D	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.8	0.5	0.1	-	-

AGENDA

Intersection	
Int Delay, s/veh	4.3

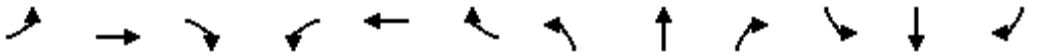
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	5	50	5	0	10	95	695	5	5	460	95
Future Vol, veh/h	20	5	50	5	0	10	95	695	5	5	460	95
Conflicting Peds, #/hr	44	0	6	6	0	44	69	0	6	6	0	69
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	6	56	6	0	11	107	781	6	6	517	107

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1700	1659	646	1624	1709	834	693	0	0	793	0	0
Stage 1	652	652	-	1004	1004	-	-	-	-	-	-	-
Stage 2	1048	1007	-	620	705	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	73	98	472	82	91	368	902	-	-	828	-	-
Stage 1	457	464	-	291	320	-	-	-	-	-	-	-
Stage 2	275	319	-	476	439	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	79	438	60	73	351	843	-	-	823	-	-
Mov Cap-2 Maneuver	57	79	-	60	73	-	-	-	-	-	-	-
Stage 1	373	430	-	253	278	-	-	-	-	-	-	-
Stage 2	223	277	-	404	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	61.9	35.7	1.2	0.1
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	142	134	823	-	-
HCM Lane V/C Ratio	0.127	-	-	0.593	0.126	0.007	-	-
HCM Control Delay (s)	9.9	-	-	61.9	35.7	9.4	-	-
HCM Lane LOS	A	-	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	3.1	0.4	0	-	-

AGENDA



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	120	20	15	155	180	60	505	35	140	280	105
Future Volume (veh/h)	80	120	20	15	155	180	60	505	35	140	280	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	88	132	22	16	170	198	66	555	38	154	308	115
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	150	25	17	183	213	308	592	41	201	481	179
Arrive On Green	0.16	0.16	0.16	0.26	0.26	0.26	0.04	0.37	0.36	0.07	0.40	0.39
Sat Flow, veh/h	606	908	151	66	697	811	1641	1594	109	1641	1196	446
Grp Volume(v), veh/h	242	0	0	384	0	0	66	0	593	154	0	423
Grp Sat Flow(s),veh/h/ln	1665	0	0	1573	0	0	1641	0	1703	1641	0	1642
Q Serve(g_s), s	17.8	0.0	0.0	29.9	0.0	0.0	3.1	0.0	42.1	7.1	0.0	26.1
Cycle Q Clear(g_c), s	17.8	0.0	0.0	29.9	0.0	0.0	3.1	0.0	42.1	7.1	0.0	26.1
Prop In Lane	0.36		0.09	0.04		0.52	1.00		0.06	1.00		0.27
Lane Grp Cap(c), veh/h	274	0	0	413	0	0	308	0	632	201	0	660
V/C Ratio(X)	0.88	0.00	0.00	0.93	0.00	0.00	0.21	0.00	0.94	0.77	0.00	0.64
Avail Cap(c_a), veh/h	531	0	0	502	0	0	433	0	692	276	0	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	0.0	45.1	0.0	0.0	25.1	0.0	38.1	29.5	0.0	30.3
Incr Delay (d2), s/veh	3.7	0.0	0.0	20.0	0.0	0.0	0.3	0.0	18.9	8.3	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	0.0	13.9	0.0	0.0	1.3	0.0	20.6	3.2	0.0	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	0.0	0.0	65.1	0.0	0.0	25.5	0.0	57.0	37.9	0.0	31.9
LnGrp LOS	D	A	A	E	A	A	C	A	E	D	A	C
Approach Vol, veh/h		242			384			659			577	
Approach Delay, s/veh		54.9			65.1			53.8			33.5	
Approach LOS		D			E			D			C	

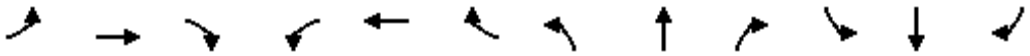
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	50.6		24.7	9.4	54.4		36.9				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	15.0	50.0		40.0	15.0	50.0		40.0				
Max Q Clear Time (g_c+I1), s	9.1	44.1		19.8	5.1	28.1		31.9				
Green Ext Time (p_c), s	0.2	1.4		0.9	0.1	1.8		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			50.0									
HCM 6th LOS			D									

AGENDA

HCM 6th Signalized Intersection Summary
1: Grand Blvd & 29th Ave

2040 Future No Build PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	515	115	175	435	200	145	295	125	430	595	30
Future Volume (veh/h)	55	515	115	175	435	200	145	295	125	430	595	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	59	548	122	186	463	213	154	314	133	457	633	32
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	740	164	311	1020	455	371	466	193	527	1099	56
Arrive On Green	0.07	0.28	0.27	0.10	0.31	0.31	0.10	0.21	0.20	0.23	0.35	0.34
Sat Flow, veh/h	1641	2662	591	1641	3273	1460	1641	2255	936	1641	3170	160
Grp Volume(v), veh/h	59	336	334	186	463	213	154	226	221	457	327	338
Grp Sat Flow(s),veh/h/ln	1641	1637	1616	1641	1637	1460	1641	1637	1554	1641	1637	1694
Q Serve(g_s), s	2.2	16.8	16.9	7.1	10.2	10.6	6.6	11.4	11.8	18.9	14.6	14.7
Cycle Q Clear(g_c), s	2.2	16.8	16.9	7.1	10.2	10.6	6.6	11.4	11.8	18.9	14.6	14.7
Prop In Lane	1.00		0.37	1.00		1.00	1.00		0.60	1.00		0.09
Lane Grp Cap(c), veh/h	338	455	449	311	1020	455	371	338	321	527	568	587
V/C Ratio(X)	0.17	0.74	0.74	0.60	0.45	0.47	0.42	0.67	0.69	0.87	0.58	0.58
Avail Cap(c_a), veh/h	590	668	660	508	1336	596	616	741	704	545	743	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	29.5	29.7	21.6	24.8	24.9	24.8	32.8	33.2	20.3	24.0	24.0
Incr Delay (d2), s/veh	0.1	3.4	3.6	0.7	0.5	1.1	0.3	3.2	3.7	12.8	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.8	6.8	2.7	3.9	3.7	2.5	4.7	4.7	8.6	5.7	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.8	32.9	33.2	22.3	25.3	26.0	25.0	36.0	36.9	33.1	25.3	25.3
LnGrp LOS	C	C	C	C	C	C	C	D	D	C	C	C
Approach Vol, veh/h		729			862			601			1122	
Approach Delay, s/veh		32.1			24.8			33.5			28.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	22.7	10.2	32.0	12.5	35.2	13.2	29.0
Change Period (Y+Rc), s	4.0	* 4.8	4.0	* 4.7	4.0	* 4.8	4.0	* 4.7
Max Green Setting (Gmax), s	22.0	* 40	20.0	* 36	22.0	* 40	20.0	* 36
Max Q Clear Time (g_c+I1), s	20.9	13.8	4.2	12.6	8.6	16.7	9.1	18.9
Green Ext Time (p_c), s	0.1	4.1	0.0	5.6	0.2	6.0	0.2	5.4

Intersection Summary	
HCM 6th Ctrl Delay	29.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

AGENDA

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	5	60	20	5	75	55	445	55	110	680	95
Future Vol, veh/h	25	5	60	20	5	75	55	445	55	110	680	95
Conflicting Peds, #/hr	9	0	6	6	0	9	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	125	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	5	65	22	5	82	60	484	60	120	739	103

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1408	1698	430	1252	1719	281	845	0	0	544	0	0
Stage 1	1034	1034	-	634	634	-	-	-	-	-	-	-
Stage 2	374	664	-	618	1085	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	99	91	573	129	89	716	787	-	-	1021	-	-
Stage 1	248	308	-	434	471	-	-	-	-	-	-	-
Stage 2	619	456	-	443	291	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	70	74	568	92	72	710	785	-	-	1021	-	-
Mov Cap-2 Maneuver	70	74	-	92	72	-	-	-	-	-	-	-
Stage 1	228	271	-	401	435	-	-	-	-	-	-	-
Stage 2	495	421	-	337	256	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	51.5	29.2	1	1.1
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	785	-	-	170	255	1021	-	-
HCM Lane V/C Ratio	0.076	-	-	0.575	0.426	0.117	-	-
HCM Control Delay (s)	10	-	-	51.5	29.2	9	-	-
HCM Lane LOS	A	-	-	F	D	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	3	2	0.4	-	-

AGENDA

Intersection	
Int Delay, s/veh	2.8

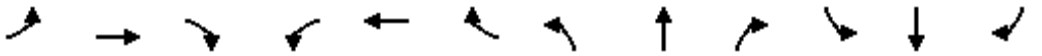
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	5	60	0	5	5	40	490	5	25	625	65
Future Vol, veh/h	25	5	60	0	5	5	40	490	5	25	625	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	5	65	0	5	5	43	533	5	27	679	71

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1396	1393	715	1426	1426	536	750	0	0	538	0	0
Stage 1	769	769	-	622	622	-	-	-	-	-	-	-
Stage 2	627	624	-	804	804	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	120	143	434	114	137	549	868	-	-	1040	-	-
Stage 1	397	413	-	478	482	-	-	-	-	-	-	-
Stage 2	475	481	-	380	398	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	108	132	434	89	127	549	868	-	-	1040	-	-
Mov Cap-2 Maneuver	108	132	-	89	127	-	-	-	-	-	-	-
Stage 1	377	402	-	454	458	-	-	-	-	-	-	-
Stage 2	442	457	-	310	388	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.6	23.4	0.7	0.3
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	868	-	-	221	206	1040	-	-
HCM Lane V/C Ratio	0.05	-	-	0.443	0.053	0.026	-	-
HCM Control Delay (s)	9.4	-	-	33.6	23.4	8.6	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2.1	0.2	0.1	-	-

AGENDA

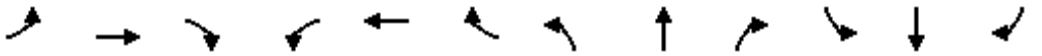


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	220	45	25	130	145	35	320	25	215	485	75
Future Volume (veh/h)	60	220	45	25	130	145	35	320	25	215	485	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	68	250	51	28	148	165	40	364	28	244	551	85
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	269	55	30	160	178	110	473	36	316	548	84
Arrive On Green	0.24	0.24	0.24	0.23	0.23	0.23	0.03	0.30	0.29	0.11	0.38	0.37
Sat Flow, veh/h	307	1129	230	130	685	764	1641	1579	121	1641	1457	225
Grp Volume(v), veh/h	369	0	0	341	0	0	40	0	392	244	0	636
Grp Sat Flow(s),veh/h/ln	1666	0	0	1579	0	0	1641	0	1701	1641	0	1682
Q Serve(g_s), s	29.4	0.0	0.0	28.7	0.0	0.0	2.3	0.0	28.5	13.8	0.0	51.0
Cycle Q Clear(g_c), s	29.4	0.0	0.0	28.7	0.0	0.0	2.3	0.0	28.5	13.8	0.0	51.0
Prop In Lane	0.18		0.14	0.08		0.48	1.00		0.07	1.00		0.13
Lane Grp Cap(c), veh/h	398	0	0	368	0	0	110	0	510	316	0	632
V/C Ratio(X)	0.93	0.00	0.00	0.93	0.00	0.00	0.37	0.00	0.77	0.77	0.00	1.01
Avail Cap(c_a), veh/h	491	0	0	465	0	0	234	0	639	316	0	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.5	0.0	0.0	50.9	0.0	0.0	37.3	0.0	43.3	31.6	0.0	42.4
Incr Delay (d2), s/veh	19.7	0.0	0.0	19.6	0.0	0.0	2.0	0.0	3.3	11.2	0.0	37.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	0.0	0.0	13.3	0.0	0.0	1.0	0.0	12.4	6.4	0.0	27.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.2	0.0	0.0	70.5	0.0	0.0	39.4	0.0	46.6	42.7	0.0	79.8
LnGrp LOS	E	A	A	E	A	A	D	A	D	D	A	F
Approach Vol, veh/h		369			341			432			880	
Approach Delay, s/veh		70.2			70.5			45.9			69.5	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	44.7		36.4	8.7	55.0		35.7				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	15.0	50.0		40.0	15.0	50.0		40.0				
Max Q Clear Time (g_c+I1), s	15.8	30.5		31.4	4.3	53.0		30.7				
Green Ext Time (p_c), s	0.0	1.5		1.0	0.0	0.0		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		64.8	
HCM 6th LOS		E	

AGENDA



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	305	245	85	395	90	125	435	115	205	250	20
Future Volume (veh/h)	230	305	245	85	395	90	125	435	115	205	250	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	240	318	255	89	411	94	130	453	120	214	260	21
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	465	365	269	550	125	528	526	139	298	662	54
Arrive On Green	0.13	0.27	0.26	0.07	0.21	0.21	0.08	0.40	0.39	0.10	0.42	0.41
Sat Flow, veh/h	1641	1745	1368	1641	2650	601	1641	1312	348	1641	1573	127
Grp Volume(v), veh/h	240	298	275	89	252	253	130	0	573	214	0	281
Grp Sat Flow(s),veh/h/ln	1641	1637	1476	1641	1637	1615	1641	0	1660	1641	0	1700
Q Serve(g_s), s	11.0	16.2	16.8	4.1	14.4	14.6	4.5	0.0	31.5	7.6	0.0	11.4
Cycle Q Clear(g_c), s	11.0	16.2	16.8	4.1	14.4	14.6	4.5	0.0	31.5	7.6	0.0	11.4
Prop In Lane	1.00		0.93	1.00		0.37	1.00		0.21	1.00		0.07
Lane Grp Cap(c), veh/h	337	436	393	269	340	335	528	0	665	298	0	716
V/C Ratio(X)	0.71	0.68	0.70	0.33	0.74	0.75	0.25	0.00	0.86	0.72	0.00	0.39
Avail Cap(c_a), veh/h	417	654	590	280	491	485	532	0	962	368	0	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.3	32.7	33.2	28.4	37.0	37.1	15.6	0.0	27.4	21.4	0.0	20.0
Incr Delay (d2), s/veh	2.8	2.7	3.2	0.3	4.8	5.3	0.1	0.0	6.7	3.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	6.7	6.3	1.6	6.1	6.2	1.7	0.0	13.2	3.0	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.1	35.4	36.4	28.7	41.8	42.4	15.7	0.0	34.0	24.8	0.0	20.5
LnGrp LOS	C	D	D	C	D	D	B	A	C	C	A	C
Approach Vol, veh/h		813			594			703			495	
Approach Delay, s/veh		33.9			40.1			30.6			22.4	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	44.0	17.2	24.7	11.8	45.9	11.3	30.5
Change Period (Y+Rc), s	4.0	* 4.8	4.0	* 4.7	4.0	* 4.8	4.0	* 4.7
Max Green Setting (Gmax), s	14.0	* 57	18.0	* 29	8.0	* 63	8.0	* 39
Max Q Clear Time (g_c+I1), s	9.6	33.5	13.0	16.6	6.5	13.4	6.1	18.8
Green Ext Time (p_c), s	0.1	5.8	0.2	3.3	0.0	2.7	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

AGENDA

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	35	0	0	10	90	655	20	0	500	100
Future Vol, veh/h	0	0	35	0	0	10	90	655	20	0	500	100
Conflicting Peds, #/hr	4	0	17	17	0	4	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	125	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	39	0	0	11	101	736	22	0	562	112

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	636	-	-	751	675	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	478	0	0	411	916	-	-	0	-	-
Stage 1	0	0	-	0	0	-	-	-	-	0	-	-
Stage 2	0	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	470	-	-	409	915	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	14.1	1.1	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	915	-	-	470	409	-	-
HCM Lane V/C Ratio	0.111	-	-	0.084	0.027	-	-
HCM Control Delay (s)	9.4	-	-	13.4	14.1	-	-
HCM Lane LOS	A	-	-	B	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.3	0.1	-	-

AGENDA

Intersection	
Int Delay, s/veh	4.3

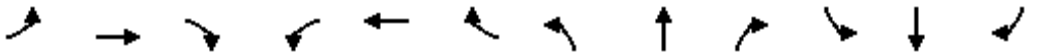
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	5	50	5	0	10	95	695	5	5	460	95
Future Vol, veh/h	20	5	50	5	0	10	95	695	5	5	460	95
Conflicting Peds, #/hr	44	0	6	6	0	44	69	0	6	6	0	69
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	6	56	6	0	11	107	781	6	6	517	107

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1700	1659	646	1624	1709	834	693	0	0	793	0	0
Stage 1	652	652	-	1004	1004	-	-	-	-	-	-	-
Stage 2	1048	1007	-	620	705	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	73	98	472	82	91	368	902	-	-	828	-	-
Stage 1	457	464	-	291	320	-	-	-	-	-	-	-
Stage 2	275	319	-	476	439	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	79	438	60	73	351	843	-	-	823	-	-
Mov Cap-2 Maneuver	57	79	-	60	73	-	-	-	-	-	-	-
Stage 1	373	430	-	253	278	-	-	-	-	-	-	-
Stage 2	223	277	-	404	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	61.9	35.7	1.2	0.1
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	142	134	823	-	-
HCM Lane V/C Ratio	0.127	-	-	0.593	0.126	0.007	-	-
HCM Control Delay (s)	9.9	-	-	61.9	35.7	9.4	-	-
HCM Lane LOS	A	-	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	3.1	0.4	0	-	-

AGENDA



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	120	20	15	155	180	60	505	35	140	280	105
Future Volume (veh/h)	80	120	20	15	155	180	60	505	35	140	280	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	88	132	22	16	170	198	66	555	38	154	308	115
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	150	25	17	183	213	308	592	41	201	481	179
Arrive On Green	0.16	0.16	0.16	0.26	0.26	0.26	0.04	0.37	0.36	0.07	0.40	0.39
Sat Flow, veh/h	606	908	151	66	697	811	1641	1594	109	1641	1196	446
Grp Volume(v), veh/h	242	0	0	384	0	0	66	0	593	154	0	423
Grp Sat Flow(s),veh/h/ln	1665	0	0	1573	0	0	1641	0	1703	1641	0	1642
Q Serve(g_s), s	17.8	0.0	0.0	29.9	0.0	0.0	3.1	0.0	42.1	7.1	0.0	26.1
Cycle Q Clear(g_c), s	17.8	0.0	0.0	29.9	0.0	0.0	3.1	0.0	42.1	7.1	0.0	26.1
Prop In Lane	0.36		0.09	0.04		0.52	1.00		0.06	1.00		0.27
Lane Grp Cap(c), veh/h	274	0	0	413	0	0	308	0	632	201	0	660
V/C Ratio(X)	0.88	0.00	0.00	0.93	0.00	0.00	0.21	0.00	0.94	0.77	0.00	0.64
Avail Cap(c_a), veh/h	531	0	0	502	0	0	433	0	692	276	0	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	0.0	45.1	0.0	0.0	25.1	0.0	38.1	29.5	0.0	30.3
Incr Delay (d2), s/veh	3.7	0.0	0.0	20.0	0.0	0.0	0.3	0.0	18.9	8.3	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	0.0	13.9	0.0	0.0	1.3	0.0	20.6	3.2	0.0	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	0.0	0.0	65.1	0.0	0.0	25.5	0.0	57.0	37.9	0.0	31.9
LnGrp LOS	D	A	A	E	A	A	C	A	E	D	A	C
Approach Vol, veh/h		242			384			659			577	
Approach Delay, s/veh		54.9			65.1			53.8			33.5	
Approach LOS		D			E			D			C	

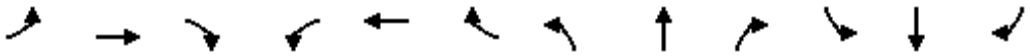
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	50.6		24.7	9.4	54.4		36.9				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	15.0	50.0		40.0	15.0	50.0		40.0				
Max Q Clear Time (g_c+I1), s	9.1	44.1		19.8	5.1	28.1		31.9				
Green Ext Time (p_c), s	0.2	1.4		0.9	0.1	1.8		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			50.0									
HCM 6th LOS			D									

AGENDA

HCM 6th Signalized Intersection Summary
1: Grand Blvd & 29th Ave

2040 Future Build PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	525	115	175	435	200	145	280	115	520	505	30
Future Volume (veh/h)	70	525	115	175	435	200	145	280	115	520	505	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	74	559	122	186	463	213	154	298	122	553	537	32
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	591	129	205	555	254	366	304	124	563	826	49
Arrive On Green	0.06	0.22	0.22	0.09	0.25	0.25	0.06	0.26	0.26	0.31	0.51	0.51
Sat Flow, veh/h	1641	2673	581	1641	2183	997	1641	1162	476	1641	1610	96
Grp Volume(v), veh/h	74	342	339	186	346	330	154	0	420	553	0	569
Grp Sat Flow(s),veh/h/ln	1641	1637	1618	1641	1637	1543	1641	0	1637	1641	0	1705
Q Serve(g_s), s	4.7	27.8	28.0	11.8	27.1	27.5	8.0	0.0	34.5	40.7	0.0	33.1
Cycle Q Clear(g_c), s	4.7	27.8	28.0	11.8	27.1	27.5	8.0	0.0	34.5	40.7	0.0	33.1
Prop In Lane	1.00		0.36	1.00		0.65	1.00		0.29	1.00		0.06
Lane Grp Cap(c), veh/h	179	362	358	205	416	393	366	0	429	563	0	875
V/C Ratio(X)	0.41	0.94	0.95	0.91	0.83	0.84	0.42	0.00	0.98	0.98	0.00	0.65
Avail Cap(c_a), veh/h	185	362	358	205	416	393	366	0	429	563	0	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.8	52.0	52.2	39.0	47.8	47.9	35.2	0.0	49.8	38.7	0.0	24.1
Incr Delay (d2), s/veh	0.6	33.1	34.5	37.2	13.9	15.4	0.3	0.0	38.2	33.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	14.8	14.8	6.9	12.7	12.3	3.9	0.0	18.6	23.4	0.0	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.4	85.1	86.7	76.2	61.7	63.4	35.4	0.0	88.0	71.9	0.0	26.1
LnGrp LOS	D	F	F	E	E	E	D	A	F	E	A	C
Approach Vol, veh/h		755			862			574			1122	
Approach Delay, s/veh		81.4			65.5			73.9			48.6	
Approach LOS		F			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	46.0	39.6	11.5	38.5	12.0	73.6	16.0	34.0
Change Period (Y+Rc), s	4.0	* 4.8	4.0	* 4.7	4.0	* 4.8	4.0	* 4.7
Max Green Setting (Gmax), s	42.0	* 35	8.0	* 33	8.0	* 69	12.0	* 29
Max Q Clear Time (g_c+I1), s	42.7	36.5	6.7	29.5	10.0	35.1	13.8	30.0
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	6.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	64.9
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

AGENDA

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	65	0	0	75	60	445	55	0	700	95
Future Vol, veh/h	0	0	65	0	0	75	60	445	55	0	700	95
Conflicting Peds, #/hr	9	0	6	6	0	9	3	0	0	0	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	125	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	71	0	0	82	65	484	60	0	761	103

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	822	-	-	523	867	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	374	0	0	554	777	-	-	0	-	-
Stage 1	0	0	-	0	0	-	-	-	-	0	-	-
Stage 2	0	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	371	-	-	549	775	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	12.7	1.1	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	775	-	-	371	549	-	-
HCM Lane V/C Ratio	0.084	-	-	0.19	0.148	-	-
HCM Control Delay (s)	10.1	-	-	17	12.7	-	-
HCM Lane LOS	B	-	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.7	0.5	-	-

AGENDA

Intersection	
Int Delay, s/veh	2.8

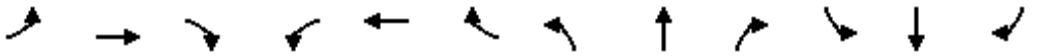
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	5	60	0	5	5	40	490	5	25	625	65
Future Vol, veh/h	25	5	60	0	5	5	40	490	5	25	625	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	5	65	0	5	5	43	533	5	27	679	71

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1396	1393	715	1426	1426	536	750	0	0	538	0	0
Stage 1	769	769	-	622	622	-	-	-	-	-	-	-
Stage 2	627	624	-	804	804	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	120	143	434	114	137	549	868	-	-	1040	-	-
Stage 1	397	413	-	478	482	-	-	-	-	-	-	-
Stage 2	475	481	-	380	398	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	108	132	434	89	127	549	868	-	-	1040	-	-
Mov Cap-2 Maneuver	108	132	-	89	127	-	-	-	-	-	-	-
Stage 1	377	402	-	454	458	-	-	-	-	-	-	-
Stage 2	442	457	-	310	388	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.6	23.4	0.7	0.3
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	868	-	-	221	206	1040	-	-
HCM Lane V/C Ratio	0.05	-	-	0.443	0.053	0.026	-	-
HCM Control Delay (s)	9.4	-	-	33.6	23.4	8.6	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2.1	0.2	0.1	-	-

AGENDA



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	220	45	25	130	145	35	320	25	215	485	75
Future Volume (veh/h)	60	220	45	25	130	145	35	320	25	215	485	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	68	250	51	28	148	165	40	364	28	244	551	85
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	269	55	30	160	178	110	473	36	316	548	84
Arrive On Green	0.24	0.24	0.24	0.23	0.23	0.23	0.03	0.30	0.29	0.11	0.38	0.37
Sat Flow, veh/h	307	1129	230	130	685	764	1641	1579	121	1641	1457	225
Grp Volume(v), veh/h	369	0	0	341	0	0	40	0	392	244	0	636
Grp Sat Flow(s),veh/h/ln	1666	0	0	1579	0	0	1641	0	1701	1641	0	1682
Q Serve(g_s), s	29.4	0.0	0.0	28.7	0.0	0.0	2.3	0.0	28.5	13.8	0.0	51.0
Cycle Q Clear(g_c), s	29.4	0.0	0.0	28.7	0.0	0.0	2.3	0.0	28.5	13.8	0.0	51.0
Prop In Lane	0.18		0.14	0.08		0.48	1.00		0.07	1.00		0.13
Lane Grp Cap(c), veh/h	398	0	0	368	0	0	110	0	510	316	0	632
V/C Ratio(X)	0.93	0.00	0.00	0.93	0.00	0.00	0.37	0.00	0.77	0.77	0.00	1.01
Avail Cap(c_a), veh/h	491	0	0	465	0	0	234	0	639	316	0	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.5	0.0	0.0	50.9	0.0	0.0	37.3	0.0	43.3	31.6	0.0	42.4
Incr Delay (d2), s/veh	19.7	0.0	0.0	19.6	0.0	0.0	2.0	0.0	3.3	11.2	0.0	37.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	0.0	0.0	13.3	0.0	0.0	1.0	0.0	12.4	6.4	0.0	27.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.2	0.0	0.0	70.5	0.0	0.0	39.4	0.0	46.6	42.7	0.0	79.8
LnGrp LOS	E	A	A	E	A	A	D	A	D	D	A	F
Approach Vol, veh/h		369			341			432			880	
Approach Delay, s/veh		70.2			70.5			45.9			69.5	
Approach LOS		E			E			D			E	

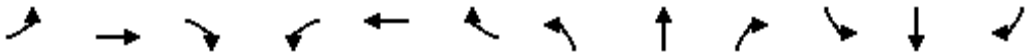
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	44.7		36.4	8.7	55.0		35.7				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	15.0	50.0		40.0	15.0	50.0		40.0				
Max Q Clear Time (g_c+I1), s	15.8	30.5		31.4	4.3	53.0		30.7				
Green Ext Time (p_c), s	0.0	1.5		1.0	0.0	0.0		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		64.8	
HCM 6th LOS		E	

AGENDA

HCM 6th Signalized Intersection Summary
1: Grand Blvd & 29th Ave

2040 Future Build PM - Dual SBL



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	525	115	175	435	200	145	280	115	520	505	30
Future Volume (veh/h)	70	525	115	175	435	200	145	280	115	520	505	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	74	559	122	186	463	213	154	298	122	553	537	32
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	670	146	267	621	283	181	352	144	620	624	37
Arrive On Green	0.07	0.25	0.24	0.10	0.28	0.28	0.11	0.30	0.30	0.19	0.39	0.38
Sat Flow, veh/h	1641	2673	581	1641	2183	997	1641	1162	476	3183	1610	96
Grp Volume(v), veh/h	74	342	339	186	346	330	154	0	420	553	0	569
Grp Sat Flow(s),veh/h/ln	1641	1637	1618	1641	1637	1543	1641	0	1637	1591	0	1705
Q Serve(g_s), s	3.5	21.0	21.2	8.7	20.4	20.7	9.8	0.0	25.6	18.0	0.0	32.6
Cycle Q Clear(g_c), s	3.5	21.0	21.2	8.7	20.4	20.7	9.8	0.0	25.6	18.0	0.0	32.6
Prop In Lane	1.00		0.36	1.00		0.65	1.00		0.29	1.00		0.06
Lane Grp Cap(c), veh/h	241	410	405	267	465	439	181	0	496	620	0	662
V/C Ratio(X)	0.31	0.83	0.84	0.70	0.74	0.75	0.85	0.00	0.85	0.89	0.00	0.86
Avail Cap(c_a), veh/h	255	462	456	287	525	495	247	0	793	778	0	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.0	37.7	37.9	27.7	34.5	34.6	46.4	0.0	34.9	41.7	0.0	29.9
Incr Delay (d2), s/veh	0.3	12.1	12.6	5.3	5.7	6.3	14.3	0.0	6.4	9.4	0.0	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	9.7	9.7	3.7	8.8	8.4	4.7	0.0	10.9	7.8	0.0	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	49.8	50.5	33.0	40.2	41.0	60.7	0.0	41.3	51.2	0.0	36.2
LnGrp LOS	C	D	D	C	D	D	E	A	D	D	A	D
Approach Vol, veh/h		755			862			574			1122	
Approach Delay, s/veh		48.0			38.9			46.5			43.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.7	36.3	11.1	34.2	15.8	45.3	14.7	30.6
Change Period (Y+Rc), s	4.0	* 4.8	4.0	* 4.7	4.0	* 4.8	4.0	* 4.7
Max Green Setting (Gmax), s	26.0	* 51	8.0	* 33	16.0	* 61	12.0	* 29
Max Q Clear Time (g_c+I1), s	20.0	27.6	5.5	22.7	11.8	34.6	10.7	23.2
Green Ext Time (p_c), s	0.7	3.9	0.0	4.2	0.1	5.8	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	43.9
HCM 6th LOS	D

Notes

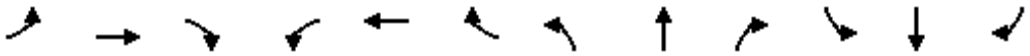
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

AGENDA

HCM 6th Signalized Intersection Summary
1: Grand Blvd & 29th Ave

2040 Future Build - Dual SBL with Split Phasing



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	525	115	175	435	200	145	280	115	520	505	30
Future Volume (veh/h)	70	525	115	175	435	200	145	280	115	520	505	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	74	559	122	186	463	213	154	298	122	553	537	32
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	562	122	198	532	243	403	291	119	1038	535	32
Arrive On Green	0.06	0.21	0.21	0.09	0.24	0.24	0.25	0.25	0.25	0.33	0.33	0.33
Sat Flow, veh/h	1641	2673	581	1641	2183	997	1641	1162	476	3183	1610	96
Grp Volume(v), veh/h	74	342	339	186	346	330	154	0	420	553	0	569
Grp Sat Flow(s),veh/h/ln	1641	1637	1618	1641	1637	1543	1641	0	1637	1591	0	1705
Q Serve(g_s), s	4.7	28.2	28.4	12.0	27.5	27.9	10.6	0.0	34.0	19.2	0.0	45.0
Cycle Q Clear(g_c), s	4.7	28.2	28.4	12.0	27.5	27.9	10.6	0.0	34.0	19.2	0.0	45.0
Prop In Lane	1.00		0.36	1.00		0.65	1.00		0.29	1.00		0.06
Lane Grp Cap(c), veh/h	169	344	340	198	398	376	403	0	411	1038	0	566
V/C Ratio(X)	0.44	0.99	1.00	0.94	0.87	0.88	0.38	0.00	1.02	0.53	0.00	1.00
Avail Cap(c_a), veh/h	175	344	340	198	398	376	403	0	411	1038	0	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.0	53.4	53.6	39.8	49.2	49.3	42.5	0.0	50.9	37.2	0.0	45.3
Incr Delay (d2), s/veh	0.7	46.3	48.1	45.8	18.6	20.7	0.8	0.0	50.2	0.7	0.0	39.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	16.0	16.1	7.4	13.3	12.9	4.4	0.0	19.6	7.6	0.0	25.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.7	99.7	101.7	85.6	67.8	70.0	43.4	0.0	101.1	37.9	0.0	84.2
LnGrp LOS	D	F	F	F	E	E	D	A	F	D	A	F
Approach Vol, veh/h		755			862			574			1122	
Approach Delay, s/veh		94.9			72.5			85.6			61.4	
Approach LOS		F			E			F			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		38.0	11.5	37.0		49.0	16.0	32.5				
Change Period (Y+Rc), s		* 4.7	4.0	* 4.7		4.8	4.0	* 4.7				
Max Green Setting (Gmax), s		* 33	8.0	* 32		44.2	12.0	* 28				
Max Q Clear Time (g_c+I1), s		36.0	6.7	29.9		47.0	14.0	30.4				
Green Ext Time (p_c), s		0.0	0.0	1.1		0.0	0.0	0.0				

Intersection Summary	
HCM 6th Ctrl Delay	76.1
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

AGENDA

Intersection: 1: Grand Blvd & 29th Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	TR	L	T
Maximum Queue (ft)	177	449	436	220	576	554	149	148	199	232	175	1159
Average Queue (ft)	51	221	212	136	239	223	77	77	86	122	166	724
95th Queue (ft)	140	445	448	244	646	608	155	140	165	209	218	1585
Link Distance (ft)		1128	1128		1477	1477			262	262		1637
Upstream Blk Time (%)		0	1		0	0			0	0		9
Queuing Penalty (veh)		0	0		0	0			0	1		0
Storage Bay Dist (ft)	175			200			125	125			150	
Storage Blk Time (%)	0	15		22	1	9	0	1	2		36	32
Queuing Penalty (veh)	0	7		46	1	15	0	2	3		94	122

Intersection: 1: Grand Blvd & 29th Ave

Movement	SB
Directions Served	TR
Maximum Queue (ft)	1115
Average Queue (ft)	646
95th Queue (ft)	1533
Link Distance (ft)	1637
Upstream Blk Time (%)	2
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Blvd & 30th Ave/Manito Shopping Center

Movement	EB	WB	NB	NB	NB	B12	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	T	L	T	TR
Maximum Queue (ft)	248	258	77	109	61	32	75	301	289
Average Queue (ft)	88	132	28	13	5	2	46	155	140
95th Queue (ft)	270	306	76	126	29	38	95	364	359
Link Distance (ft)	725	269		557	557	319		262	262
Upstream Blk Time (%)	1	27		1		0		13	9
Queuing Penalty (veh)	0	0		2		2		52	35
Storage Bay Dist (ft)			125				50		
Storage Blk Time (%)			3				2	43	
Queuing Penalty (veh)			5				6	41	

AGENDA

Intersection: 3: Grand Blvd & 33rd Ave

Movement	NB	SB	B12	B12
Directions Served	TR	TR	T	
Maximum Queue (ft)	34	436	593	538
Average Queue (ft)	1	327	405	292
95th Queue (ft)	18	572	795	751
Link Distance (ft)	1256	319	557	557
Upstream Blk Time (%)		58	28	9
Queuing Penalty (veh)		394	92	31
Storage Bay Dist (ft)				
Storage Blk Time (%)	0	58		
Queuing Penalty (veh)	0	0		

Intersection: 4: Grand Blvd & 37th Ave

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	524	352	99	359	75	1272
Average Queue (ft)	251	181	30	168	61	1194
95th Queue (ft)	455	307	80	317	94	1562
Link Distance (ft)	870	832		629		1256
Upstream Blk Time (%)	0					24
Queuing Penalty (veh)	0					162
Storage Bay Dist (ft)			75		50	
Storage Blk Time (%)			1	31	30	51
Queuing Penalty (veh)			2	11	150	97

Network Summary

Network wide Queuing Penalty: 1372

AGENDA

Intersection: 1: Grand Blvd & 29th Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	200	540	523	225	860	837	150	278	845	872
Average Queue (ft)	104	326	308	193	456	442	107	242	404	462
95th Queue (ft)	223	528	503	279	1037	1000	183	324	825	1047
Link Distance (ft)		1140	1140		1489	1489		262	1465	1465
Upstream Blk Time (%)					3	2		27	0	0
Queuing Penalty (veh)					0	0		115	0	0
Storage Bay Dist (ft)	175			200			125			
Storage Blk Time (%)	0	41		48	7		5	48		
Queuing Penalty (veh)	1	27		100	12		18	59		

Intersection: 2: Grand Blvd & 30th Ave/Manito Shopping Center

Movement	EB	WB	NB	NB	B12	SB
Directions Served	R	R	L	TR	T	TR
Maximum Queue (ft)	297	237	150	451	18	237
Average Queue (ft)	128	94	43	154	1	135
95th Queue (ft)	387	236	122	405	23	335
Link Distance (ft)	737	281		557	319	262
Upstream Blk Time (%)		8		1		6
Queuing Penalty (veh)		0		3		39
Storage Bay Dist (ft)			125			
Storage Blk Time (%)			0	16		
Queuing Penalty (veh)			0	8		

Intersection: 3: Grand Blvd & 33rd Ave

Movement	SB	B12
Directions Served	TR	T
Maximum Queue (ft)	437	568
Average Queue (ft)	328	368
95th Queue (ft)	558	773
Link Distance (ft)	319	557
Upstream Blk Time (%)	55	10
Queuing Penalty (veh)	368	70
Storage Bay Dist (ft)		
Storage Blk Time (%)	59	
Queuing Penalty (veh)	0	

AGENDA

Intersection: 4: Grand Blvd & 37th Ave

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	477	341	99	362	74	1272
Average Queue (ft)	257	187	30	177	63	1238
95th Queue (ft)	426	300	81	306	92	1378
Link Distance (ft)	870	832		629		1256
Upstream Blk Time (%)						26
Queuing Penalty (veh)						175
Storage Bay Dist (ft)			75		50	
Storage Blk Time (%)			1	34	33	53
Queuing Penalty (veh)			2	12	164	102

Network Summary

Network wide Queuing Penalty: 1275

AGENDA

Intersection: 1: Grand Blvd & 29th Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	L	TR
Maximum Queue (ft)	200	512	489	225	692	660	150	277	175	825	938
Average Queue (ft)	93	307	292	175	368	361	126	224	169	462	479
95th Queue (ft)	218	513	492	275	799	754	180	322	194	820	908
Link Distance (ft)		1134	1134		1483	1483		261		1465	1465
Upstream Blk Time (%)								12			
Queuing Penalty (veh)								52			
Storage Bay Dist (ft)	175			200			125		150		
Storage Blk Time (%)	0	38		39	5		22	25	18	52	
Queuing Penalty (veh)	0	25		81	8		74	30	42	123	

Intersection: 2: Grand Blvd & 30th Ave/Manito Shopping Center

Movement	EB	WB	NB	NB	SB
Directions Served	R	R	L	TR	TR
Maximum Queue (ft)	223	150	120	316	259
Average Queue (ft)	89	50	30	69	162
95th Queue (ft)	226	116	80	224	354
Link Distance (ft)	736	280		557	261
Upstream Blk Time (%)		0		0	7
Queuing Penalty (veh)		0		0	47
Storage Bay Dist (ft)			125		
Storage Blk Time (%)			0	4	
Queuing Penalty (veh)			0	2	

Intersection: 3: Grand Blvd & 33rd Ave

Movement	SB	B12
Directions Served	TR	T
Maximum Queue (ft)	430	564
Average Queue (ft)	353	424
95th Queue (ft)	546	781
Link Distance (ft)	319	557
Upstream Blk Time (%)	64	13
Queuing Penalty (veh)	428	85
Storage Bay Dist (ft)		
Storage Blk Time (%)	64	
Queuing Penalty (veh)	0	

AGENDA

Intersection: 4: Grand Blvd & 37th Ave

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	483	402	99	380	77	1272
Average Queue (ft)	256	210	32	168	62	1243
95th Queue (ft)	429	362	83	307	92	1396
Link Distance (ft)	870	832		629		1256
Upstream Blk Time (%)						29
Queuing Penalty (veh)						193
Storage Bay Dist (ft)			75		50	
Storage Blk Time (%)			1	31	29	53
Queuing Penalty (veh)			2	11	147	101

Network Summary

Network wide Queuing Penalty: 1452

AGENDA

Intersection: 1: Grand Blvd & 29th Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	L	TR
Maximum Queue (ft)	200	710	683	225	562	536	150	277	175	1011	1128
Average Queue (ft)	103	469	447	193	332	330	112	263	153	460	743
95th Queue (ft)	222	772	737	275	568	543	193	285	212	1122	1339
Link Distance (ft)		1134	1134		1483	1483		261		1465	1465
Upstream Blk Time (%)								50		4	5
Queuing Penalty (veh)								213		0	0
Storage Bay Dist (ft)	175			200			125		150		
Storage Blk Time (%)	2	60		32	13		7	66	8	23	
Queuing Penalty (veh)	5	39		67	21		23	81	18	54	

Intersection: 2: Grand Blvd & 30th Ave/Manito Shopping Center

Movement	EB	WB	NB	NB	B12	SB
Directions Served	R	R	L	TR	T	TR
Maximum Queue (ft)	138	300	150	541	74	226
Average Queue (ft)	51	209	55	283	8	70
95th Queue (ft)	118	380	148	553	71	227
Link Distance (ft)	736	280		557	319	261
Upstream Blk Time (%)		48		3	0	1
Queuing Penalty (veh)		0		11	0	9
Storage Bay Dist (ft)			125			
Storage Blk Time (%)			0	36		
Queuing Penalty (veh)			0	19		

Intersection: 3: Grand Blvd & 33rd Ave

Movement	NB	SB	B12
Directions Served	TR	TR	T
Maximum Queue (ft)	2	400	447
Average Queue (ft)	0	248	237
95th Queue (ft)	2	553	638
Link Distance (ft)	1256	319	557
Upstream Blk Time (%)		40	4
Queuing Penalty (veh)		270	26
Storage Bay Dist (ft)			
Storage Blk Time (%)		44	
Queuing Penalty (veh)		0	

AGENDA

Intersection: 4: Grand Blvd & 37th Ave

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	492	403	99	386	77	1271
Average Queue (ft)	260	193	29	168	64	1129
95th Queue (ft)	454	346	80	311	91	1529
Link Distance (ft)	870	832		629		1256
Upstream Blk Time (%)						19
Queuing Penalty (veh)						130
Storage Bay Dist (ft)			75		50	
Storage Blk Time (%)			1	31	34	52
Queuing Penalty (veh)			1	10	171	99

Network Summary

Network wide Queuing Penalty: 1268

AGENDA

Intersection: 1: Grand Blvd & 29th Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	TR	L	T
Maximum Queue (ft)	200	496	478	225	1222	1203	150	150	262	268	175	4855
Average Queue (ft)	72	270	256	201	721	676	97	96	126	149	170	2781
95th Queue (ft)	190	433	421	277	1504	1440	184	162	235	250	211	5102
Link Distance (ft)		1128	1128		1477	1477			262	262		6058
Upstream Blk Time (%)					8	3			0	1		1
Queuing Penalty (veh)					0	0			1	3		0
Storage Bay Dist (ft)	175			200			125	125			150	
Storage Blk Time (%)	0	29		72	2	16	1	6	7		35	64
Queuing Penalty (veh)	0	16		154	3	32	1	8	10		105	274

Intersection: 1: Grand Blvd & 29th Ave

Movement	SB
Directions Served	TR
Maximum Queue (ft)	4811
Average Queue (ft)	2659
95th Queue (ft)	5064
Link Distance (ft)	6058
Upstream Blk Time (%)	1
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Blvd & 30th Ave/Manito Shopping Center

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	190	294	76	56	66	75	323	327
Average Queue (ft)	76	240	26	5	7	59	248	241
95th Queue (ft)	166	367	63	31	39	104	377	392
Link Distance (ft)	725	269		557	557		262	262
Upstream Blk Time (%)		78					26	19
Queuing Penalty (veh)		0					116	85
Storage Bay Dist (ft)			125			50		
Storage Blk Time (%)				0		3	75	
Queuing Penalty (veh)				0		9	82	

AGENDA

Intersection: 3: Grand Blvd & 33rd Ave

Movement	SB	B12	B12
Directions Served	TR	T	
Maximum Queue (ft)	436	611	609
Average Queue (ft)	386	533	487
95th Queue (ft)	496	767	808
Link Distance (ft)	319	557	557
Upstream Blk Time (%)	77	54	22
Queuing Penalty (veh)	579	204	82
Storage Bay Dist (ft)			
Storage Blk Time (%)	74		
Queuing Penalty (veh)	0		

Intersection: 4: Grand Blvd & 37th Ave

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	573	503	99	550	75	1271
Average Queue (ft)	281	230	28	266	67	1258
95th Queue (ft)	496	402	78	479	89	1319
Link Distance (ft)	870	832		629		1256
Upstream Blk Time (%)				1		34
Queuing Penalty (veh)				0		266
Storage Bay Dist (ft)			75		50	
Storage Blk Time (%)			0	43	42	51
Queuing Penalty (veh)			1	15	240	110

Network Summary

Network wide Queuing Penalty: 2395

AGENDA

Intersection: 1: Grand Blvd & 29th Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	200	1079	1038	225	1513	1497	150	281	3469	3465
Average Queue (ft)	118	754	730	219	1017	982	117	267	1860	2017
95th Queue (ft)	242	1218	1197	252	1786	1751	187	276	3673	3802
Link Distance (ft)		1140	1140		1489	1489		262	4885	4885
Upstream Blk Time (%)		8	8		28	17		54		
Queuing Penalty (veh)		0	0		0	0		282		
Storage Bay Dist (ft)	175			200			125			
Storage Blk Time (%)	1	74		88	4		11	63		
Queuing Penalty (veh)	2	52		189	7		42	91		

Intersection: 2: Grand Blvd & 30th Ave/Manito Shopping Center

Movement	EB	WB	NB	NB	B12	SB
Directions Served	R	R	L	TR	T	TR
Maximum Queue (ft)	413	308	150	661	316	279
Average Queue (ft)	219	266	60	543	147	239
95th Queue (ft)	497	368	161	782	387	355
Link Distance (ft)	737	281		557	319	262
Upstream Blk Time (%)		81		37	10	20
Queuing Penalty (veh)		0		197	50	155
Storage Bay Dist (ft)			125			
Storage Blk Time (%)			0	57		
Queuing Penalty (veh)			0	34		

Intersection: 3: Grand Blvd & 33rd Ave

Movement	NB	SB	B12
Directions Served	TR	TR	T
Maximum Queue (ft)	448	442	573
Average Queue (ft)	107	399	541
95th Queue (ft)	466	432	684
Link Distance (ft)	1256	319	557
Upstream Blk Time (%)		80	26
Queuing Penalty (veh)		615	200
Storage Bay Dist (ft)			
Storage Blk Time (%)	14	76	
Queuing Penalty (veh)	0	0	

AGENDA

Intersection: 4: Grand Blvd & 37th Ave

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	527	494	99	520	75	1271
Average Queue (ft)	291	254	28	264	67	1262
95th Queue (ft)	490	469	78	473	89	1271
Link Distance (ft)	870	832		629		1256
Upstream Blk Time (%)		0		0		37
Queuing Penalty (veh)		0		0		286
Storage Bay Dist (ft)			75		50	
Storage Blk Time (%)			1	44	46	52
Queuing Penalty (veh)			4	16	258	111

Network Summary

Network wide Queuing Penalty: 2591

AGENDA

Intersection: 1: Grand Blvd & 29th Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	L	TR
Maximum Queue (ft)	200	943	930	225	1516	1494	150	278	175	4055	4080
Average Queue (ft)	124	689	672	219	1050	1018	137	261	168	2248	2337
95th Queue (ft)	247	1226	1202	256	1802	1764	178	303	199	4363	4513
Link Distance (ft)		1134	1134		1483	1483		261		7111	7111
Upstream Blk Time (%)		16	16		26	14		38			
Queuing Penalty (veh)		0	0		0	0		197			
Storage Bay Dist (ft)	175			200			125		150		
Storage Blk Time (%)	1	69		89	3		44	26	26	64	
Queuing Penalty (veh)	1	48		192	6		171	37	67	167	

Intersection: 2: Grand Blvd & 30th Ave/Manito Shopping Center

Movement	EB	WB	NB	NB	B12	SB
Directions Served	R	R	L	TR	T	TR
Maximum Queue (ft)	321	278	148	600	182	277
Average Queue (ft)	145	169	57	322	36	239
95th Queue (ft)	329	350	152	684	186	355
Link Distance (ft)	736	280		557	319	261
Upstream Blk Time (%)		33		10	2	17
Queuing Penalty (veh)		0		55	10	138
Storage Bay Dist (ft)			125			
Storage Blk Time (%)			0	33		
Queuing Penalty (veh)			1	19		

Intersection: 3: Grand Blvd & 33rd Ave

Movement	NB	SB	B12
Directions Served	TR	TR	T
Maximum Queue (ft)	140	433	574
Average Queue (ft)	26	389	530
95th Queue (ft)	234	483	722
Link Distance (ft)	1256	319	557
Upstream Blk Time (%)		79	25
Queuing Penalty (veh)		601	191
Storage Bay Dist (ft)			
Storage Blk Time (%)	3	75	
Queuing Penalty (veh)	0	0	

AGENDA

Intersection: 4: Grand Blvd & 37th Ave

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	566	508	99	554	76	1272
Average Queue (ft)	305	260	29	277	68	1261
95th Queue (ft)	514	453	84	487	88	1293
Link Distance (ft)	870	832		629		1256
Upstream Blk Time (%)				1		36
Queuing Penalty (veh)				0		280
Storage Bay Dist (ft)			75		50	
Storage Blk Time (%)			1	47	49	52
Queuing Penalty (veh)			4	16	274	112

Network Summary

Network wide Queuing Penalty: 2587

AGENDA

Intersection: 1: Grand Blvd & 29th Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	L	TR
Maximum Queue (ft)	200	1164	1145	225	1134	1110	150	278	175	4470	4434
Average Queue (ft)	122	897	875	216	729	710	103	267	140	2512	2691
95th Queue (ft)	249	1344	1331	260	1427	1396	193	275	219	4906	4773
Link Distance (ft)		1134	1134		1483	1483		261		4788	4788
Upstream Blk Time (%)		27	28		10	5		61		9	9
Queuing Penalty (veh)		0	0		0	0		319		0	0
Storage Bay Dist (ft)	175			200			125		150		
Storage Blk Time (%)	1	77		76	7		5	71	9	27	
Queuing Penalty (veh)	2	54		164	12		20	103	24	69	

Intersection: 2: Grand Blvd & 30th Ave/Manito Shopping Center

Movement	EB	WB	NB	NB	B12	SB
Directions Served	R	R	L	TR	T	TR
Maximum Queue (ft)	332	300	150	670	358	275
Average Queue (ft)	140	267	66	608	272	204
95th Queue (ft)	332	344	171	753	461	363
Link Distance (ft)	736	280		557	319	261
Upstream Blk Time (%)		81		65	34	12
Queuing Penalty (veh)		0		345	180	91
Storage Bay Dist (ft)			125			
Storage Blk Time (%)			0	68		
Queuing Penalty (veh)			1	41		

Intersection: 3: Grand Blvd & 33rd Ave

Movement	NB	SB	B12
Directions Served	TR	TR	T
Maximum Queue (ft)	1038	430	573
Average Queue (ft)	527	375	494
95th Queue (ft)	1267	518	775
Link Distance (ft)	1256	319	557
Upstream Blk Time (%)	3	74	20
Queuing Penalty (veh)	13	559	154
Storage Bay Dist (ft)			
Storage Blk Time (%)	51	72	
Queuing Penalty (veh)	0	0	

AGENDA

Intersection: 4: Grand Blvd & 37th Ave

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	604	500	99	548	77	1272
Average Queue (ft)	312	272	27	287	69	1255
95th Queue (ft)	550	545	78	541	85	1330
Link Distance (ft)	870	832		629		1256
Upstream Blk Time (%)	0	3		5		34
Queuing Penalty (veh)	0	0		0		267
Storage Bay Dist (ft)			75		50	
Storage Blk Time (%)			1	48	47	50
Queuing Penalty (veh)			3	17	269	107

Network Summary

Network wide Queuing Penalty: 2814

AGENDA

Market Analysis

A

Market Analysis

Spokane Grand Boulevard

Leland Consulting Group
March 2020

AGENDA

Table of Contents

Introduction

This market analysis is part of a larger Grand Boulevard Transportation and Land Use Study being undertaken by the City of Spokane to evaluate Grand Boulevard along a Study Area extending from 27th to 39th Avenues.

Much of that effort is devoted to exploring opportunities for transportation, safety, and aesthetic improvements to that stretch of Grand Boulevard, potentially including changes to streetscaping, bike/ped amenities, traffic engineering, etc.

This market analysis component is included to evaluate the area's redevelopment potential and study how private sector changes to the built environment might best complement any transportation infrastructure recommendations to further Comprehensive Plan goals.

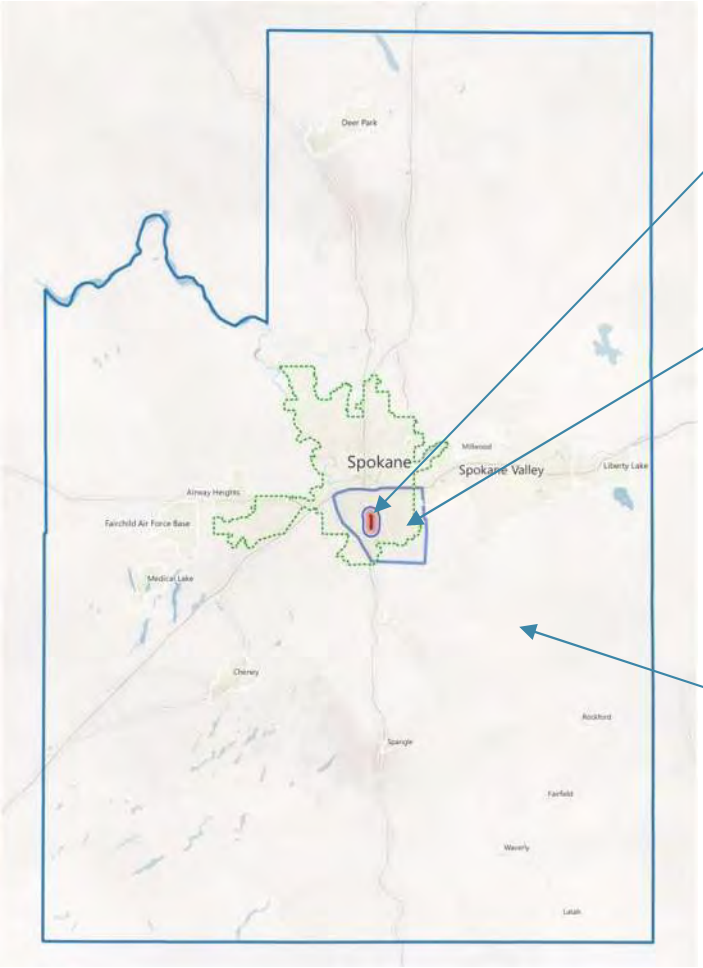
The report, in fact, provides evidence for favorable market conditions, with ample residential and retail demand to support infill development in the Study Area.

Existing land use policy for the area appears to be well-suited to accommodate desirable development forms (although could perhaps be better promoted).

Finally, the contemplated investments in street improvements should help attract developer and property owner interest in redevelopment – leading by example in moving towards a vision of a more vibrant, resident- and business-friendly street.

Comparison Geographies

This market study involves analysis of demographic and economic conditions at varying geographic scales. This is an overview of those boundaries, along with a rationale for their use and notes on some exceptions.



Geography	Use and Rationale	Notes
Grand Boulevard Study Area or "Study Area"	This half-mile buffer around the stretch of Grand Blvd. from 27th to 39th Streets is the immediate project vicinity and area most directly affected by any street improvements or changes to zoning or policy.	
South Side Market Area or "Market Area"	The Market Area is drawn to encompass areas of likely competition for private sector land uses such as new housing or retail. In the case of retail (and dining), the boundary is also intended to cover a "catchment area" of neighborhoods most likely to patronize Study Area establishments. Although political boundaries can sometimes be used to define a market area, it is important to respect factors such as drive times and major physical divides such as rivers and highways. In this case, the boundary extends into unincorporated Spokane County to the southeast, in recognition that those households have few convenient, available shopping alternatives.	The main provider of commercial real estate data, Costar, tracks indicators such as inventory, rents and vacancy rates for pre-defined submarkets with different boundaries that do not exactly match the Market Area used here. Costar's "South Spokane" retail submarket excludes unincorporated areas to the southeast of Spokane. For their multifamily reports, Costar (confusingly) uses a different boundary for their South Spokane submarket – excluding South Hill
Spokane County	Spokane County serves as the Metropolitan Statistical Area (MSA) boundary for Census (and other) data sources and is a suitable area for regional comparisons.	Some sources consider "metro Spokane" to extend eastward to include Coeur d'Alene and the rest of Kootenai County, ID. While those households may indeed support regional retail elsewhere in Spokane County, they are not considered as competition or demand sources in this analysis.

Data Sources

This report draws on data from a variety of public and private sources. The table below describes the primary data providers and how they are used in this report.

Source	Description	Use in this Report
U.S. Census	All key demographics including population, age, income, household composition, household spending potential, and housing characteristics are based on U.S. Census decennial counts and American Community Survey (ACS) inter-year sampled surveys. The Census division's Longitudinal Employment and Household Dynamics (LEHD) tool provides information on employment and commuting flows using jobs data based on both place-of-work and place-of-residence data for major industry sectors at the Census block level.	• Historical population growth • Employment estimates • Commuter flows and mapping *Note: LEHD mapping data is very fine-grained geographically but does include some "blurring" to preserve confidentiality (moving a small portion of locations to adjacent blocks and/or changing industry classification to similar categories)*
ESRI	Leading subscription-based demographics data provider. Most ESRI data is Census-based but is projected forward to current year estimates using proprietary models and supplementary data sources.	• Current-year demographic comparisons • Projected growth by age group • Household spending potential retail sales estimates by category
Costar	Leading subscription-based commercial real estate data provider, selling individual property information and aggregated market statistics.	• Multifamily and retail inventory mapping • Multifamily and retail rent, vacancy and activity statistics by market and submarket
Spokane County Assessor, City of Spokane	GIS and tabular parcel data, including information on size, values, land use and zoning.	Land use, land utilization and property value mapping.

DEMOGRAPHICS & EMPLOYMENT

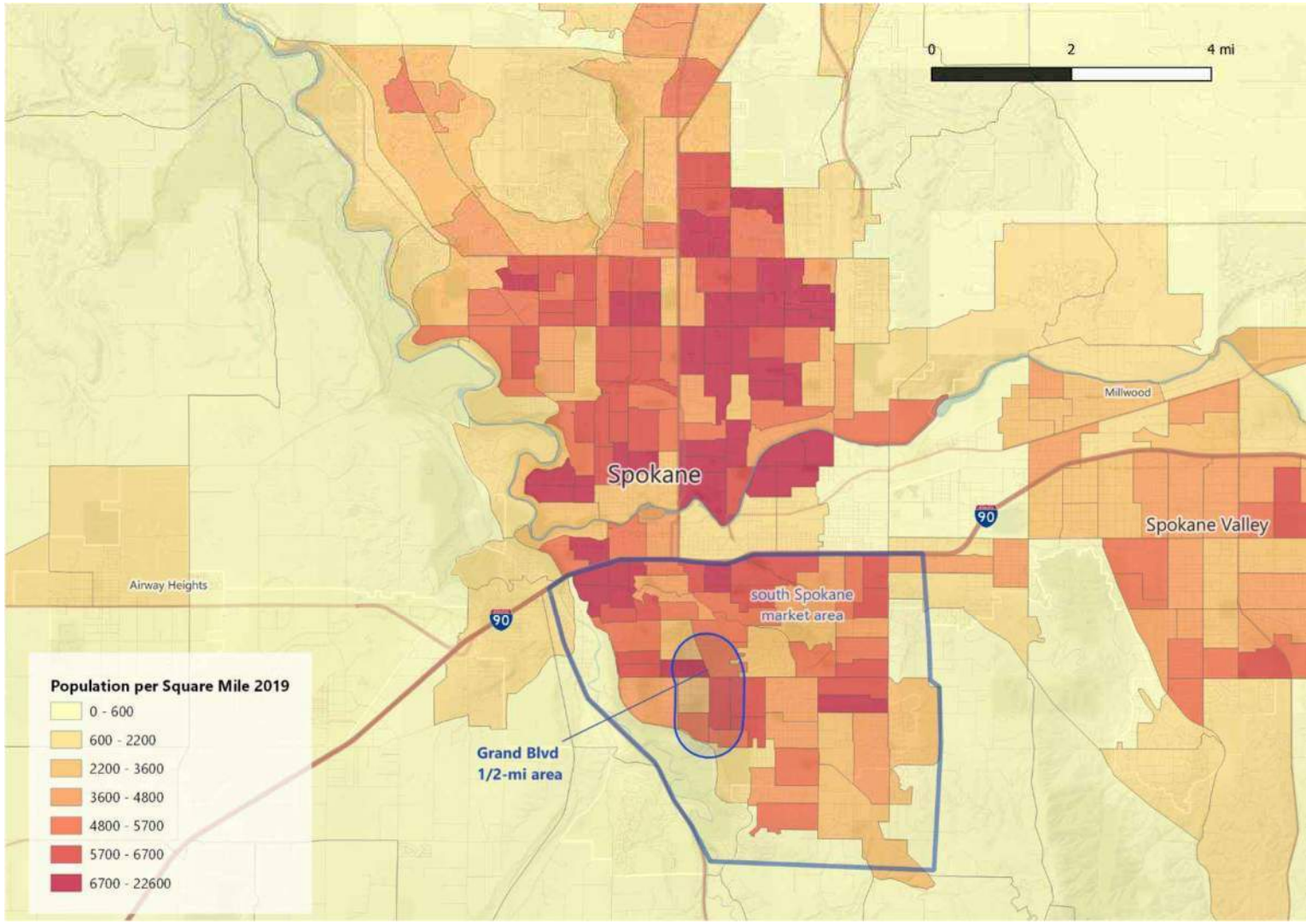
Population Density

Regional population density is highly concentrated within the Spokane and Spokane Valley municipal boundaries.

The Market Area is less dense than the city's northeast quadrant, but pockets of population density (5,000+ per square mile) are scattered throughout the south side.

Resident population is limited by topography along the city's southwest side, just beyond the Study Area – posing a natural limit on the household catchment than can support Grand Boulevard retail.

Source: US Census-based estimates from ESRI

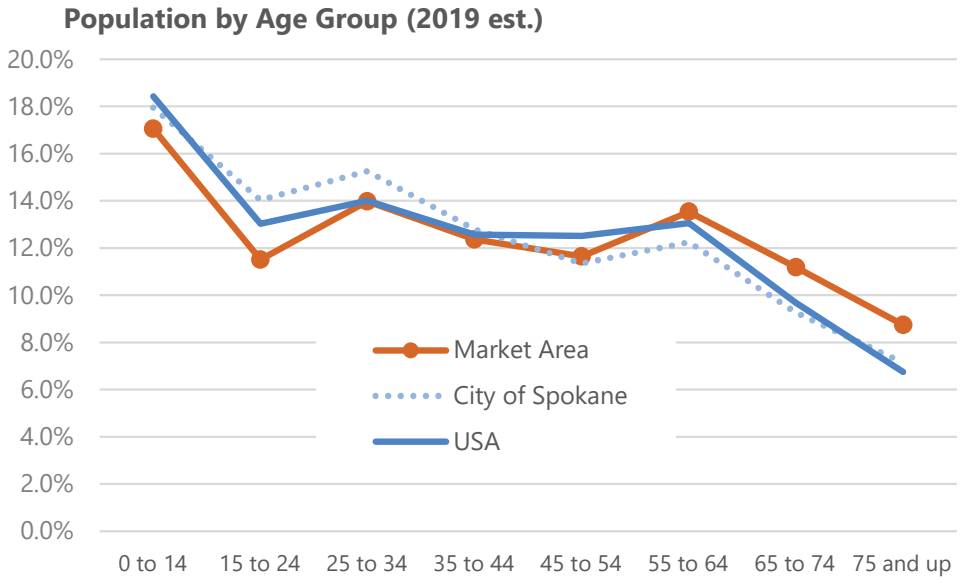


	Study Area 1/2-mi Area	South Spokane Market Area	City of Spokane	Spokane County	USA
Population					
2000	6,637	64,777	198,140	417,939	281,421,906
2010	6,650	67,644	209,770	471,221	308,745,538
2019	7,044	73,486	227,620	528,652	332,417,793
Annual Growth Rate					
2000 to 2010	0.02%	0.43%	0.57%	1.21%	0.93%
2010 to 2019	0.64%	0.92%	0.91%	1.29%	0.82%

Population by Age

All comparison areas have similar proportions of adults aged 35 to 54. The Market Area, however, skews older than the citywide, county and national comparisons, both in terms of median age and share of seniors aged 65 and up.

As the larger Baby Boomer and Millennial generational cohorts advance in age over the next five years, the Market Area may see considerable growth in residents over age 70 and age 30-45. The increase in senior population should boost demand for senior-friendly housing options throughout the region.



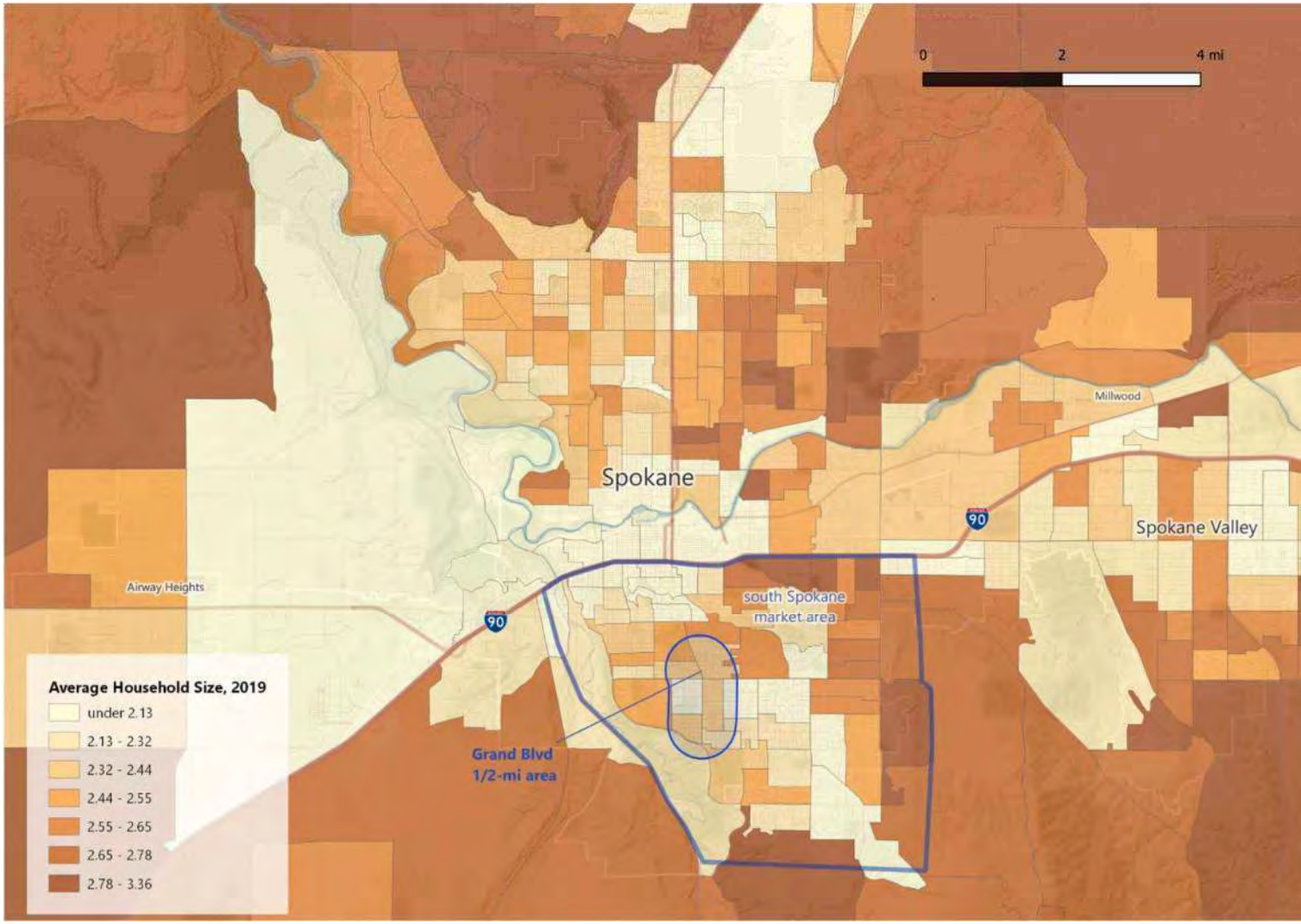
	Median Age	Age 65+
Study Area	41.3	19.5%
Market Area	40.8	19.9%
City of Spokane	37.0	16.4%
Spokane County	38.4	16.9%
USA	38.5	16.4%

Source: US Census-based estimates from ESRI

Household Sizes

Study Area households are smaller, on average, than those found on the fringes of suburban Spokane and into the county, but not as consistently small as those across central and downtown Spokane.

The broader Market Area has slightly smaller household sizes than the Study Area – both below countywide and national averages.



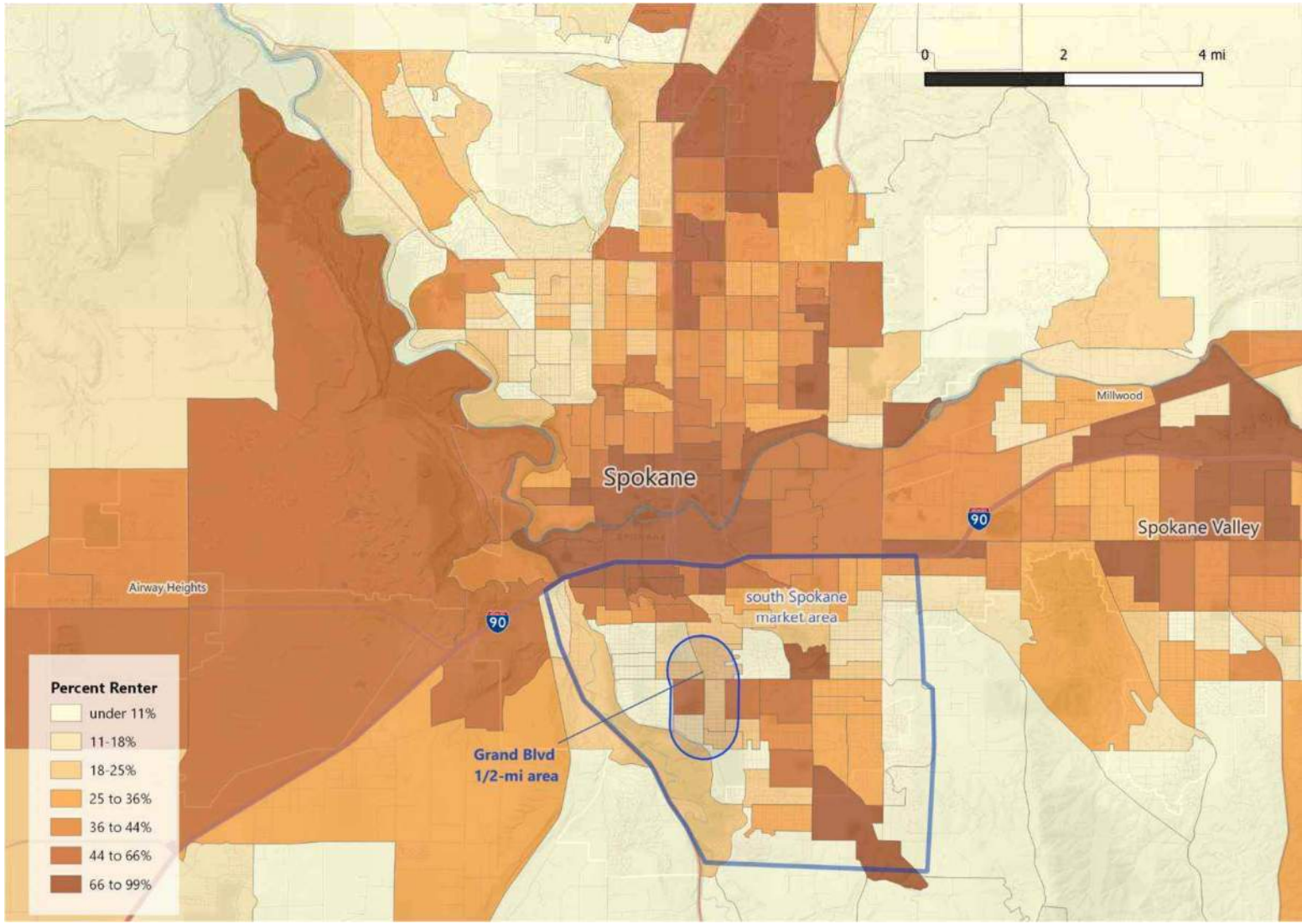
Households

	Study Area 1/2-mi Area	South Spokane Market Area	City of Spokane	Spokane County	USA
Average Household Size	2.3	2.3	2.3	2.5	2.6

Source: US Census-based estimates from ESRI

Renter Households

Housing in the Market Area and immediate Study Area is predominantly owner-occupied but does includes substantial representation of renter households, both in apartments and detached homes.



Households

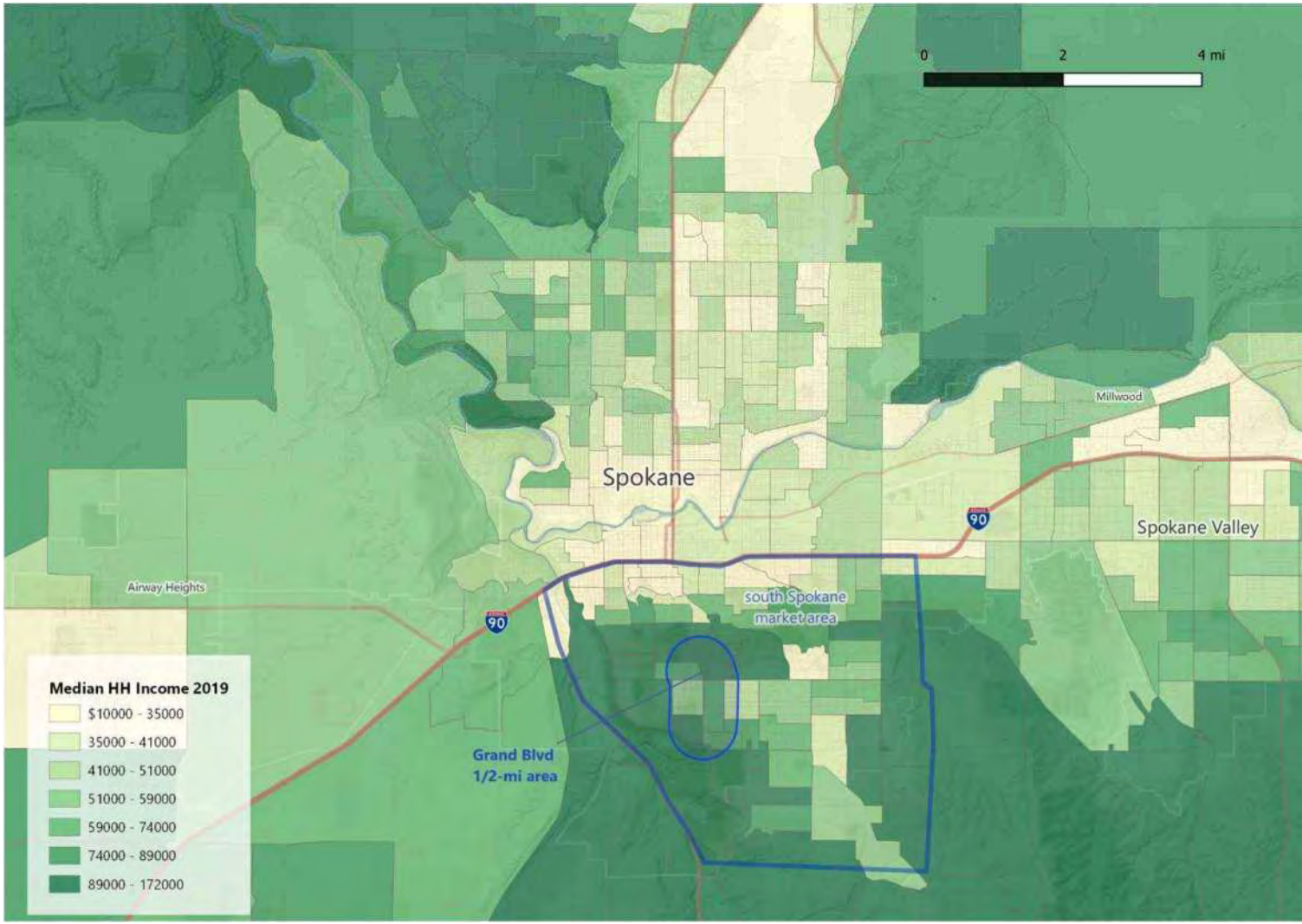
	Study Area 1/2-mi Area	South Spokane Market Area	City of Spokane	Spokane County	USA
Percent Renter	28%	39%	43%	36%	37%

Source: US Census-based estimates from ESRI

Household Incomes

Incomes in the Market Area are substantially higher than county-wide figures, which in turn are higher than those within City of Spokane overall.

Study Area incomes are higher still, with half earning over $78K and average (mean) income topping $100K, by current estimates.



Households by Income

	Study Area 1/2-mi Area	South Spokane Market Area	City of Spokane	Spokane County	USA
Median Household Income	$78,136	$61,175	$47,943	$56,227	$60,548
Average Household Income	$101,270	$86,925	$68,559	$77,749	$87,398
Per Capita Income	$44,078	$38,104	$28,749	$30,841	$33,028

Source: US Census-based estimates from ESRI

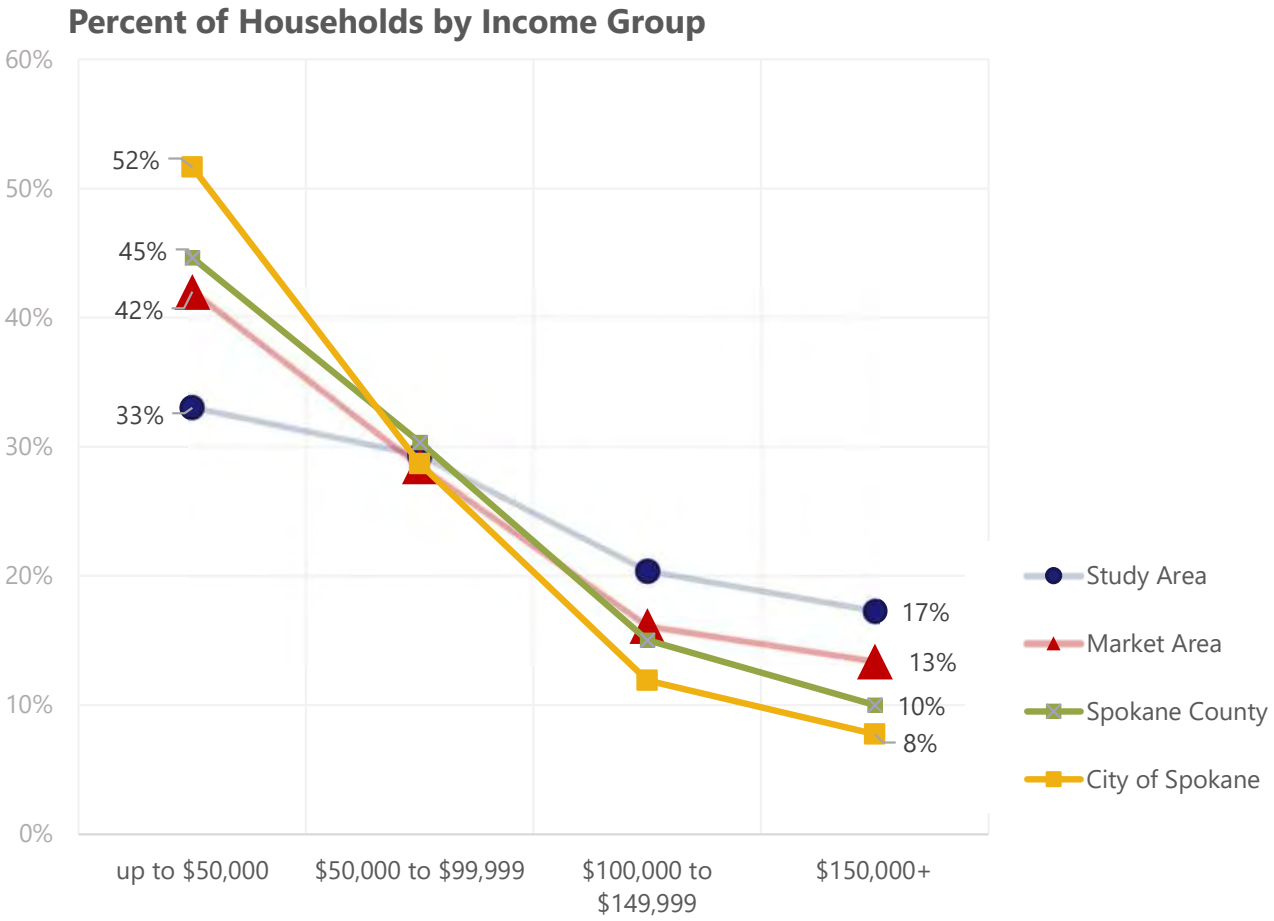
Household Incomes

This figure shows the distribution of households across income ranges for each comparison geography.

Each area has roughly 30% of households earning between $50K and $100K.

However, just one-third of Study Area households make less than $50K, while more than half of Spokane citywide households fall in that group.

Conversely, the Study Area and Market Area have higher proportions earning in the top two income groups.



Source: US Census-based estimates from ESRI

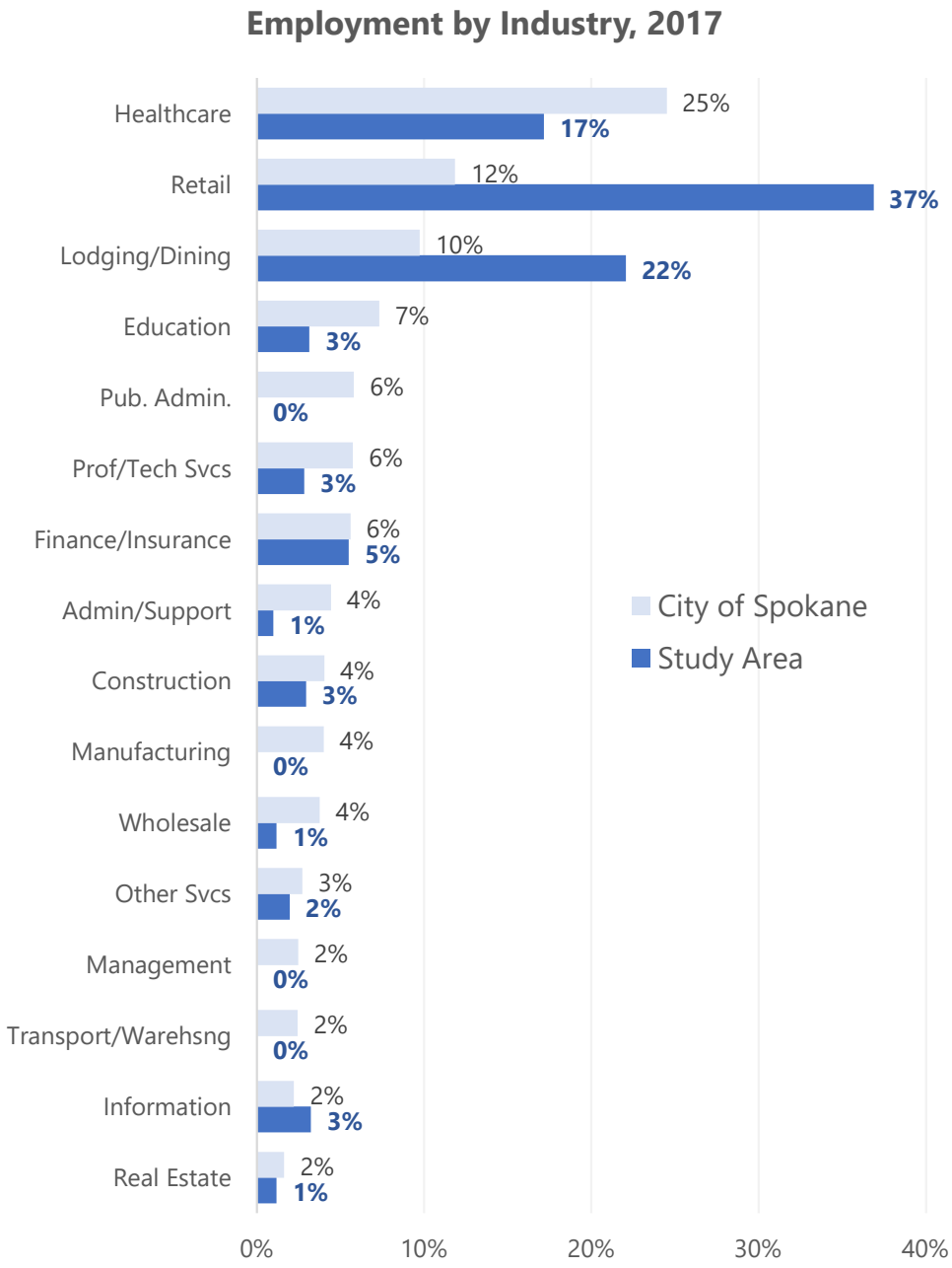
Study Area Employment Profile

Establishments within the Study Area employed just over 1,000 workers as of 2017.

Study Area jobs are almost exclusively within service industries, with 37% working in retail and 22% in food service and accommodations (mostly restaurants). Another 17% work in the healthcare industry.

There is currently a mismatch between the Study Area jobs and residents, in that its daytime workforce population tends to work in lower-wage industries, while area residents tend to have higher-paying jobs.

This presents a challenge to creating at least the possibility of a *live-work* environment. That is, without some housing that is more affordable to Grand Boulevard employees, they will always have to commute in from outside – worsening traffic and wasting time. Conversely, without some higher-paying jobs in the Study Area, local residents will always have to commute outside for work.

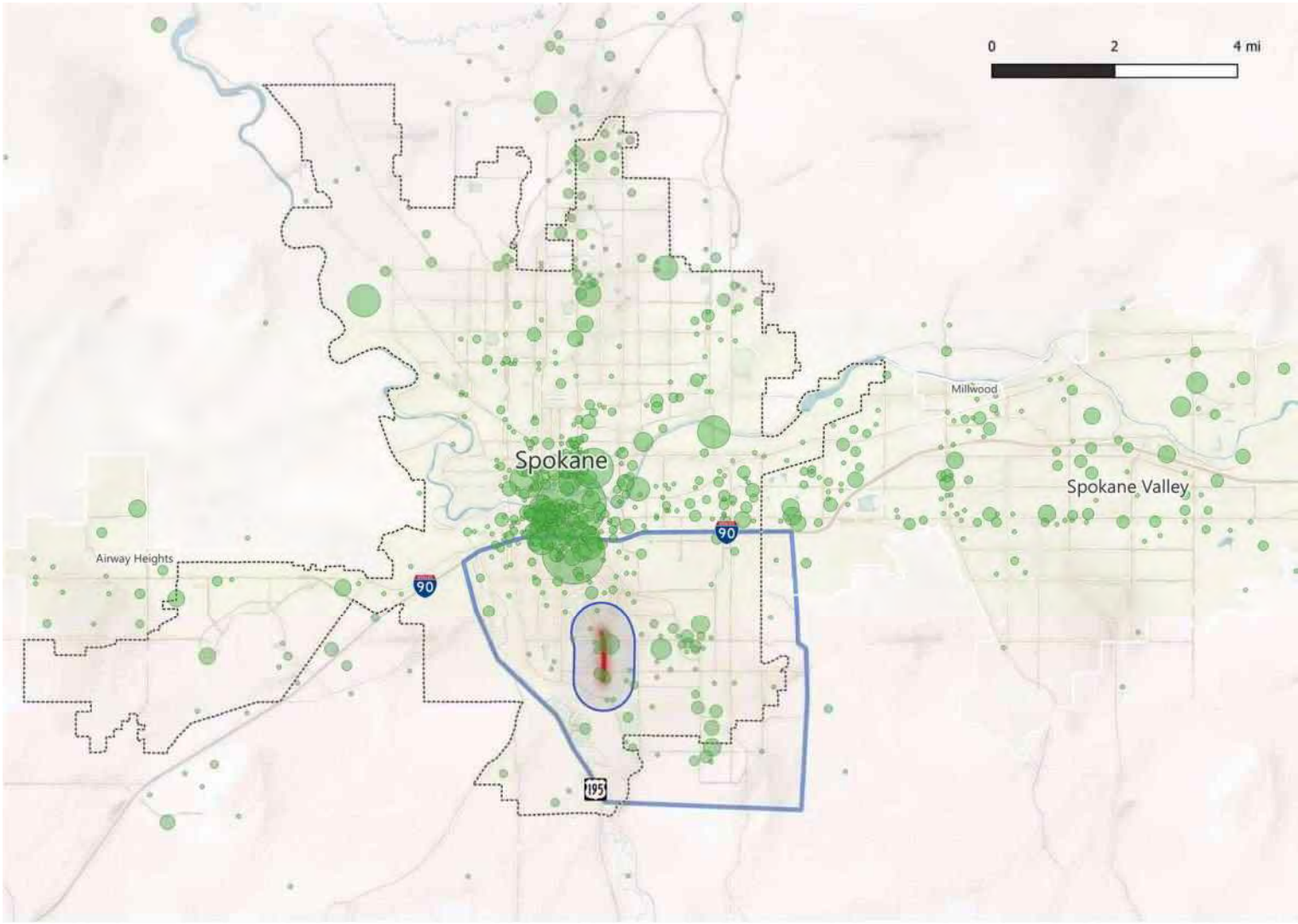


Source: US Census LEHD 2017 data (latest available)

Where do Study Area Residents Commute To?

Of the Study Area's 3,000 employed residents, less than 40 remain within the ½-mile Study Area to work each day.

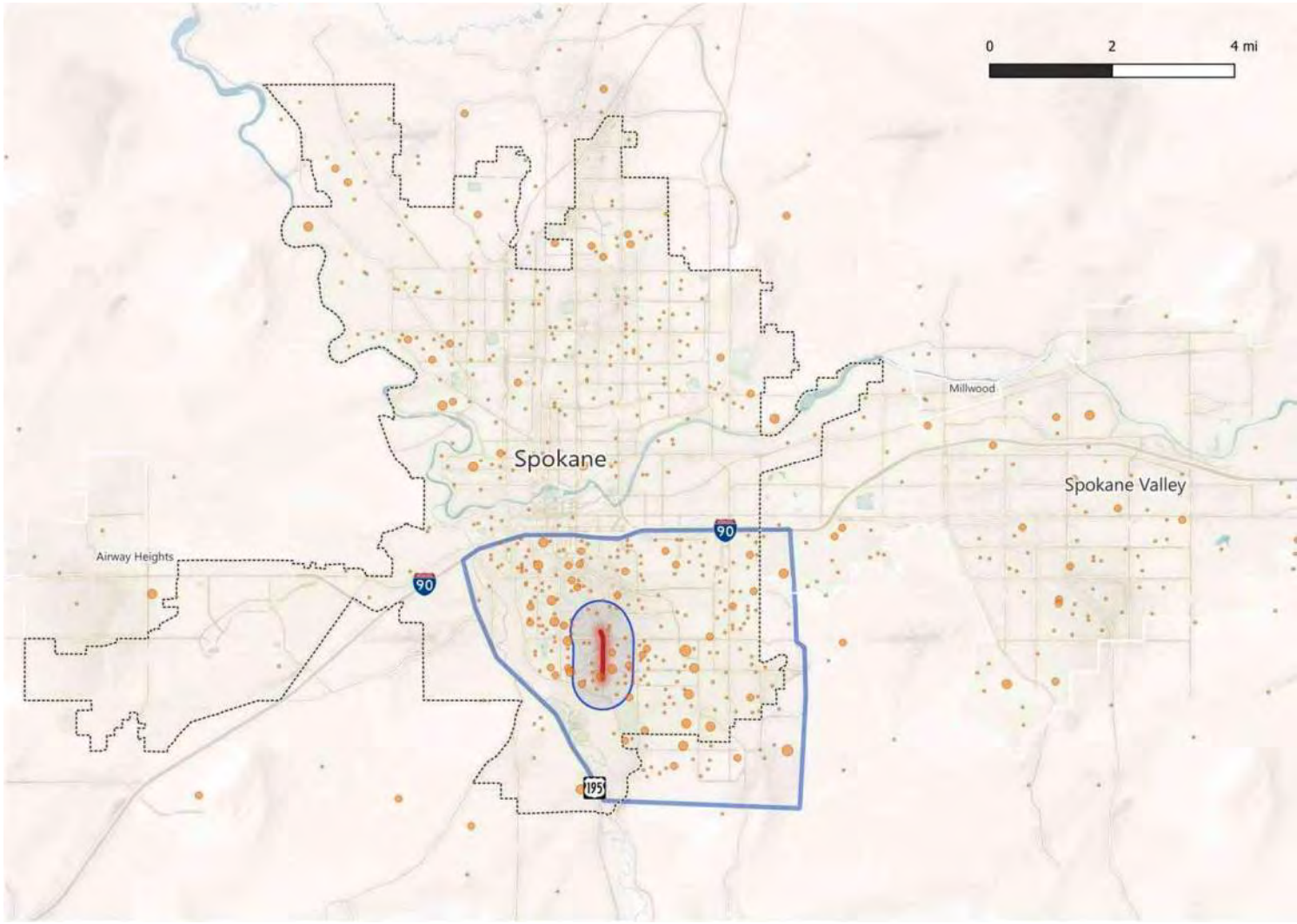
Downtown Spokane is by far the most common commute destination, with the remainder scattered throughout the city and along I-90.



Source: US Census LEHD 2017 data (latest available)

Where do Study Area Workers Commute From?

In contrast, the 1,000+ Study Area jobs are filled by residents scattered widely across the metro area. South side Market Area residents are somewhat more likely to fill Study Area jobs, but metro-wide, no more than four Study Area employees reside within any one of the region's nearly 900 Census blocks.



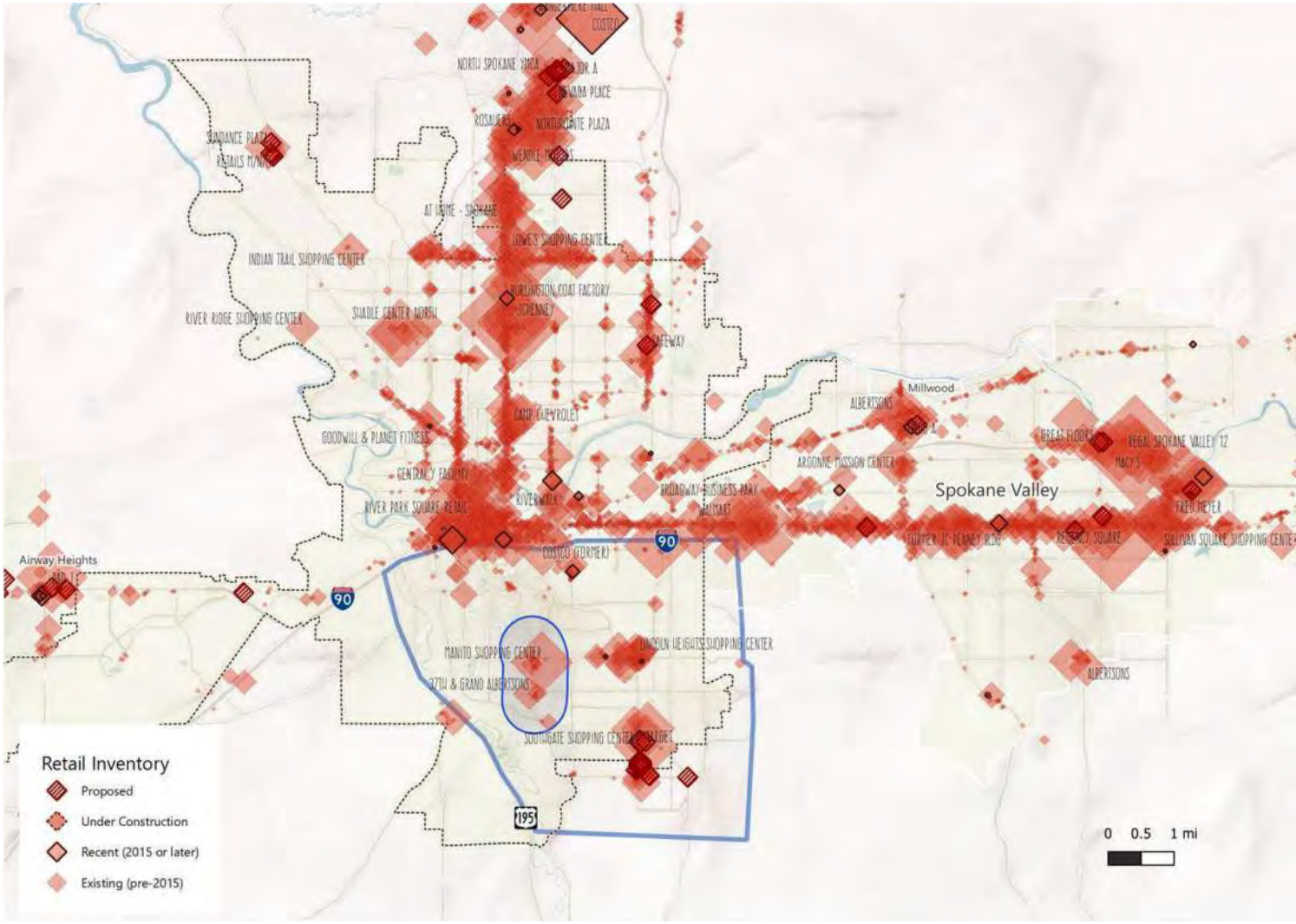
Source: US Census LEHD 2017 data (latest available)

RETAIL
SUPPLY & DEMAND

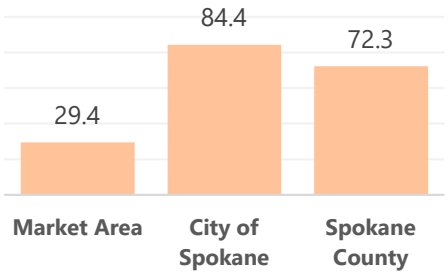
Retail Inventory

A nearly unbroken string of retail stretches from downtown Spokane to Spokane Valley along Sprague and north from the interstate well past the city limits along Division.

The standing inventory of retail in the Spokane County market is considerably unbalanced with respect to its resident population, with less than 30 square feet of retail per capita in the Market Area, versus 72 countywide and 84 for all Spokane city resident. Market rents on the south side are almost $5 per square foot per year higher than countywide average.



Retail Square Feet per Capita

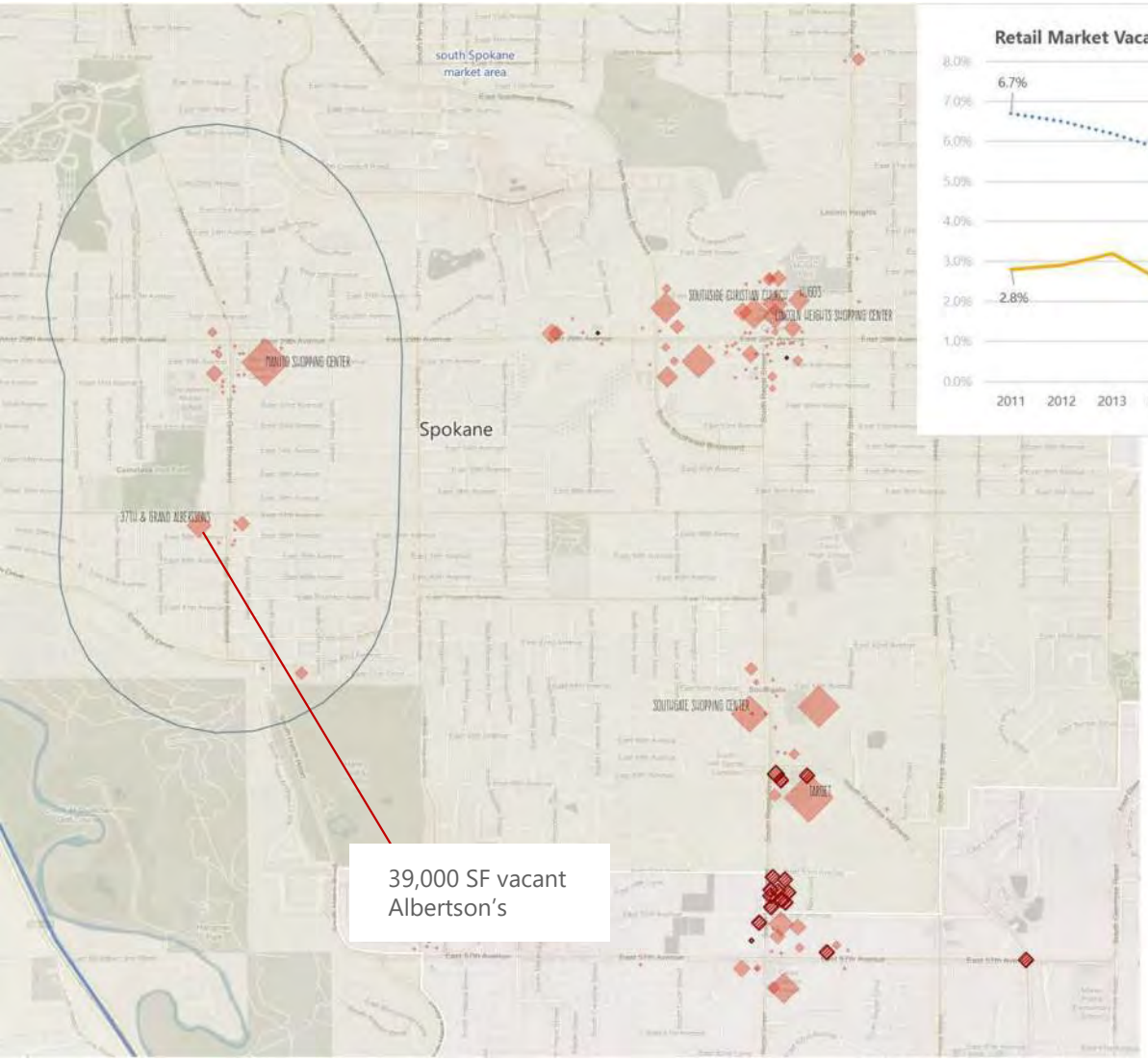


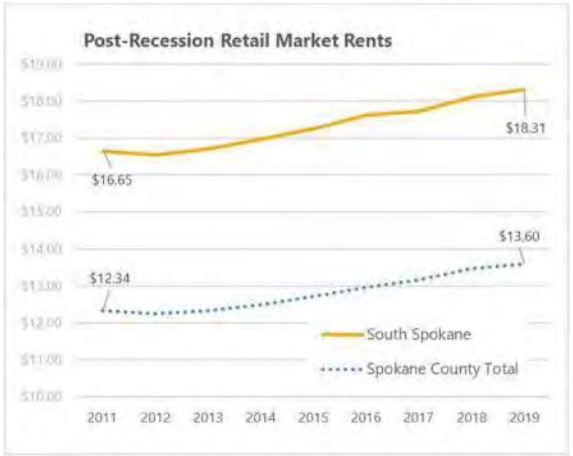
Submarket	Retail Inventory (s.f.), Q4-2019	% of County	Square Footage Built Past 12 mo.	Under Construction	Vacancy Rate	Market Rent (per s.f., per year)
Market Area	2.25 million	6%	0	0*	5.2%	$18.05
Spokane County Total	38.2 million	100%	34,000	59,200	4.3%	$13.27

**Note: early-stage construction taking place on Grand Blvd. at 31st and 32nd is not reflected in Costar retail property data pulled in November, 2019.*

Source: Costar 2019 property data

Retail Inventory (South Side Zoom)





South Spokane retail is limited to a small presence in the Study Area, including the Manito Shopping Center (Ross, Rite-Aid, Super 1 Foods).

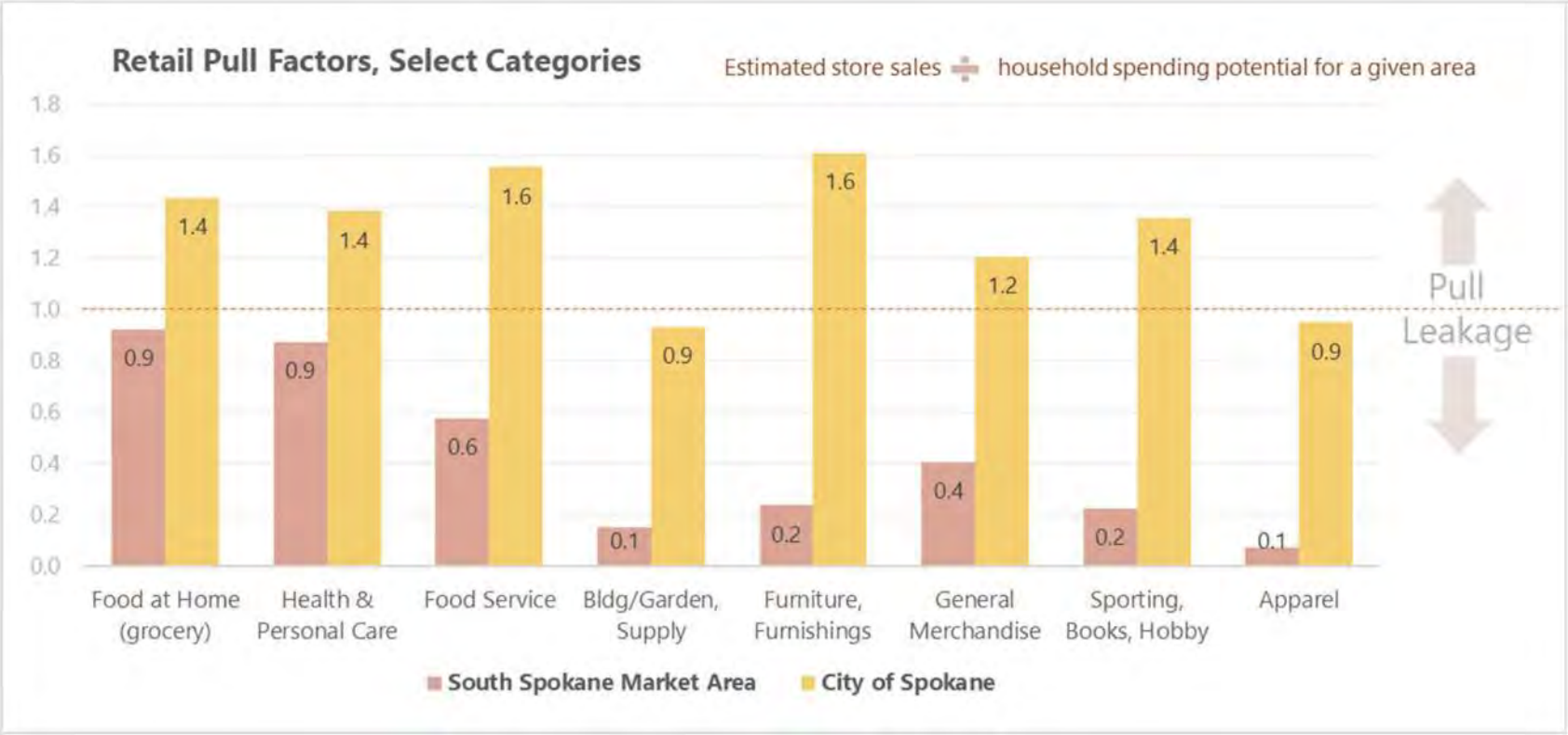
Larger concentrations are centered on Regal 1.5 miles east, with the Lincoln Heights Center (Trader Joe's, Joann, Petco) at 29th on the north and a cluster anchored by Rite-Aid, Shopko, and Target further south.

There is no truly regional retail in the Market Area, with most shopping centers being neighborhood grocery-anchored centers or somewhat larger big-box clusters. The county's malls, lifestyle centers and major club stores are all located in the north metro or to the east in Spokane Valley

Market-wide (Spokane County) retail rents have steadily climbed as vacancies have been in slow decline throughout the recovery period. The South Spokane Hill subarea has also seen rents rise in lockstep with the metro, despite more volatility in occupancy.

Source: Costar (2019 property data); and Leland Consulting Group

Retail Pull, Leakage



Measures of retail "**pull**" and "**leakage**" are based on comparing an area's household spending potential with the volume of sales actually occurring in that area.

When sales exceed resident spending potential, an area is said to be "pulling" in retail dollars from outside its boundary. When sales fall short of resident buying power, an area is "leaking" retail dollars to stores outside the area.

For all major store types except supermarkets and drugstores, Spokane's south side residents depend heavily on retail outlets (and restaurants) outside the market area, either north of the interstate or to the east in the City of Spokane Valley.

- In fact, south Spokane does not exceed the 1.0 pull factor threshold for any retail category – where an area theoretically exceeds self-sufficiency and "pulls" dollars in from non-area households.

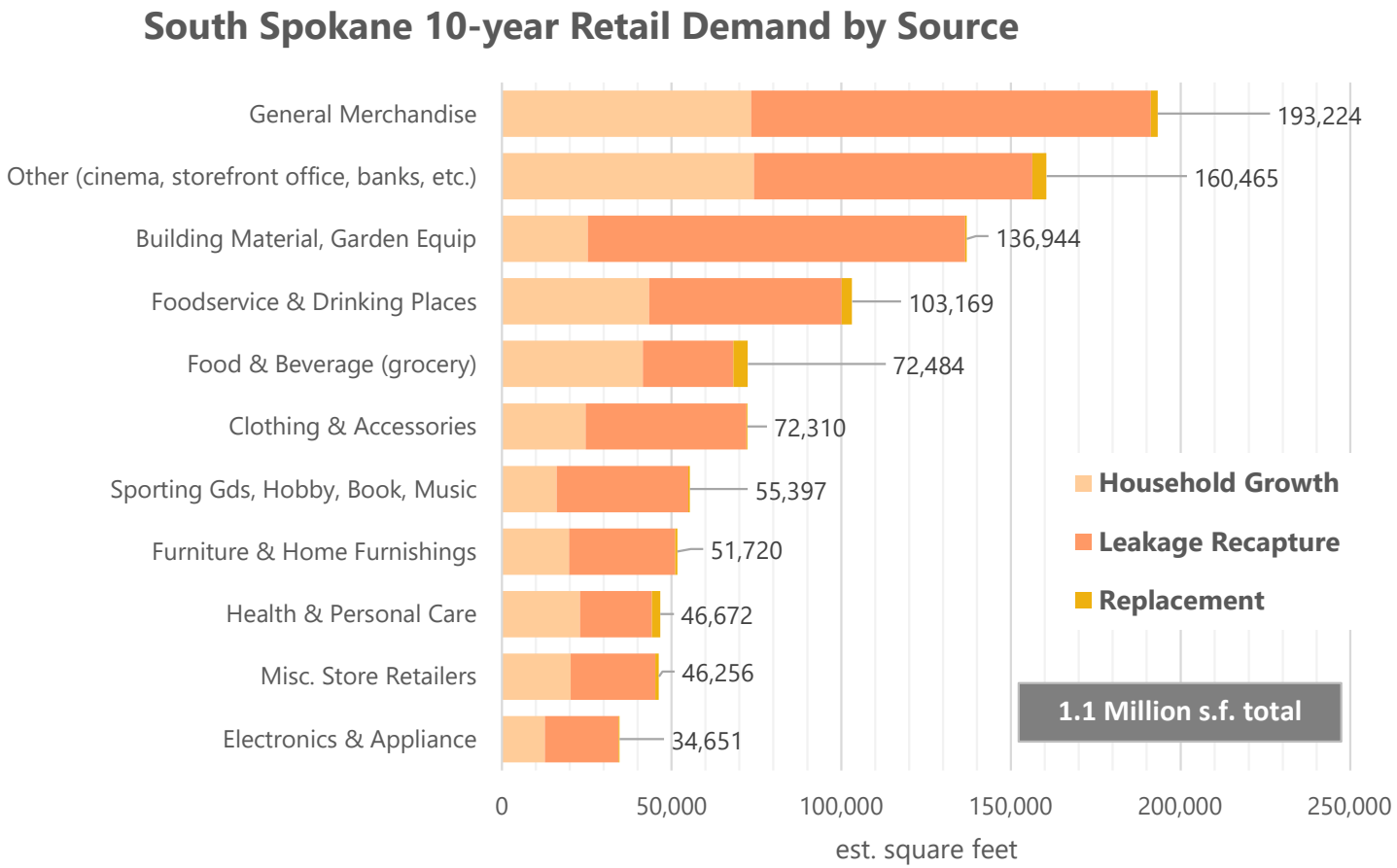
Source: ESRI (2020 report using 2017 data for retail supply/demand; and Leland Consulting Group

Market Area Retail Demand Growth

Retail demand for the Market Area is driven largely by the widespread leakage across categories, plus some additional demand due to moderate continued household growth.

In total, new retail demand for the Market Area should top 1.1 million square feet over the coming decade.

This projection is then adjusted to account for growing share of e-commerce* before estimating the attainable capture for the Grand Boulevard Study Area.



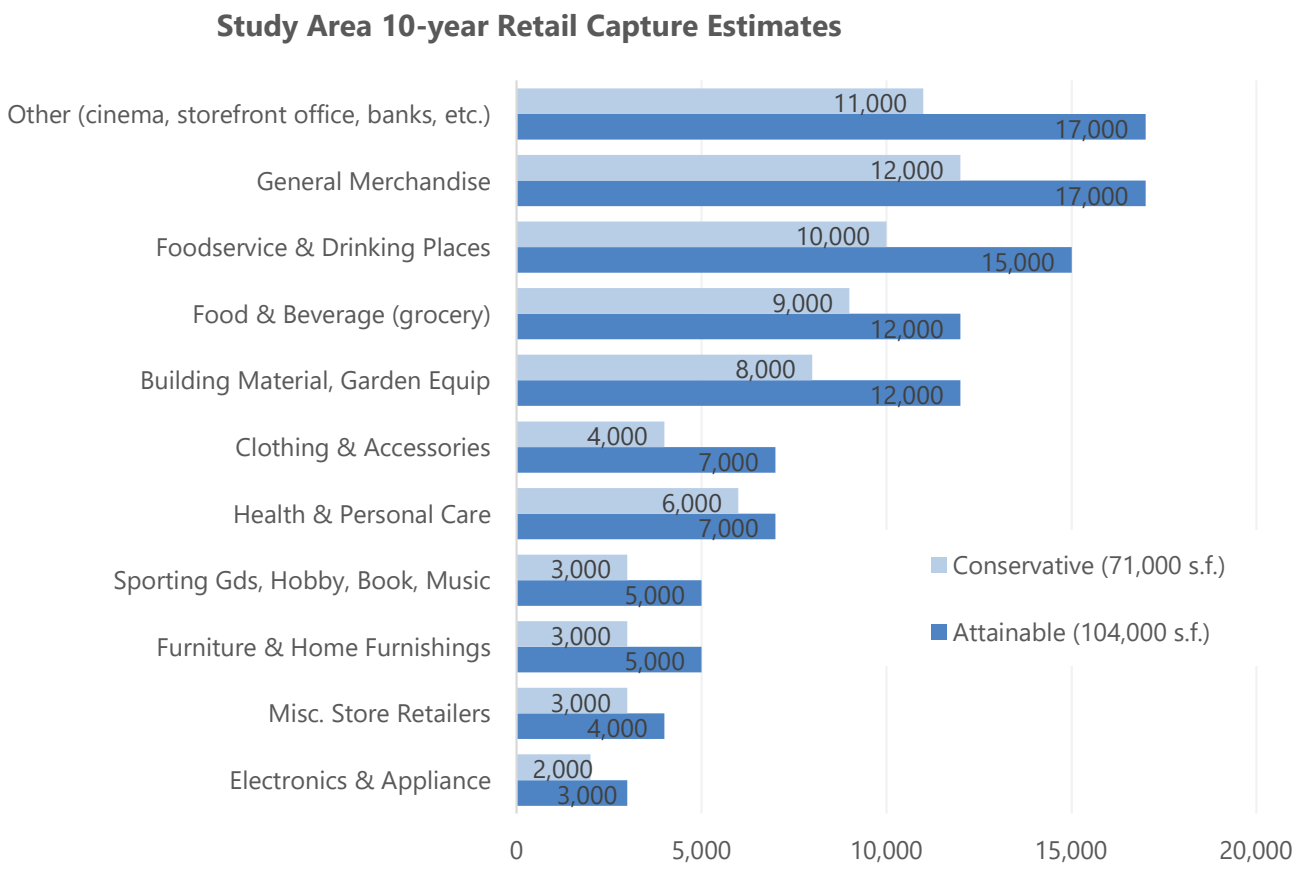
Source: Leland Consulting Group, using estimates for household expenditure and category sales from ESRI
**Note: Manual model changes to account for e-commerce are all downwards adjustments, and vary by store type.*

Estimated Attainable Capture for Grand Boulevard

At an estimated capture rate of between 10% and 15% (15-20% for grocery and drugstore categories), the Study Area could absorb approximately 71,000 to 104,000 s.f. of new Market Area retail demand over the coming decade.

At a typical retail floor area ratio (FAR) of 0.25*, this level of development would require 6.5 to 9.6 acres of land – about the size of the existing Manito Shopping Center site.

Because the largest vacant commercial parcel in the Study Area (the vacant Albertson's site at 37th) is 3.1 acres, the full capture shown here would likely be spread across multiple sites, and would require redevelopment of one or more currently occupied sites



*Floor Area Ratio for a given parcel is the building area divided by land area. So, at an FAR of 0.25, a one-story retail building would take up one-quarter of the lot, with the rest taken up by parking and landscaping.

An FAR of up to 3.0 (or even higher, with certain approved bonuses) is permitted under existing Study Area zoning – and, in fact desirable, from the standpoint of minimizing surface parking – but anything higher is very uncommon in the U.S. outside of much more urban neighborhood environments.

Source: Leland Consulting Group, using estimates for household expenditure and category sales from ESRI

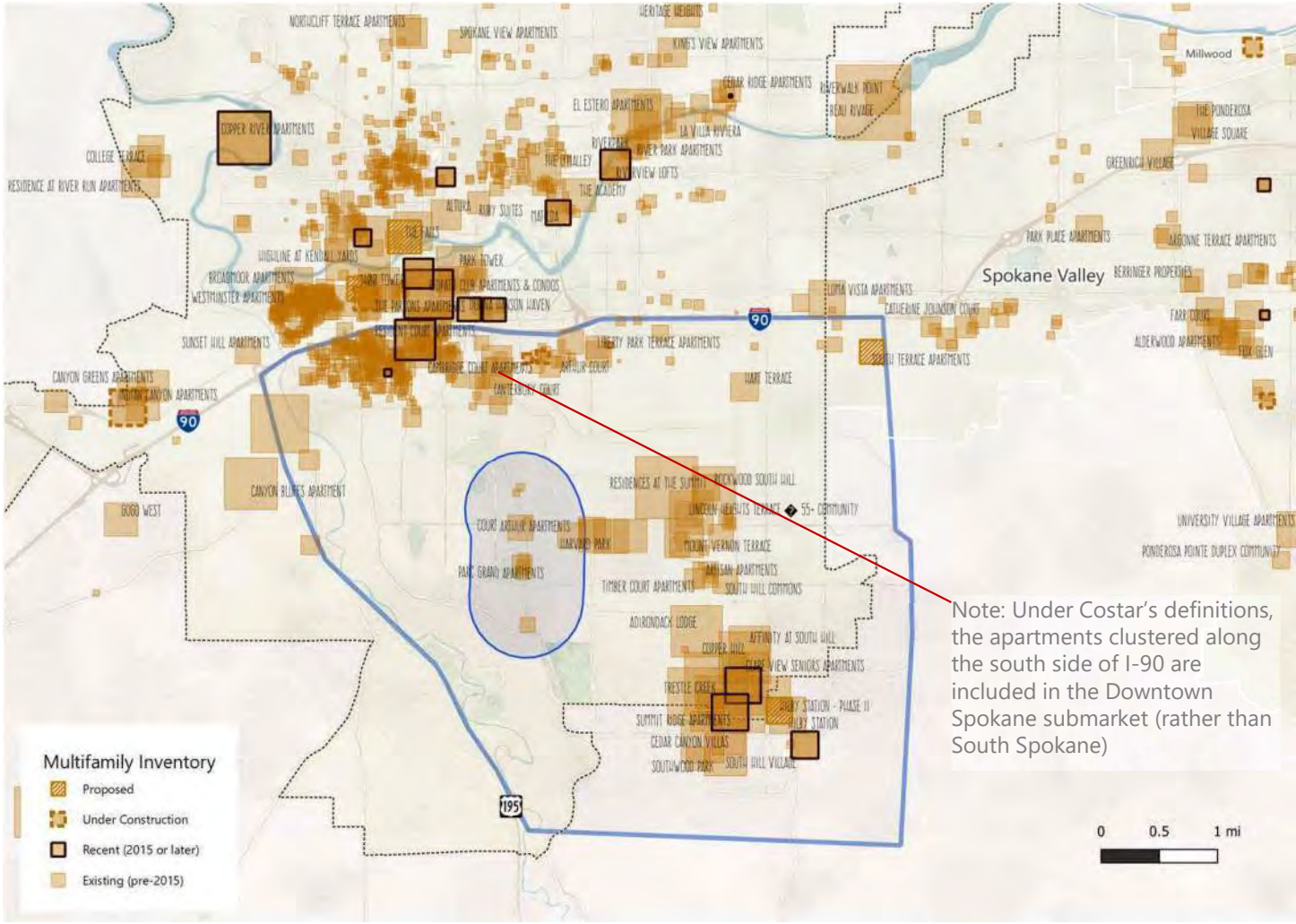
RESIDENTIAL SUPPLY & DEMAND

Apartment Inventory

South Spokane accounts for a small fraction of metro-wide multifamily inventory. Excluding the properties clustered near downtown, just 8% of countywide apartment units are in the Market Area.

Most recent and ongoing construction activity in the city of Spokane is limited to downtown and the north side. Most ongoing countywide construction activity is, in fact, taking place in Spokane Valley and across unincorporated locations.

There are several recently-completed, and at least one proposed, apartment projects within the Market Area, but all are just outside the city limits, along south Regal.



Submarket	Unit Inventory (Q4-2019)	% of County	Units Built (past 12 mo.)	Units Under Construction
Downtown Spokane	8,394	25%	32	65
North Spokane	6,745	20%	6	64
South Spokane	2,736	8%	0	0
Spokane Valley	9,904	30%	20	527
All Other Spokane County	5,593	17%	0	461
Spokane County Total	33,372	100%	58	1,117

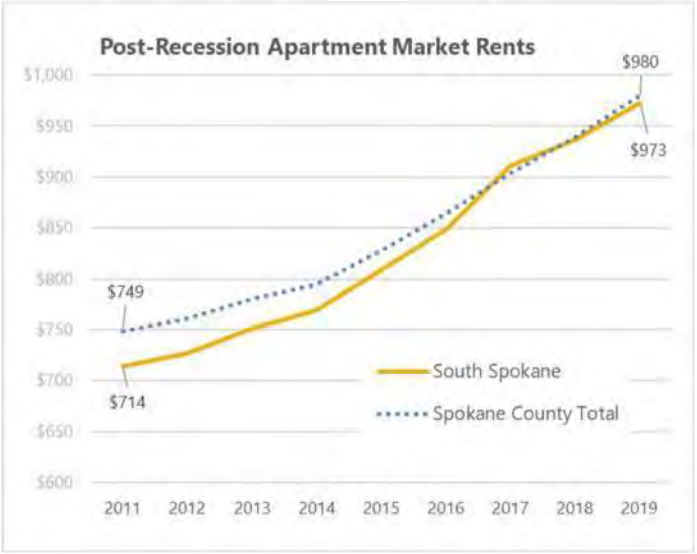
Source: Costar (2019 data; and Leland Consulting Group

Apartment Supply Conditions

South Spokane (excluding properties along I-90) has closed the gap in rents with the overall metro area over the post-recession period, with current market rents now hovering around $980 across all property types and ages.

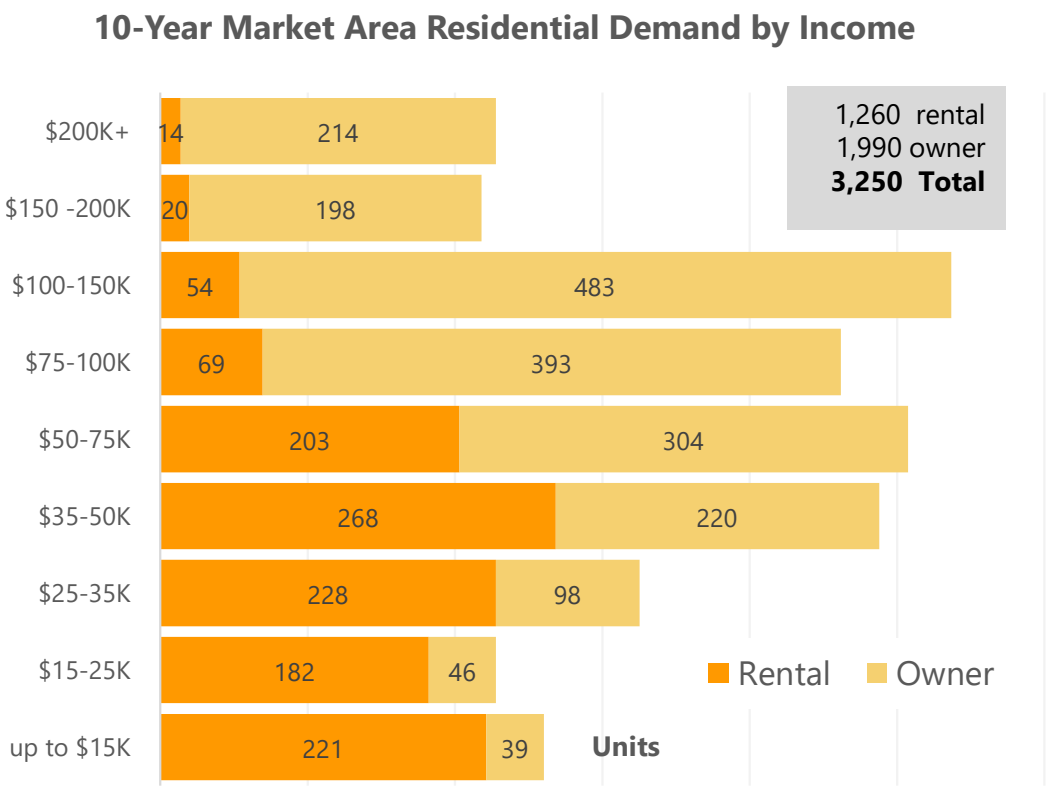
Vacancy rates in the South Spokane submarket (again, by Costar definitions) have remained lower than those across the overall market, although the gap has closed from two percentage points to just one since 2011.

Both the South Spokane submarket and the overall market are "tighter" than the 5.0% vacancy generally considered to be an equilibrium level for multifamily development (where renters and landlords have similar negotiating power and there is adequate inventory to accommodate normal turnover levels.)



Source: Costar; and Leland Consulting Group

Market Area Residential Demand



Demand for net new housing units is based on applying a 0.93% annual growth rate to the existing Market Area household count. This rate is an average of 2010-19 actual historical growth and ESRI's 2019-24 projected growth rates.

The projected 10-year growth in households is then increased by an additional 5% overall (to account for preserving a healthy market vacancy rate while allowing for a modest amount of potential demolitions and growth due to second homes) to arrive at a 10-year new unit requirement.

This total unit count is then allocated across household income categories and tenure (rent vs. own). For this analysis, we assume that the percent renting in each income group will remain constant (39%) into the forecast period. Although home ownership rates have been dropping nationally for years, most analysts are reluctant to assume additional declines as Millennials move further into prime home-ownership years.

Population by income range is assumed to remain generally constant, with moderate reductions to shares in the lowest income brackets as declining housing affordability gradually displaces some households.

Based on projected household growth alone (i.e. irrespective of any arguable pent-up demand in the multifamily rental market), the south Spokane market area should generate demand for approximately 3,250 new units per decade – apportioned across rental and ownership units as shown in the figure above.

Source: Leland Consulting Group, using historical growth rate, tenure and income distribution data from ESRI

Residential Demand & Study Area Capture Potential

Summary of Market Area Demand and Attainable 10-year Study Area Capture by Product Type

	Market Area Unit Demand*	Conservative Capture Rate	Attainable Capture Rate	10-year Study Area Absorption (low)	10-year Study Area Absorption (high)	Approx. Units Per Acre (low)	Approx. Units Per Acre (high)	Acreage Required (low)	Acreage Required (high)
Rental Apartments	1,040	10%	20%	100	210	18	30	5.6	7.0
Attached Ownership (Townhome, Condo, Plex, etc.)	290	10%	20%	30	60	15	18	2.0	3.3
Single Family Smaller Lot	567	0%	0%	0	0	10	12	0.0	0.0
Single Family Larger Lot	1,288	0%	0%	0	0	4	8	0.0	0.0
Totals*	**3,185***	**4%**	**8%**	**130**	**270**			**8**	**10**

*Totals above exclude demand from households earning below $15K

total unit demand for lowest income segment (<$15K)	*260*

Source: Leland Consulting Group, using historical growth rate, tenure and income distribution data from ESRI

The Market Area's moderate but steady growth should support development of nearly 3,500 housing units over the coming decade.

Of this, the Study Area should theoretically be able to attract approximately 130 to 270 units, as a mix of rental and attached ownership products.

However, as with retail demand and capture estimates, this absorption level – requiring some 8-10 acres – would require redevelopment of one or more larger sites currently occupied. Parcels in Manito Center are unlikely to redevelop in the coming decade, at least, due to profitable ongoing operations and stringent lease restrictions.

Note: Single family detached demand for the Market Area is shown in the table above but this analysis assumes that only multifamily development is under consideration for the Study Area.

It is possible that some modest level of housing demand could be absorbed within the Study Area single family neighborhoods in the form of accessory dwelling units (ADUs).

The City has recently updated its code related to infill development, making it easier to construct attached units, cottages, and other small format homes. Although not a use-by-right in Low Density Residential zones, ADUs that meet development standards do not require a conditional use permit. For details, see:

https://my.spokanecity.org/business/residential/development-options/

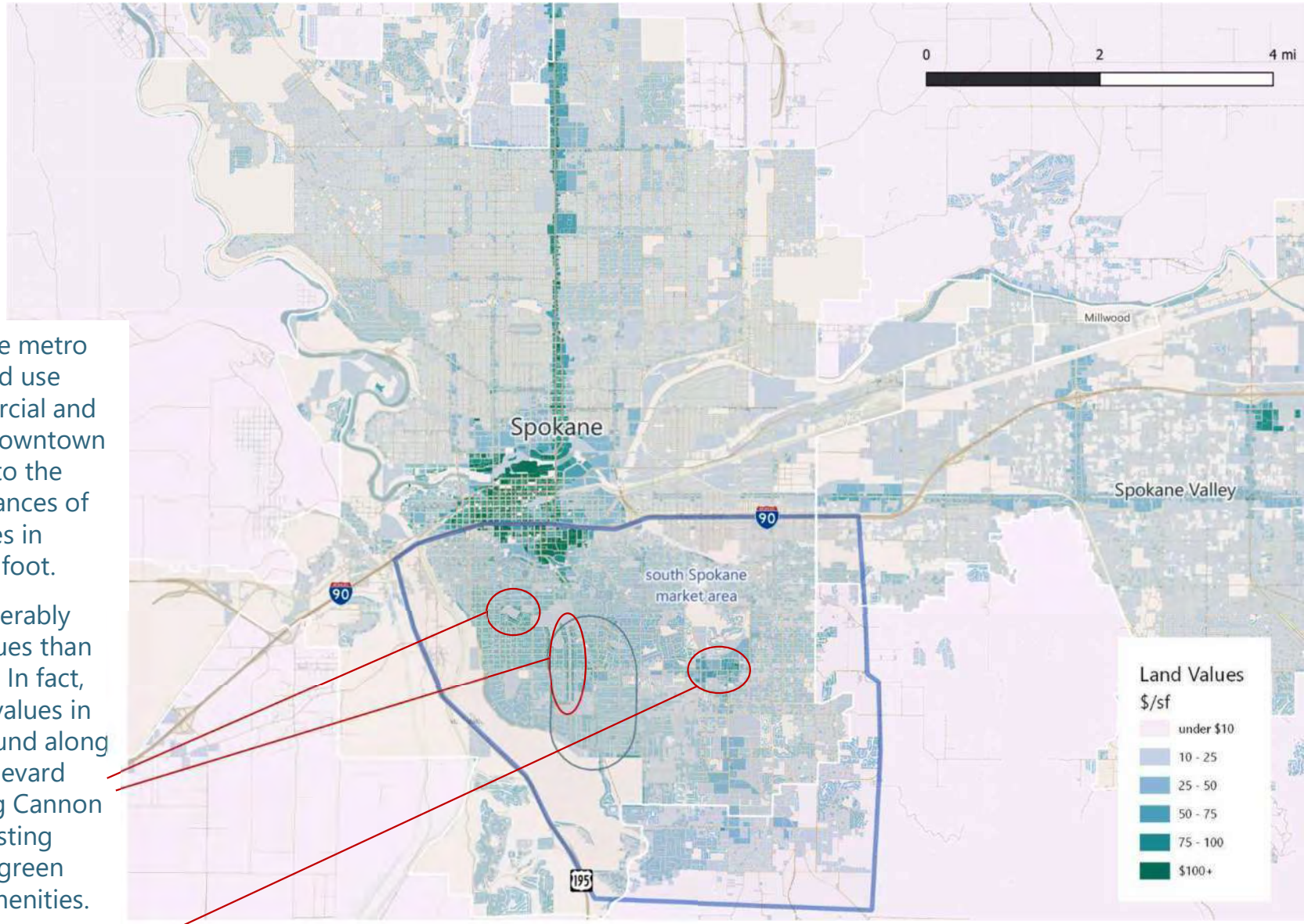
POLICY & LAND USE

Regional Land Values

Land values in the Spokane metro area are closely tied to land use designations, with commercial and denser mixed-use zones downtown and along Division Street to the north having the only instances of (Assessor-appraised) values in excess of $100 per square foot.

South Spokane has considerably higher residential land values than can be found to the north. In fact, some of the highest land values in the market area can be found along the tree-lined Manito Boulevard and on the streets fronting Cannon and Manito Parks – suggesting market responsiveness to green and pedestrian-friendly amenities.

Values for commercial parcels along 29th Avenue between Southeast Boulevard and Regal Street also reach above $75/sf.



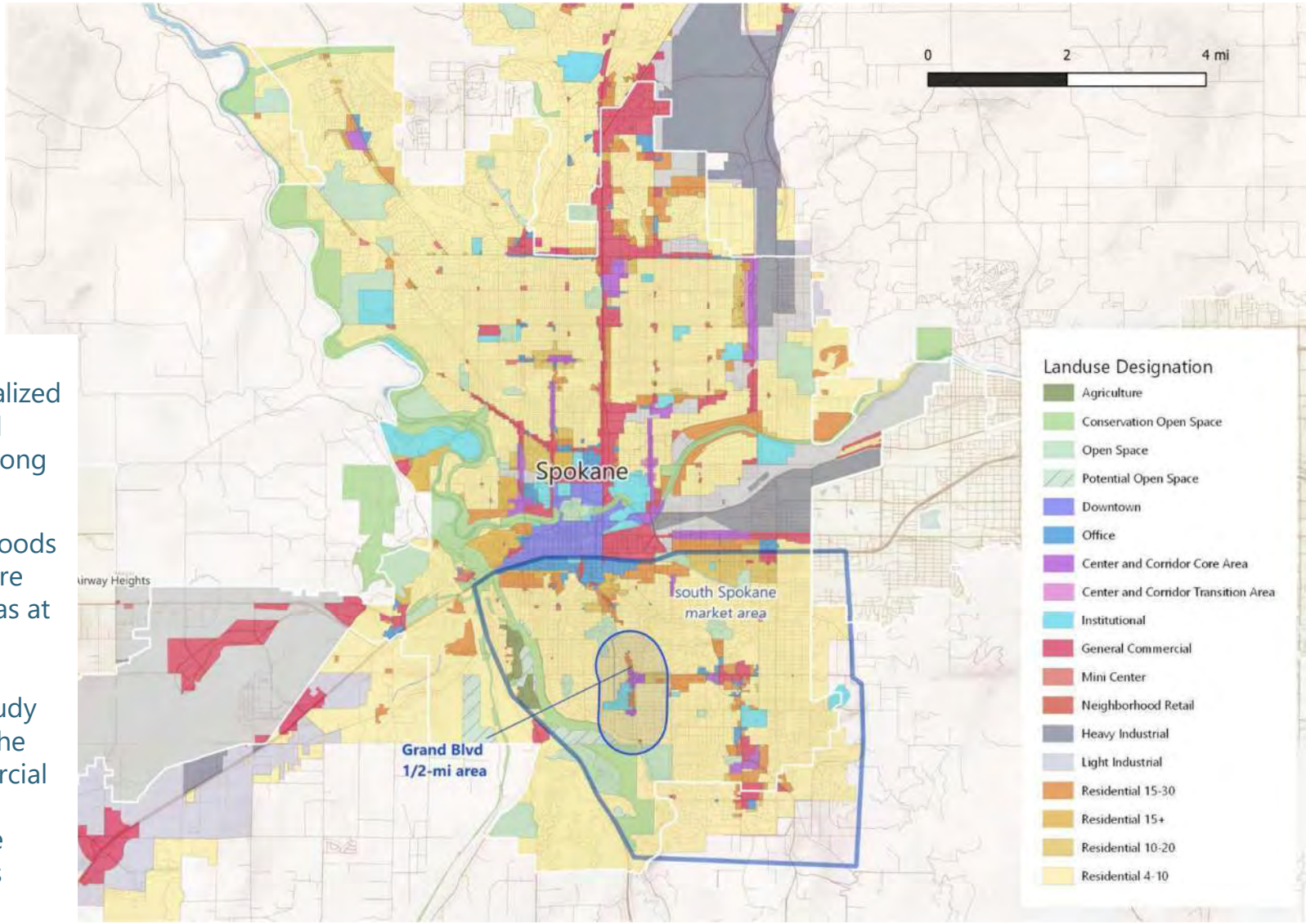
Source: Spokane County Assessor; and Leland Consulting Group

Metro Land Use Context

Spokane area land use is dominated by a strongly centralized downtown and the commercial spine extending to the north along Division.

Whereas residential neighborhoods on the north side of Spokane are punctuated by commercial areas at arterial corners, the expanse of single-family development surrounding the Study Area Study Area is relatively unbroken to the south, west and north. Commercial and other higher-value development on the south side (apart from the I-90 corridor) is largely concentrated along the Regal corridor, 1.5 miles east of Grand Boulevard.

Growth potential to the west of the south Spokane market area is largely constrained by topography (bluff and Latah Creek).

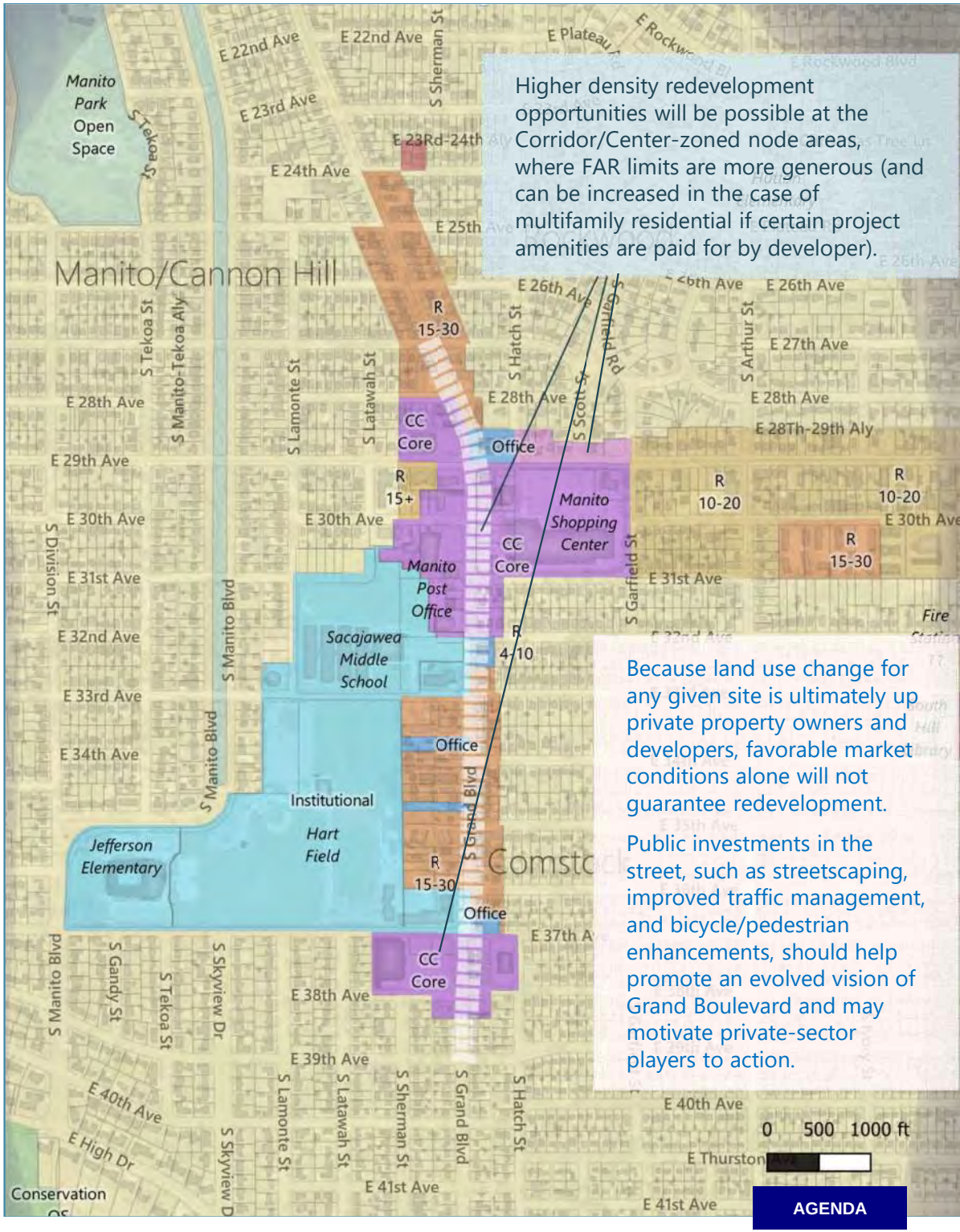


Source: Spokane County Assessor and City of Spokane

Study Area Land Use Designations

A zoom in to the half-mile Study Area shows a relatively narrow corridor of commercial and institutional (primarily school-related) uses surrounded by low density residential neighborhoods.

Some medium-high density residential uses are also found interspersed, limited to areas fronting or within a block of either Grand or 30th Avenue. These are limited to older (typically 70s-construction) apartments and the occasional multi-unit building amid lots simply being used for single-family residences – the predominant pattern along the upzoned portions of 29th and 30th Avenues. These areas represent capacity for increased residential density in theory, but redevelopment is likely to be fragmented and opportunistic, depending on prevailing market conditions and land purchase prices.

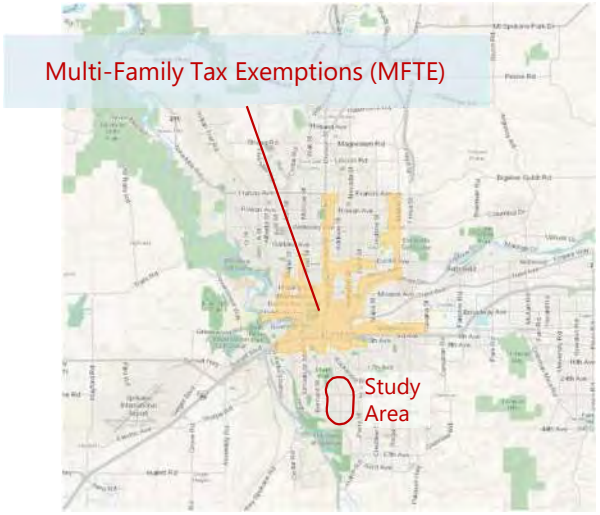


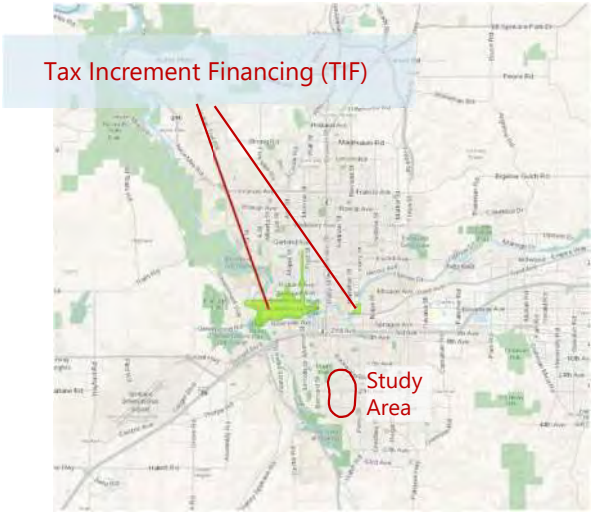
Source: Spokane County Assessor, City of Spokane, and Leland Consulting Group

Economic Development Incentives

The Study Area has higher median income and market forces that are generally functioning to meet area demand for both residential and commercial development. As such, the area is not included in major City and federal economic incentive program boundaries.

- The City's Multi-Family Tax Exemption (MFTE) program, which provides substantial property tax savings over 8 to 12 years for newly constructed multi-unit residential projects, is currently limited to designated areas with lower median incomes.
- Because Tax Increment Financing districts in Washington are designed to address conditions of economic instability or stagnation, the Study Area is an unlikely candidate for TIF designation and related incentives.
- The federal Opportunity Zone program is specifically targeted to low income Census tracts.





Source: City of Spokane mapping

REDEVELOPMENT OPPORTUNITIES

Land Utilization

Examining the patterns in existing land utilization can be an important step in screening for potential redevelopment opportunities.

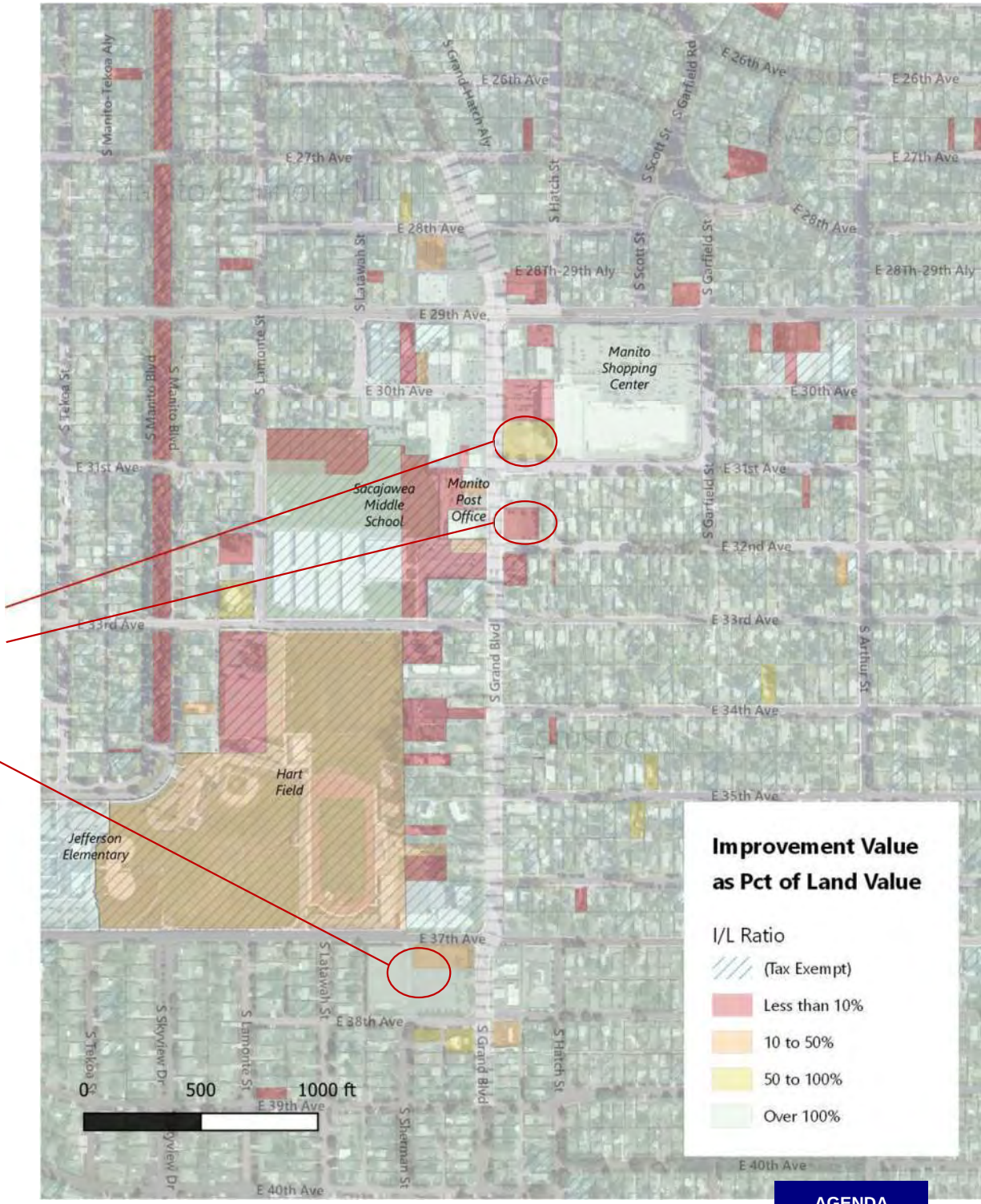
Parcels with low improvement (building) values relative to the underlying land value are flagged here in yellow, orange, or red shading.

Note that most shaded land in the Study Area also has blue hash markings – indicating that the land is tax-exempt. These public and charitable/religious uses are typically not redevelopment candidates.

In the northern half of the Study Area, only the parcels at the northeast corners of Grand & 31st (0.8 acres) and Grand & 32nd (0.5 acres) are immediately redevelopable.

The largest immediate redevelopment opportunity is near the southern end of the Study Area the 3.1 acre vacant Albertsons parcel.

With just 5% tenant vacancy (per Costar), the Manito Shopping Center does not currently appear to be functionally underutilized (although it is not well-configured to serve as a pedestrian-friendly shopping destination).



Source: Spokane County Assessor, 2019 parcel data

Exploring Residential Infill Redevelopment Feasibility in Spokane

The City of Spokane recently commissioned a study of market feasibility for multifamily infill development focused on Spokane's South Perry Center and Monroe Street Corridor (Comprehensive Plan designations).

That analysis, documented the *City of Spokane Housing Feasibility Analysis*, December 2019, by Community Attributes, Inc. (CAI), used market data on rents and product types, together with input from area developers, to generate assumptions for land values, construction costs, attainable rents and other proforma inputs. Those inputs were used to derive likely financial outcomes, including residual land value and an expected internal rate of return (IRR).

Their report found that, based on a minimum 15% IRR threshold, three-story walk-up apartments had the greatest feasibility potential in most contexts but that scenarios involving structured parking or mixed-use products were less likely to be feasible.

Scenarios involving the use of Multifamily Tax Exemptions (MFTEs) were much more likely to pencil out as feasible (or have more attractive IRRs) than those which did not.

Substituting structured parking for surface parking also reduced IRRs to below-acceptable levels for 3-story walk-up models.

The model is sensitive to inputs for land acquisition costs and attainable rents, so major shifts in those could alter IRR performance in practice.

Infill Redevelopment Prospects

Using proforma worksheets created by CAI for that 2019 analysis, Leland Consulting Group examined preliminary feasibility for infill redevelopment of three major vacant sites (3.1-acre vacant Albertson's, plus the 0.8-acre and 0.5-acre corner lots at 31st and 32nd) identified in the previous slide.

For the three-story walk-up property type, multifamily development at those sites appear feasible when using Assessor-appraised values as the assumed land purchase price, even without MFTE incentives.

- For the 0.5-acre parcel at the northeast corner of 32st Ave and Grand, the CAI model yields a 21% IRR (assuming a 25-unit project achieving rents of $1,250)
- For the 0.8-acre parcel one block to the north, the model shows an attainable IRR of 18% for a 42-unit project.
- If converted to residential, the former Albertsons parcel(s) shows acceptable returns (15.1% IRR) under the CAI model assumptions for 162 three-story walk-up units, even after assuming a $3.1M site purchase price and tear-down of the existing 39,000 square foot structure.

Feasibility for the above sites appeared much more questionable for mixed-use or ownership townhome scenarios, with IRRs dipping below 5% for all three sites in the CAI models.

- The Albertson's site would be simpler and likely more profitable to redevelop as another grocery store, keeping and rehabbing the existing building, but the CAI model was not set up to examine retail-only proforma scenarios.

Examples of smaller-lot attached housing on Grand Blvd.

Conclusions & Strategic Considerations

The Grand Boulevard Study Area lies within a market context of favorable income demographics and modest but steady residential growth.

Together with the significant undersupply of retail south of I-90, this creates an environment of healthy residential and retail demand for the Market Area, with a diminishing supply of land to satisfy that demand.

The estimated residential and retail Market Area demand is more than adequate to support unsubsidized redevelopment of the limited supply of vacant zoned parcels in the Study Area.

- At conservative capture rates, we estimate approximately 130 to 270 new multifamily units (primarily rental) could be absorbed in the Study Area, along with approximately 70,000 to 100,000 SF of neighborhood-serving retail space.

Unless the Manito Shopping Center decides to embark on a major redevelopment, near-term (0-5 year) infill activity will likely be limited to a handful of relatively small infill sites in the Study Area.

Given the existing suburban auto-oriented development pattern in the Study Area, there is much to be gained in terms of quality of life and safety by making street improvements and adding ped-friendly amenities.

Opportunistically adding increased residential density and reconfiguring existing retail to help define street edges and forge walk/bike connections would both help to further that goal.

Conclusions & Strategic Considerations (continued)

Existing zoning along Grand Boulevard is relatively generous in terms of densities, relative to what developers (either retail or residential) are likely to consider for the area, suggesting that local policy is not a significant constraint to redevelopment here.

The three largest available sites are formerly commercial/retail uses fronting Grand Boulevard. Because of the limited retail supply in the Market Area relative to its population and spending power, conversion of those sites to retail would be simpler for developers and would serve an evident local need.

- However, redevelopment as multifamily residential of one or more of the sites would offer advantages of providing additional activation to the street and providing new spending support for existing retail and dining on Grand.
- Redevelopment of any sort on the Albertson's site (though more expensive than adaptive re-use) would allow for better configuration of buildings relative to the street front.

Because of its higher income profile, no major development incentives are available in the Study Area, leaving developers to rely mainly on an unsubsidized profit calculus to drive land assembly and rehab or scrape/rebuild decisions.

- Adding new units to low- and middle-income areas is an obvious and direct route to combating the city's growing housing affordability problem; however, the creation of new residential inventory *anywhere* in the city will actually help shift the supply/demand equation in favor greater affordability.
- While the Study Area may not need profit-boosting incentives to the same extent as other Spokane neighborhoods, the combination of incentives plus infrastructure investment can be a strong motivating signal to property owners who may otherwise be reluctant to consider redevelopment.
- Expanding the City's MFTE program, in particular, to cover all Spokane neighborhoods could help spur opportunistic infill development in the Study Area -- promoting greater housing diversity, adding needed supply units, and helping to reshape Grand Boulevard in concert with transportation and streetscape improvements.

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People Places Prosperity

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AGENDA

Project List and Cost Estimates

A

Spokane Grand Boulevard Transportation and Land Use Study

Project ID	Project Description	Project Elements	Planning Level Cost Estimate
SHORT TERM PROJECTS			
S1.A	Restripe Grand Boulevard to reduce to three lanes and add buffered bike lanes between 29th Avenue and 32nd Avenue	New cross-section includes a 6' bike lane (NB/SB), 8' concrete planter strip (SB), 2' striped buffer (NB), and 7' painted curb space extension (NB)	$ 140,000.00
S1.B	Restripe Grand Boulevard to reduce vehicle travel lane width and add buffered bike lanesbetween 32nd Avenue and 37th Avenue	New cross-section includes a 5' bike lane (NB/SB) and 2' striped buffer (NB/SB)	$ 85,000.00
S2	Install temporary access restrictions at 30th Avenue/Grand Bouelvard intersection	Installation of bollards and striping to restrict turn movements	$ 45,000.00
S3	Install enhanced pedestrian crossing at 30th Avenue	Installation of signing, RRFB, and striped crosswalk on north leg of Grand Boulevard at 30th Avenue. ADA ramps will be upgraded as needed.	$ 75,000.00
S4	Install enhanced pedestrian crossing at 32nd Avenue	Installation of signing, RRFB, and striped crosswalk on north leg of Grand Boulevard at 32nd Avenue. ADA ramps will be upgraded as needed.	$ 75,000.00
S5	Install enhanced pedestrian crossing at 33rd Avenue	Installation of signing, RRFB, and striped crosswalk on both legs of Grand Boulevard at 33rd Avenue; marked bike crossings will also be provided. A ramps will be upgraded as needed.	$ 75,000.00
S6	Modify Grand Boulevard/29th Avenue intersection	Traffic signal and striping modifications for new northbound and southbound lane configurations	$ 100,000.00
LONG TERM PROJECTS			
L1	Extend 32nd Avenue to the west	New street connection associated with school rebuild project	$ -
L2	Improve existing streetscape on Grand Boulevard between 29th Avenue and 32nd Avenue	Complete road reconstruction with new cross-section includes 2' sidewalk widening, 6' curb extensions for pedestrian scale lighting, drainage and restriping	$ 2,080,000.00
L3	Install permenant access restrictions at 30th Avenue/Grand Boulevard	Installation of raised median/curb signage and striping	$ 190,000.00
L4	Install raised medians	Installation of raised medians between 30th and 31st, approaching 31st (NB), between 35th and 36th, and approaching 36th (NB)	$ 60,000.00
L5	Install street trees	Installation of new street trees between 29th Avenue and 32nd Avenue	$ 125,000.00

Planning level cost estimates include contingencies for administration, design, mobilization and traffic control costs. The estimates do not include right of way or environmental costs.

BRIEFING PAPER
City of Spokane Plan Commission Workshop
Grand Boulevard Transportation and Land Use Study Update
June 24, 2020

Subject

This update is for the Draft Grand Boulevard Transportation and Land Use Study https://my.spokanecity.org/projects/grand-boulevard-transportation-and-land-use-study/. The Grand District Center a Comprehensive Plan designated center, with land use and zoning categories applied in 2006 to implement the center designation.

Transportation and market analysis, alternatives studied, and recommendations are included in the draft. This is a Study; there is no funding for projects identified. The Study does provide a foundation for future implementation if funding is identified and available.

Background

Launched in early fall 2019, Grand Boulevard Transportation and Land Use Study has been a collaborative project between Planning Services and Integrated Capital Management. The transportation analysis is funded primarily through Traffic Calming dollars identified by Comstock Neighborhood Council in 2016, with land use analysis funding sponsored by City Council in 2017. Comstock, Manito-Cannon Hill, and Rockwood Neighborhood Council boundaries intersect at 29th Avenue and Grand Blvd. and the neighborhood councils are actively engaged in the project. The elements of the study are:

- Review: Traffic patterns and safety on Grand Blvd.
- Develop: Understanding of bicycle and pedestrian needs.
- Evaluate: Concepts of lane reduction, bike lanes, wider sidewalks, and green infrastructure. Analyze current land use and market data.
- Study: Land use designations with Comprehensive Plan goals in mind.

Generally, the study area is Grand Boulevard south of 29th Avenue (see attached map).

- Transportation analysis focused on core of the business district on Grand between 29th and 34th Avenues.
- Land use analysis study-area is bounded by 27th Avenue, 39th Avenue, Latawah Street and Arthur Street.

A series of focus interviews with area stakeholders and two community open houses were held, along with an online survey that received 475 responses. The Grand Boulevard email distribution list has approximately 120 members. Comments from participants have been incorporated into the draft coming to Plan Commission. Citizen comment regarding safety and traffic calming for pedestrians, bicyclists, and users of all ages and abilities was the prime driver of alternatives that were recommended.

Implementation alternatives that respond to the transportation analysis and conclusions include near term, lower cost projects, and long-term permanent infrastructure changes. A 30% cost estimate was included in the scope of work.

For more information please contact Melissa Wittstruck, Planner II, mwittstruck@spokanecity.org and Inga Note, Sr Traffic Planning Engineer inote@spokanecity.org

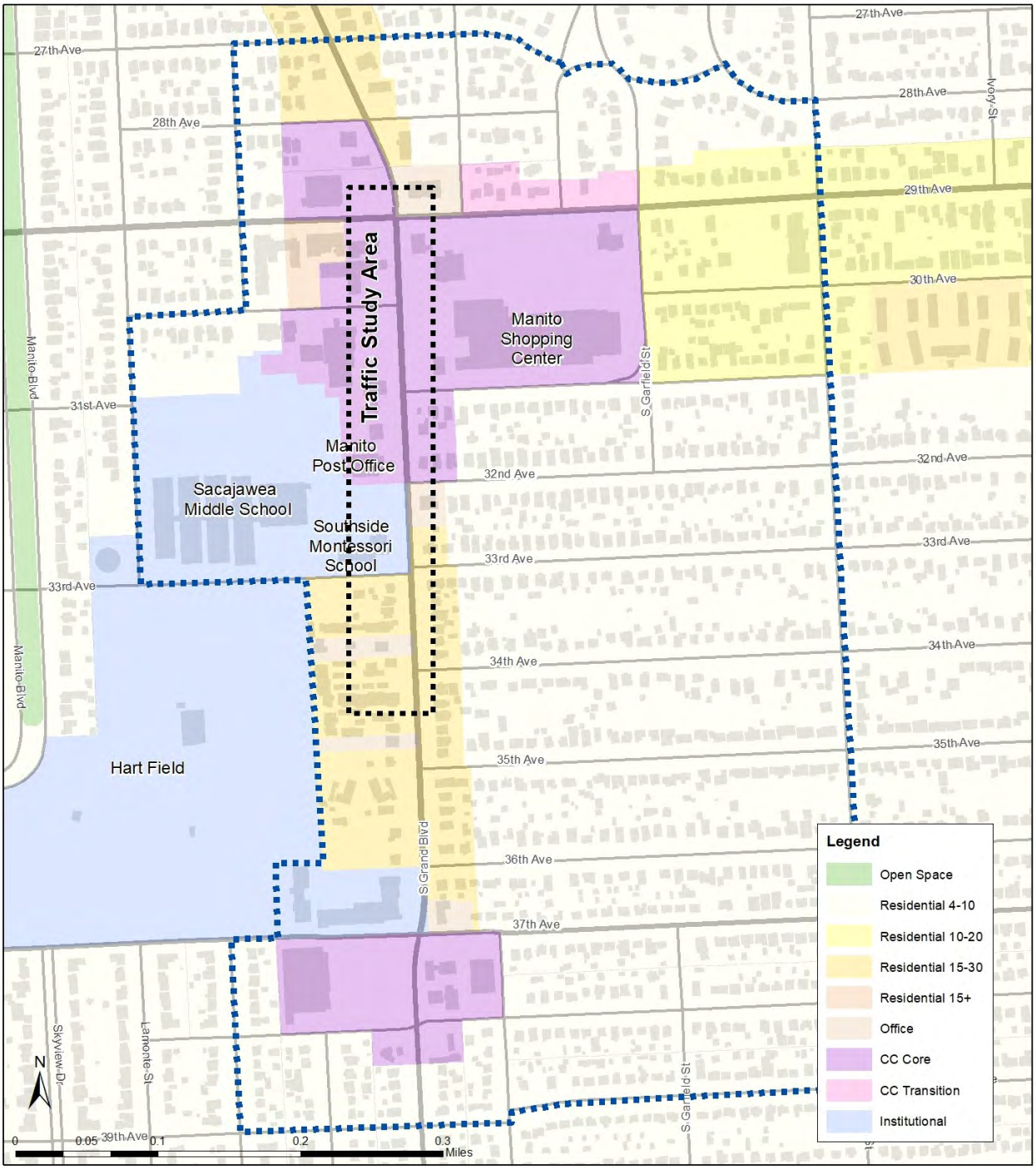
AGENDA

Land use and zoning in the Grand District Center was a specific interest of City Council. The market analysis performed by Leland Consulting Group identifies area demographics, retail patterns, and available land zoned for development/redevelopment. Conclusions, briefly, were that the area has adequate zoning for current and future growth, but the support of an improved streetscape environment and application of City incentive programs could bolster economic growth and land utilization.

Action

Review and recommendation to move forward to Plan Commission hearing July 8, 2020. If ultimately recommended to City Council, the Grand Boulevard Transportation and Land Use Study would be approved by resolution, as with other neighborhood planning efforts. The Study is categorically exempt from SEPA per WAC 197-11-800(19)(a)(b).

For more information please contact Melissa Wittstruck, Planner II, mwittstruck@spokanecity.org and Inga Note, Sr Traffic Planning Engineer inote@spokanecity.org



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Melissa Wittstruck, Assistant Planner, Neighborhood and Planning Services

Inga Note, Senior Traffic Planning Engineer, Integrated Capital Management

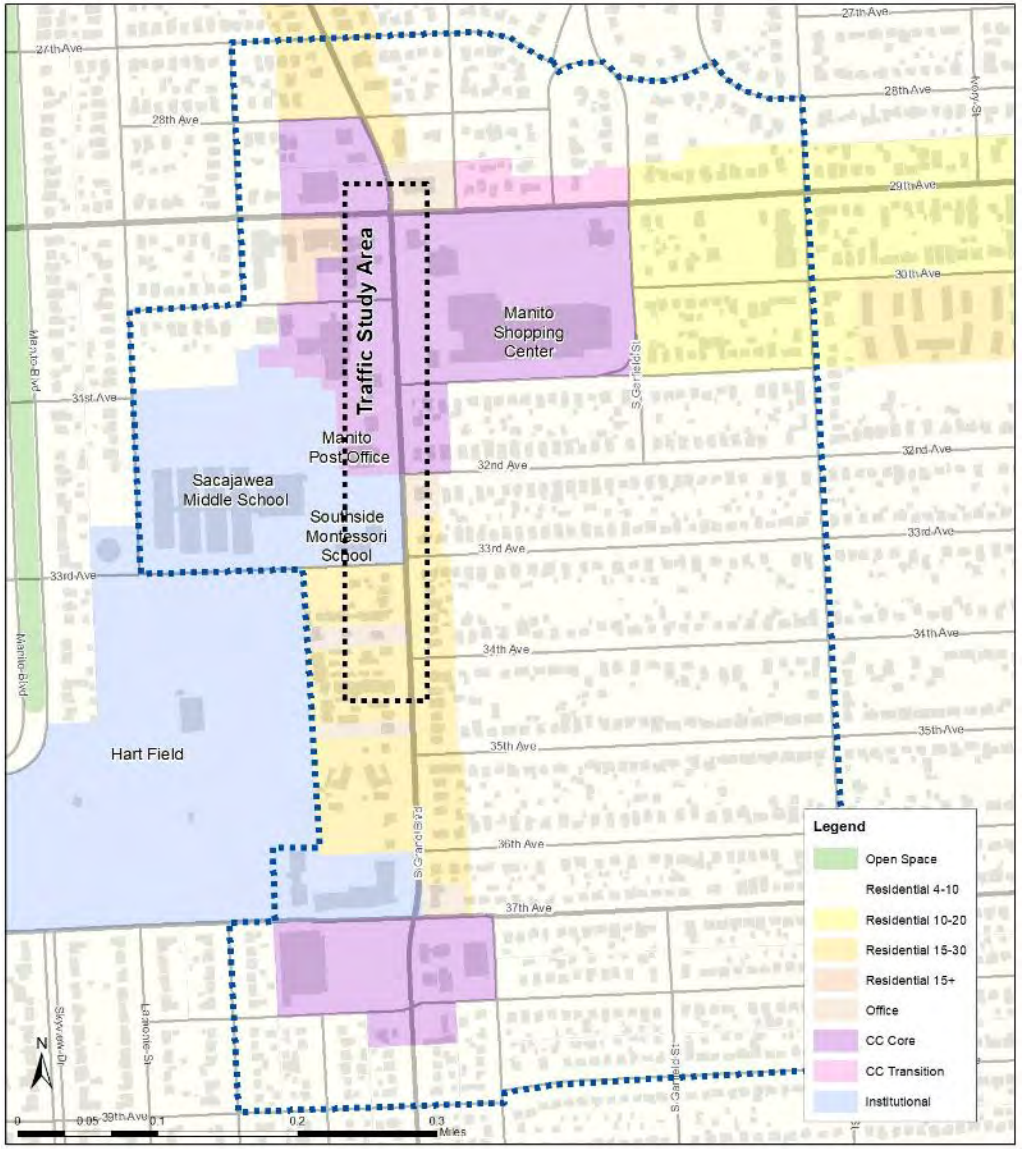
Plan Commission June 24, 2020

AGENDA

Project Area Boundaries

Grand Boulevard south of 29th Avenue.

- Transportation analysis focused on core of the business district on Grand between 29th and 34th .
- Land use analysis sub-area bounded by 27th Avenue, 39th Avenue, Latawah, and Arthur Streets.



Introduction

Grand Boulevard is a key north-south arterial for the City of Spokane through the South Hill neighborhoods. The Grand Boulevard corridor study was commissioned to understand existing issues for pedestrians, bicyclists, and vehicles, develop potential streetscape improvements, and identify economic opportunities and zoning needs.

Background

- **Grand Boulevard Transportation and Land Use Study** launched in September 2019, with public kickoff meetings in October and a second Community Meeting February 2020. Comstock, Rockwood, and Manito-Cannon Hill Neighborhood Councils support the study, which was funded by Traffic Calming dollars and Council allocated funding.

Elements of the study included:

- REVIEW: Traffic patterns and safety on Grand Blvd.
- DEVELOP: Understanding of bicycle and pedestrian needs.
- EVALUATE: Concepts of lane reduction, bike lanes, wider sidewalks, and green infrastructure. Analyze current land use and market data.
- STUDY: Land use boundaries with Comprehensive Plan goals in mind.

Safety and Streetscape Improvements

- ***Safety was identified as a critical concern – especially for school-aged children and senior residents***
- ***Desire for traffic calming/design/ pedestrian amenities***
- ***Desires and concerns about streetscape and features that better define neighborhood identity***

Grand Boulevard Study Goals

RELEVANT COMPREHENSIVE PLAN GOALS:

GOAL 1: ACTIVE DOWNTOWN LINKAGES

- Develop greenways
- Create additional bike routes to close network gaps
- Extend biking and walking trips with safe and convenient access to transit

GOAL 2: COMPLETE NEIGHBORHOODS

- Improve east-west access
- Where business centers are being developed, encourage multimodal access from all directions by planning for street and path connectivity
- Explore opportunities to enhance arterials. Examples include addition of bike lanes, bulbouts, raised crossings, planted medians, bus shelters, street furnishings, trash cans, bike racks, etc.

GOAL 3: CRIME PREVENTION

- Install appropriate lighting
- Encourage foot traffic in public places. Add paths, landscaping, community gardens and activity spaces.

GOAL 4: TRAFFIC SAFETY

- Work with the City to address level of service and traffic flows in order to review speed limits on arterials to improve pedestrian and bicycle safety and reduce noise.

Snapshot: Online Survey – Dec. to Jan. 31, 2020

GRAND BLVD

Transportation and Land Use Study

Project Survey Results

Q3. What are the most important **assets** that the Grand Boulevard planning area currently offers?

- Restaurants
- Business and Services
- Shopping
- Schools
- Historic Neighborhoods

Q4. What are the pressing **issues** in the Grand Boulevard Planning Area?

- Routes for pedestrians and cyclists
- Traffic speed and volume
- Building character or design
- Access to goods and services
- Public safety

Q5. What **new assets** would you like to see in the Grand Boulevard Planning Area?

- Bikeability/ walkability
- Green space
- Restaurants
- Diversity of businesses and services
- Arts and culture of offerings

Q7 **Where** are you going as you travel this part of Grand Boulevard?

- Shopping
- Restaurants or entertainment venues
- Locations outside this planning area
- Exercise
- Parks

Q8. What types of **changes** would make you more likely to **walk or bike** within the traffic study area?

- Crossing improvements
- Sidewalk improvements
- Landscaping, including vegetation
- Bicycle Lanes
- Slower traffic

Darker color indicates higher response rate

Full details on the survey response will be available on the website below the first week of March.
https://my.spokanecity.org/projects/grand-boulevard-transportation-and-land-use-study/

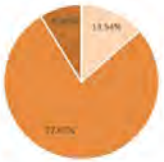
GRAND BLVD

Transportation and Land Use Study

Project Survey Results

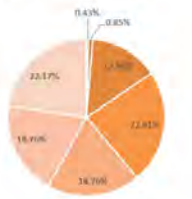
Q1. Where do you live?

Q2. Where do you work?

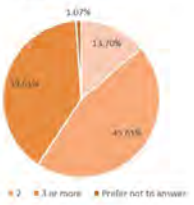


Q6. How do you travel within the study area?

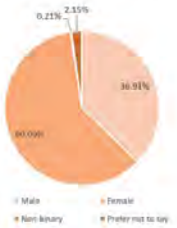
Q22. What is your age?



Q23. How many people are in your household?



Q24. What is your gender?



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GRAND BLVD

Transportation and Land Use Study

Project Survey Results

Full details on the survey response will be available on the website below the first week of March.

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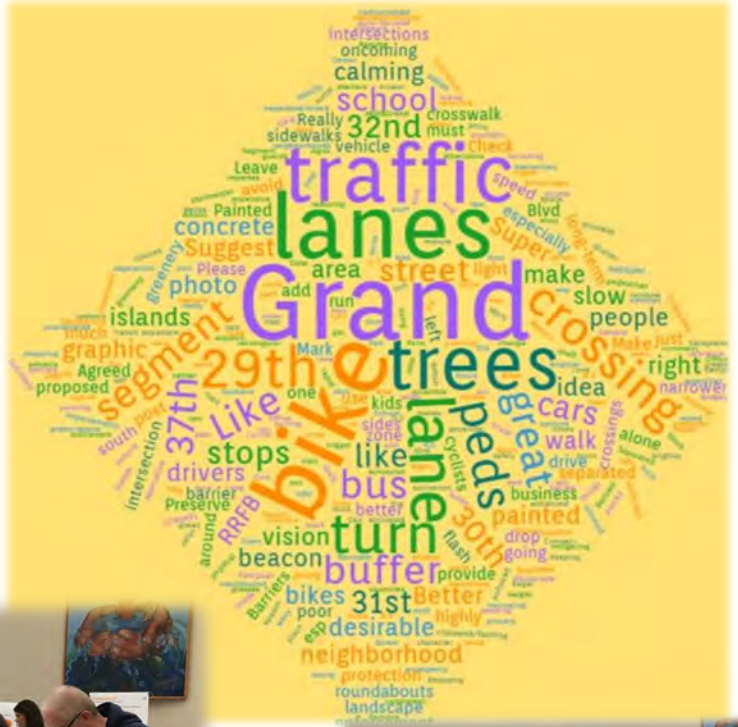
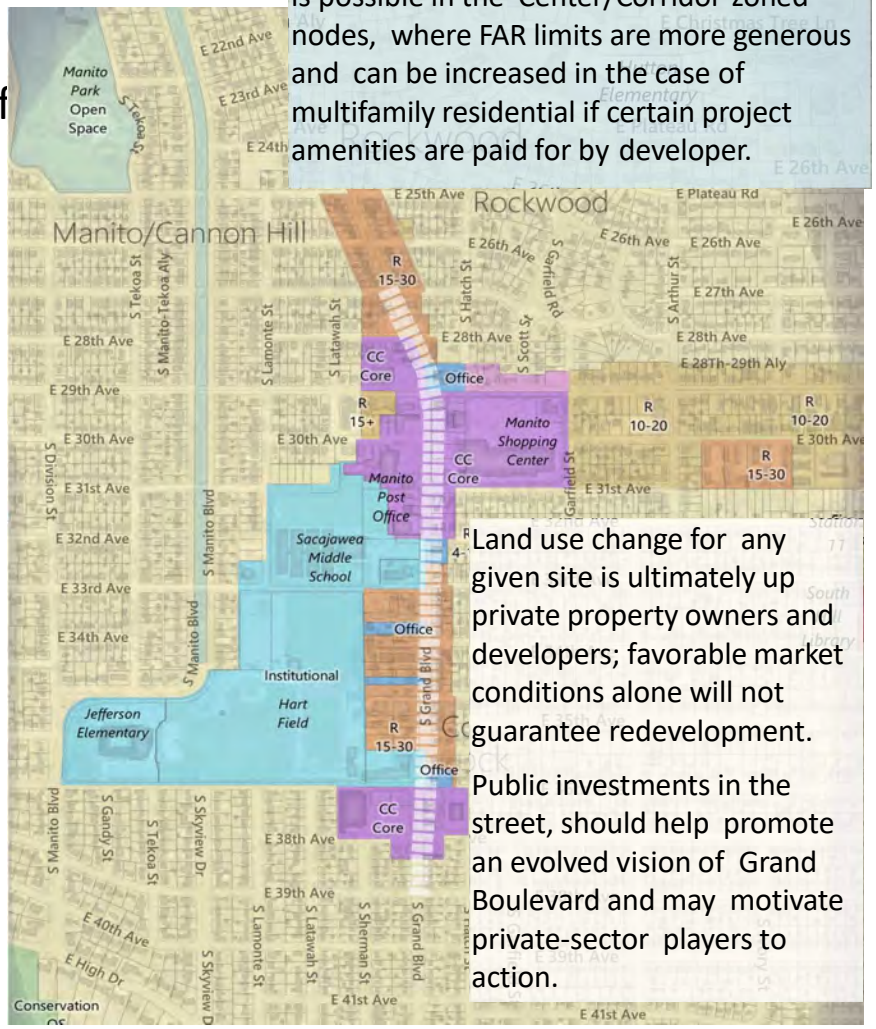
Community Meetings



Market Analysis – Leland Consulting Group

- The Land Use market analysis was requested by Council in 2017, with the intent of a close look at current policy setting density and intensity of uses in the Grand District Center.
- Briefly, the analysis evaluates the area's redevelopment potential that further Comprehensive Plan goals.
- The report documents favorable market conditions, with ample residential and retail demand to support infill development in the Study Area.
- Existing land use policy for the area appears to be well-suited to accommodate desirable development forms.
- Finally, investments in street improvements should help attract developer and property owner interest in redevelopment.

Higher density redevelopment opportunities is possible in the Center/Corridor-zoned nodes, where FAR limits are more generous and can be increased in the case of multifamily residential if certain project amenities are paid for by developer.



Land use change for any given site is ultimately up private property owners and developers; favorable market conditions alone will not guarantee redevelopment.

Public investments in the street, should help promote an evolved vision of Grand Boulevard and may motivate private-sector players to action.

Strategic Conclusions and Considerations - Highlights

- ***Existing zoning is relatively generous in terms of densities, suggesting local policy is not a significant constraint to redevelopment***

- ***Limited supply of vacant land indicates developers rely mainly on unsubsidized profit calculus to drive land assembly or scrape/rebuild decisions***

- ***Incentives plus infrastructure development can be a strong motivating signal for redevelopment***

- ***Strive to increase residential density to gradually improve the suburban auto-oriented development pattern; help define the street edge and forge walk/bike connections***

Complete Streets

What Are Complete Streets?

The Grand Boulevard Study identifies complete street elements that can be added both in the short and long term to meet corridor goals. Complete streets accommodate all modes of transportation by planning, designing, and building facilities for walking, biking, transit riding, and driving trips.

GATHERING SPACES

Parks, plazas and courtyards create destinations along the street. These become opportunities for organized events, space to celebrate nature and culture.

CROSSING VISIBILITY

Clearly marked crossings create a safe and comfortable environment for people crossing the street by foot, bike and wheelchair.

BICYCLE ACCOMMODATIONS

Bicycle facilities offer separation from vehicular traffic for cyclists. These can include multi-use paths, on-street buffered and protected bike lanes. A complete street will accommodate a wide range of ages and abilities.

EFFICIENCY

Roadway design and operations should allow people to travel reliably and understand how to safely and efficiently move by bus or motor vehicle.

TRANSIT

A complete street considers every passenger's trip from start to finish. Transit stops should provide shelter, seating, wayfinding and transit information.

WALKING

A complete street should provide a high quality environment where people are safe walking and have natural features and great destinations that make people walk.

Summary Final Draft Study - Traffic

Long-Term Vision

GRAND BOULEVARD POTENTIAL STREETSCAPE IMPROVEMENTS

1 ACCESS RESTRICTIONS

PEDESTRIAN SAFETY ISLAND

RAISED MEDIAN ART

POTENTIAL SHORT-TERM IMPROVEMENTS

Improve safety and bikeability with separated bike lanes and enhanced pedestrian crossings. Reduce vehicle traffic to two through lanes and one center turn lane/median. In remaining open street space, add bike planters, bike parking, and other pedestrian amenities.

BUFFERED BIKE LANE

BOX PLANTERS

SNOW STORAGE

TRAFFIC CALMING

2 POTENTIAL 32ND AVE INTERSECTION EXTENSION WEST

Possible intersection extension west and revised parking area to be coordinated with potential future revisions to Secajawea campus.

3 ENHANCED GREENWAY CROSSING

CYCLIST ACTIVATED RAPID FLASH BEACON (RRFB)

ENHANCED PEDESTRIAN CROSSINGS

RAPID FLASH BEACON (RRFB)

POTENTIAL LONG-TERM IMPROVEMENTS NORTH OF 33RD AVE

Improve safety and walkability with widened sidewalks, landscape buffers, consolidated driveways, pedestrian scale lighting and other pedestrian amenities. Add stormwater planters where feasible.

SEATING AMENITIES

LIGHTING

GREENSTREET ELEMENTS

WIDE SIDEWALK

POTENTIAL IMPROVEMENTS SOUTH OF 33RD AVE

Improve safety and bikeability with separated bike lanes. Reduce vehicle traffic to two through lanes and one center turn lane/median. Retain existing curb as is, preserving mature trees.

TRAFFIC CALMING

BUFFERED BIKE LANES

MAP LEGEND

- Parcel Lines
- Street
- Sidewalk
- Landscape Buffer
- Tree (New Planting)
- Tree (Existing)
- Stormwater Planting
- Potential Median Art
- Lighting (Pedestrian + Street)
- Crosswalk
- Enhanced Pedestrian Crossing (RRFB)
- Enhanced Bike Crossing (RRFB)
- Separated Bike Lane
- Shared Roadway
- Transit Stop

A Typical Street Improvements, 29th-32nd (see pg 28)
B Street Improvements Adjacent to Recent Development (see pg 28)
C Street Improvements Adjacent to Potential Future Development (see pg 29)
D Typical Street Improvements, 33rd-37th (see pg 29)

0 20 40 80 Feet

Long-Term Vision for Grand Boulevard in the Center

- ***One northbound and one southbound travel land, plus a center turn lane***

- ***Enhanced pedestrian crossings with flashing beacons at 30th Avenue, 32nd Avenue and 33rd Avenue, restricting vehicle turn movements at 30th Avenue.***

- ***Continuous bike lanes, plus a buffer when space in available***

- ***Landscape are to separate sidewalks from traffic lands***
- ***Driveway relocation and consolidation as opportunities arise***

Intersection Highlights – future Sacajawea Middle School

Street Sections - Phasing

Stay Involved!

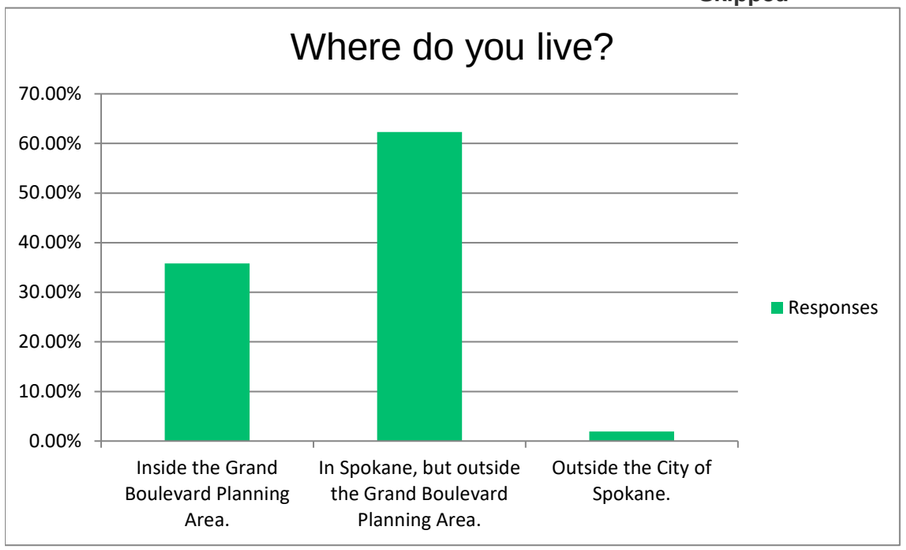
Email grandboulevardplan@spokanecity.org

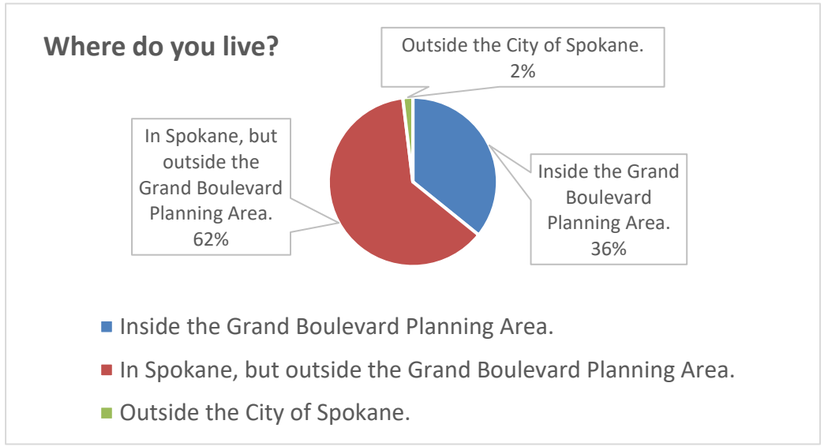
Melissa Wittstruck
mwittstruck@spokanecity.org
Inga Note
inote@spokanecity.org

GRAND BOULEVARD PLANNING AREA SURVEY

Where do you live?

Answer Choices	Responses	
Inside the Grand Boulevard Planning Area.	35.81%	169
In Spokane, but outside the Grand Boulevard Planning Area.	62.29%	294
Outside the City of Spokane.	1.91%	9
	Answered	**472**
	Skipped	**2**

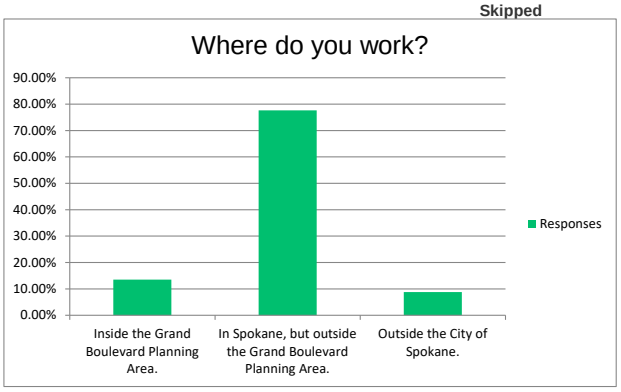


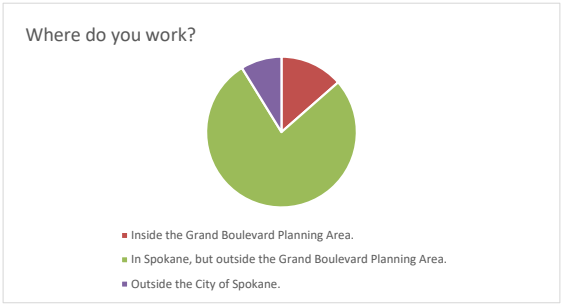


GRAND BOULEVARD PLANNING AREA SURVEY

Where do you work?

Answer Choices	Responses	
Inside the Grand Boulevard Planning Area.	13.54%	60
In Spokane, but outside the Grand Boulevard Planning Area.	77.65%	344
Outside the City of Spokane.	8.80%	39
	Answered	**443**
	Skipped	**31**



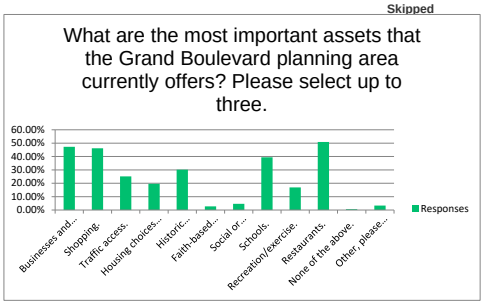


AGENDA

GRAND BOULEVARD PLANNING AREA SURVEY

What are the most important assets that the Grand Boulevard planning area currently offers? Please select up to three.

Answer Choices	Responses	
Businesses and services.	47.26%	224
Shopping.	46.20%	219
Traffic access.	25.11%	119
Housing choices (single, multi-family, duplex, senior, etc.).	19.62%	93
Historic neighborhoods.	30.17%	143
Faith-based organizations.	2.74%	13
Social or community involvement.	4.64%	22
Schools.	39.45%	187
Recreation/exercise.	16.88%	80
Restaurants.	50.84%	241
None of the above.	0.63%	3
Other, please specify.	3.38%	16
Answered		**474**
Skipped		**0**

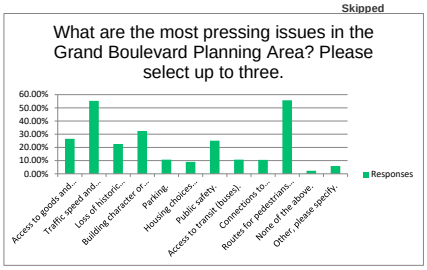


Respondents	Response Date	Other, please specify.	Tags
1	Jan 31 2020 0:	Access to parks, especially Manito Park	
2	Jan 30 2020 0!	Walkability	
3	Jan 30 2020 0!	maintaining the neighborhood feel, cutting down traffic, putting a stop on any more business growth after the dentist office on 32nd & Grand	
4	Jan 29 2020 0!	Athletic courts / gym space	
5	Jan 29 2020 0!	Protecting and preserving the residential quality	
6	Jan 29 2020 0!	Post office	
7	Jan 29 2020 0'	post office, bank, paint supplies	
8	Jan 29 2020 07:09 PM	This is one of the nicest areas in the city. I understand the need to update and renew the city but please don't let developers trash everything along Grand Blvd. so they can make more money. We don't need more ugly strip malls. Please keep it a high quality neighborhood first. Thank you.	
9	Jan 29 2020 0!	Post Office	
10	Jan 29 2020 0!	free parking	
11	Jan 29 2020 0-	Businesses and services should include restaurants & shopping	
12	Jan 29 2020 0-	Shopping and restaurants, We also have friends who live within the planning area. We enjoy more than 3!	
13	Jan 11 2020 1!	Home	
14	Jan 04 2020 0!	over congested/ traffic is like a freeway, and people drive fast	
15	Jan 04 2020 1	good living location	
16	Dec 12 2019 0	Intersection that can facilitate or hinder N-S and E-W movement on the South Hill	

GRAND BOULEVARD PLANNING AREA SURVEY

What are the most pressing issues in the Grand Boulevard Planning Area? Please select up to three.

Answer Choices	Responses	
Access to goods and services.	26.58%	126
Traffic speed and volume.	55.27%	262
Loss of historic features and landmarks.	22.57%	107
Building character or design.	32.49%	154
Parking.	10.76%	51
Housing choices (single, multi-family, duplex, senior, etc.).	9.07%	43
Public safety.	25.11%	119
Access to transit (buses).	10.76%	51
Connections to Downtown.	10.55%	50
Routes for pedestrians and cyclists.	55.70%	264
None of the above.	2.32%	11
Other, please specify.	5.91%	28
	Answered	**474**
	Skipped	**0**

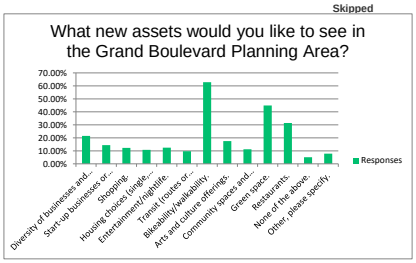


Respondents	Response Date	Other, please specify.	Tags
1	Jan 31 2020 0	street character	
2	Jan 31 2020 0	Safe street crossings during high traffic times	
3	Jan 30 2020 1	I am happy with the current framework.	
4	Jan 30 2020 1	Road condition	
5	Jan 30 2020 0	disregarding the history of the neighborhoods and those who have watched the integrity of the neighborhood disintegrate	
6	Jan 29 2020 0	Protection of the family and ability to live safely in the area	
7	Jan 29 2020 0	It seems fine right now.	
8	Jan 29 2020 0	I don't think there are issues	
9	Jan 29 2020 0	Turning lanes and parking lot exits	
10	Jan 29 2020 0	There are no issues with this area its low traffic most of the time. Why are you researching this area when there are many others that need help?	
11	Jan 29 2020 0	Anytime there is a lane that disappears after an intersection people try and speed past the others in line to get ahead. If you're going to make a lane merge, then it should be a mandantory turn	
12	Jan 29 2020 0	Need for Police to patrol for speeders and vandalism.	
13	Jan 29 2020 0	I grew up on 33rd between Grand and Arthur. I am curious about the neighborhood.	
14	Jan 15 2020 0	Improved street lighting	
15	Jan 14 2020 1	inadequate parking around Manito Tap House,Verizon, etc	
16	Jan 14 2020 1	Lane merge on Grand between 30th and 31st is dangerous due to location being adjacent to business driveways	
17	Jan 12 2020 0	Keeping traffic volumn on main streets (Grand) & off of residential streets	
18	Jan 11 2020 0	Lack of street-facing businesses (too many strip malls)	
19	Jan 10 2020 0	Preservation residential areas	
20	Jan 08 2020 0	Grand should go back to being four lanes all the way to 37th.	
21	Jan 06 2020 0	Lighting & visibility for pedestrians to cross east -west on grand at 33rd crosswalk	
22	Jan 06 2020 0	Crosswalks on 29th	
23	Jan 05 2020 1	Keeping it a decent area for existing families	
24	Jan 04 2020 0	allowing bars into our neighborhoods is an outrage, especially when they are so close to schools. The people making these decisions definitely don't live here.	
25	Dec 21 2019 0	Urban blight, concrete jungle, out of control drivers	
26	Dec 18 2019 0	Don't put round about in, it's way to busy!	
27	Dec 17 2019 0	Parklike feel that reflects neighborhood character and proximity to Manito Park.	
28	Dec 16 2019 0	Increased traffic flow and decreased congestion and traffic calming.	

GRAND BOULEVARD PLANNING AREA SURVEY

What new assets would you like to see in the Grand Boulevard Planning Area?

Answer Choices	Responses	
Diversity of businesses and services.	21.52%	102
Start-up businesses or craft industries.	14.35%	68
Shopping.	12.24%	58
Housing choices (single, multi-family, duplex, senior, etc.).	10.76%	51
Entertainment/nightlife.	12.45%	59
Transit (routes or frequency).	9.70%	46
Bikeability/walkability.	62.87%	298
Arts and culture offerings.	17.51%	83
Community spaces and buildings.	11.18%	53
Green space.	44.94%	213
Restaurants.	31.43%	149
None of the above.	5.06%	24
Other, please specify.	7.81%	37
	Answered	**474**
	Skipped	**0**

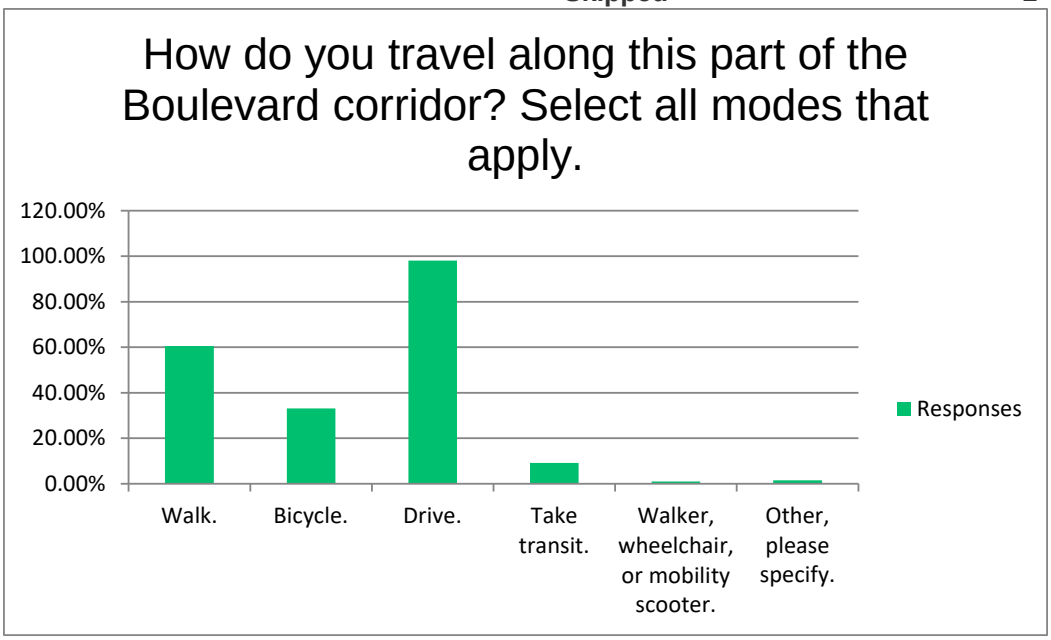


Respondents	Response Date	Other, please specify.	Tags
1	Jan 31 2020 0	make the sidewalks we have walkable	
2	Jan 30 2020 0	Food cart area that also has more permanent amenities, such as restrooms, reasonable parking, etc	
3	Jan 30 2020 0	School speed zones enforced, better pedestrian crosswalks ie brighter flashing lights.	
4	Jan 30 2020 0	Traffic calming - there are many children going to and from schools	
5	Jan 30 2020 1	Better Parking Options	
6	Jan 30 2020 0	LEAVE IT ALONE! This is NOT Seattle.	
7	Jan 30 2020 0	District identity development	
8	Jan 29 2020 0	It has a nice balance of amenities at the current time.	
9	Jan 29 2020 0	Leave as it is	
10	Jan 29 2020 0	Simple, Community-oriented fixtures in a green space: Ping pong tables, tennis court, small bandshell/amphitheater	
11	Jan 29 2020 0	Dog park	
12	Jan 29 2020 0	Leave it alone!	
13	Jan 29 2020 0	Bikeability/walkability. Green space. Restaurants.	
14	Jan 29 2020 0	more authoritative personal, crime appears to be increasing such as auto theft, prowlers, etc.	
15	Jan 29 2020 0	Drop in day care??? There are A LOT of families in the area that would utilize.	
16	Jan 29 2020 0	Keep it the way it is. We want a residential neighborhood.	
17	Jan 29 2020 0	More parking for successful businesses near the Tap House	
18	Jan 29 2020 0	Dog park. There isnt one for the south hill besides the one way up on 63rd	
19	Jan 27 2020 0	new grocery store on grand and 37th	
20	Jan 12 2020 0	safety for pedestrians/children/bikes	
21	Jan 10 2020 0	I would like to all of these things with an emphasis on greener more sustainable transportation access. We need better bike safety and walkability along Grand Blvd.	
22	Jan 10 2020 0	Bury overhead utility cables	
23	Jan 09 2020 1	accessibility. We have a tanker that needs to be able access our store	
24	Jan 09 2020 1	Traffic safety	
25	Jan 07 2020 1	I'd like no changes	
26	Jan 06 2020 0	Crosswalk with better lights or flashing lights to improve visibility to cars	
27	Jan 06 2020 0	Crosswalks on 29th	
28	Jan 06 2020 0	parking	
29	Jan 05 2020 0	A grocery store at the corner of 37th and Grand Blvd	
30	Jan 04 2020 0	safer means of turning left from business access	
31	Jan 04 2020 0	This neighborhood is already a well developed area, go somewhere else to establish the "assets" (?) you want to shove in this area.	
32	Jan 04 2020 0	Better sidewalks	
33	Jan 04 2020 1	Pedestrian oriented development (see Comp Plan).	
34	Jan 04 2020 1	Something viable done with the old grocery store	
35	Dec 21 2019 0	Vastly improved visual and auditory (noise) quality	
36	Dec 15 2019 0	slower speeds between 29th & 33rd. Crosswalk at 32nd from Post Office. Traffic often reluctant to stop for pedestrians at 32nd, and WTB is putting in a community facility there.	
37	Dec 12 2019 0	safety for kids getting to and from schools	

GRAND BOULEVARD PLANNING AREA SURVEY

How do you travel along this part of the Boulevard corridor? Select all modes that apply.

Answer Choices	Responses	
Walk.	60.59%	286
Bicycle.	33.05%	156
Drive.	98.09%	463
Take transit.	9.11%	43
Walker, wheelchair, or mobility scooter.	1.06%	5
Other, please specify.	1.48%	7
	Answered	**472**
	Skipped	**2**

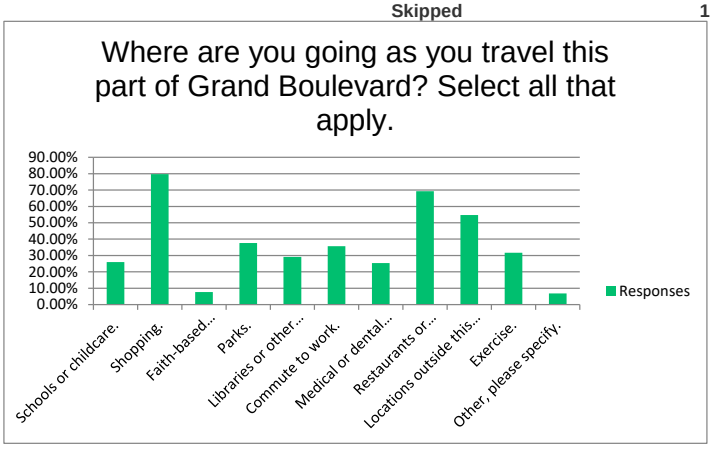


Respondents	Response Date	Other, please specify.	Tags
1	Jan 29 2020 0	Business deliveries to the post office.	
2	Jan 24 2020 0	Enforce speed zone!	
3	Jan 09 2020 0	Stroller with kids	
4	Jan 07 2020 0	Electric Scooter	
5	Jan 07 2020 1	Motorcycle and Scooter	
6	Jan 06 2020 1	Electric scooter	
7	Dec 18 2019 0	Lime scooter	

GRAND BOULEVARD PLANNING AREA SURVEY

Where are you going as you travel this part of Grand Boulevard? Select all that apply.

Answer Choices	Responses	
Schools or childcare.	26.00%	123
Shopping.	79.70%	377
Faith-based organizations.	7.61%	36
Parks.	37.63%	178
Libraries or other government facilities.	29.18%	138
Commute to work.	35.73%	169
Medical or dental offices.	25.37%	120
Restaurants or entertainment venues.	69.34%	328
Locations outside this planning area.	54.76%	259
Exercise.	31.71%	150
Other, please specify.	6.77%	32
	Answered	**473**
	Skipped	**1**

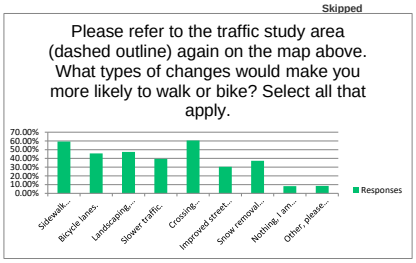


Respondents	Response Date	Other, please specify.	Tags
1	Jan 30 2020 1	Friends' homes	
2	Jan 30 2020 0	Friends' houses	
3	Jan 30 2020 0	Recreation for kids - aikido and soccer. Post office.	
4	Jan 30 2020 0	Home	
5	Jan 29 2020 1	Home	
6	Jan 29 2020 1	Post Office	
7	Jan 29 2020 0	Safety for kids at sacajawea	
8	Jan 29 2020 0	Visiting friends who live within the area.	
9	Jan 29 2020 0	bank, paint store, post office	
10	Jan 29 2020 0	Post office	
11	Jan 29 2020 0	STCU	
12	Jan 29 2020 0	Post Office	
13	Jan 29 2020 0	Bank	
14	Jan 29 2020 0	Downtown	
15	Jan 29 2020 0	Post office	
16	Jan 29 2020 0	I routinely travel the study area. It is part of my route home from areas as far as 57th and regal.	
17	Jan 29 2020 0	Post office	
18	Jan 29 2020 0	home	
19	Jan 29 2020 0	Post Office	
20	Jan 29 2020 0	Groceries	
21	Jan 24 2020 0	Post Office, Auto Mechanic	
22	Jan 22 2020 0	Our 12 year old children walk or bike alone this way to school at Sac	
23	Jan 16 2020 1	Hot Yoga	
24	Jan 12 2020 0	post office	
25	Jan 04 2020 0	Take line 4 bus downtown to children's museum/other atteactions	
26	Jan 04 2020 1	Home	
27	Jan 04 2020 1	Visit friends and relatives	
28	Jan 04 2020 1	I live here so drive here.	
29	Dec 22 2019 0	Hair dresser	
30	Dec 19 2019 0	Banks	
31	Dec 16 2019 0	Home	
32	Dec 15 2019 0	Post Office, WA Trust Bank	

GRAND BOULEVARD PLANNING AREA SURVEY

Please refer to the traffic study area (dashed outline) again on the map above. What types of changes would make you more likely to walk or bike? Select all that apply.

Answer Choices		Responses
Sidewalk improvements (buffer from traffic, wider, etc.).	59.36%	279
Bicycle lanes.	45.74%	215
Landscaping, including vegetation.	47.45%	223
Slower traffic.	39.57%	186
Crossing improvements (crosswalks, flashing lights, etc.).	60.43%	284
Improved street lighting.	30.43%	143
Snow removal improvements for sidewalks and streets.	37.23%	175
Nothing, I am just traveling through the area.	8.30%	39
Other, please specify.	8.51%	40
	Answered	**470**
	Skipped	**4**



Respondents	Response Date	Other, please specify.	Tags
1	Jan 31 2020 0	Extended transit opportunities	
2	Jan 30 2020 0	Roundabouts	
3	Jan 30 2020 0	Beautification ie vegetation as long as it is maintained regularly	
4	Jan 30 2020 0	Separated bike lanes	
5	Jan 30 2020 0	Improved SIDEWALK lighting, which is not street lighting.	
6	Jan 30 2020 0	Lo	
7	Jan 30 2020 0	Get rid of center turn lane - NO BIKE LANES	
8	Jan 29 2020 1	Getting the people going to Sacajawea to stop driving like idiots that have to be first and maybe put in a right turn lane into the parking lot so they have to move over earlier	
9	Jan 29 2020 0	The stop light at 37th & Grand was a much needed improvement. Now it's great!	
10	Jan 29 2020 0	NO ROUNDABOUTS!!!	
11	Jan 29 2020 0	center street parking up and down would not only slow traffice but there could be improved lighting and crossing imrovements	
12	Jan 29 2020 0	Hi	
13	Jan 29 2020 0	Barrier protected bike lanes	
14	Jan 29 2020 0	Nothing. I like things the way they are now.	
15	Jan 29 2020 0	This particular area of grand is fine. A little congested when the old Jefferson is occupied but otherwise fine.	
16	Jan 29 2020 0	The area noted seems to work well..only time trffic is bad is in am for shol drop off and pm for school pick up..	
17	Jan 29 2020 0	I like it as it is!	
18	Jan 29 2020 0	Improved traffic flow allowing for turning into/out of traffic.	
19	Jan 29 2020 0	Smoother sidewalks but do not add the 'buffers'	
20	Jan 29 2020 0	I would be really nice if the parking lot to business was easier to access and leave. Chase and Walgreens corner area is a nightmare to negotiate when traffic gets dense.	
21	Jan 29 2020 0	Please leave it the way it is.	
22	Jan 29 2020 0	I think you should leave alone.	
23	Jan 29 2020 0	NO stormwater planting similar to S Monroe. Hideous! Like planters.	
24	Jan 20 2020 0	Can't bike ....you fail to consider disabled or elderly!	
25	Jan 19 2020 0	Make every day warm, sunny and wind free.	
26	Jan 09 2020 1	Nothing. I don't want to ride a damn bike and I only walk with my dog around the block	
27	Jan 06 2020 0	no problem using it as is. extend corridor to 37th	
28	Jan 05 2020 1	I moved to this area for a reason. I'd prefer it didn't change.	
29	Jan 05 2020 0	I am unable to walk that far	
30	Jan 04 2020 0	Better handling of lane reduction in grand and 29th	
31	Jan 04 2020 0	barrier from road to prevent slush/puddle splash while walking	
32	Dec 21 2019 0	Primacy of pedestrian access and safety	
33	Dec 20 2019 1	Make Grand 4 lanes	
34	Dec 17 2019 1	Bicycle lanes and greenscraping	
35	Dec 17 2019 1	Nothing, I'm traveling to destinations in the area via auto.	
36	Dec 17 2019 0	Protected Bike Lanes and a roundabout at 29th	
37	Dec 17 2019 0	better usability for the blind ie: at intersections like 29th and Grand	
38	Dec 16 2019 0	Increased traffic flow, not slowing down traffic	
39	Dec 13 2019 1	Bike infrastructure, as already approved by the south hill coalition neighborhood plan, to include a greenway on the 33rd ave	
40	Dec 12 2019 0	Thoughtful integration of all forms of transportation through this zone	

GRAND BOULEVARD PLANNING AREA SURVEY

https://imgur.com/kF77sB0.jpg

Answered 296

Skipped 178

Respondents	Response Date	Responses	Tags
1	Jan 31 2020	1 Yes	
2	Jan 31 2020	0	Good
3	Jan 31 2020	0 seems like overkill	
4	Jan 31 2020	0 very well	
5	Jan 31 2020	0 alternate route greenway adjacent to Grand Blvd. would best serve bicycle traffic.	
6	Jan 31 2020	1 Very good fit	
7	Jan 31 2020	1 Very well	
8	Jan 31 2020	1 As long as it doesn't reduce the multiple lanes of traffic and impede flow, I think it would be beneficial.	
9	Jan 31 2020	1 These would be an excellent addition to the area, providing new options for bike-based travelers and calming auto traffic as well	
10	Jan 31 2020	1 Neutral	
11	Jan 31 2020	0 Great	
12	Jan 31 2020	0 Good fit	
13	Jan 31 2020	0 If the lanes were kept clean	
14	Jan 31 2020	0 No	
15	Jan 31 2020	0 If it doesn't destroy space now it could be good.	
16	Jan 30 2020	1 Not if it leads to narrower lanes and more congestion. Otherwise I like it a lot, especially near the schools.	
17	Jan 30 2020	1 Would be cool	
18	Jan 30 2020	1 Very good fit. We need dedicated bike lanes.	
19	Jan 30 2020	0 Yes	
20	Jan 30 2020	0 good	
21	Jan 30 2020	0 Well	
22	Jan 30 2020	0 great!	
23	Jan 30 2020	0 ONe on the Rigth with diagrams	
24	Jan 30 2020	0 Yes please.	
25	Jan 30 2020	0 Looks doable	
26	Jan 30 2020	0 Slider not working (doesn't appear) I'd give it a Good Fit.	
27	Jan 30 2020	0 Separated bike lane to get to the westbound bike lane on 29th would be great.	
28	Jan 30 2020	0 It's beautiful, but not enough space with current road.	
29	Jan 30 2020	0 There is very limited space for this type of improvement in needed areas	
30	Jan 30 2020	0 A good fit	
31	Jan 30 2020	0 no	
32	Jan 30 2020	0 Makes it more congested, bad idea.	
33	Jan 30 2020	1 Very good fit	
34	Jan 30 2020	1 separated bike lanes would be great -- as long as they connected to lanes outside the study area	
35	Jan 30 2020	1 Bike lanes needed, good fit, can be incorporated into design features below	
36	Jan 30 2020	1 Not needed	
37	Jan 30 2020	1 They look safe but very ugly.	
38	Jan 30 2020	1 I don't like them unless you plan on widening street widths. I would not narrow existing street widths to accommodate bike lanes.	
39	Jan 30 2020	1 The problem is that there are limited routes throught this neighborhood so if you reduce traffic you're going to congest this area, especially during snow events.	
40	Jan 30 2020	1 Sure, that sounds good.	
41	Jan 30 2020	1 Is there enough space for something like this?	
42	Jan 30 2020	0 YES! Making non-auto travel safer and more convenient is the best way to increase use of these facilities and reduce traffic counts.	
43	Jan 30 2020	0 This is car-hostile. Terrible idea.	
44	Jan 30 2020	0 Unless traffic speeds were reduced, I think you would see more Vehicle vs Ped/Cycle accidents.	
45	Jan 30 2020	0 Good fit	
46	Jan 30 2020	0 very well	
47	Jan 30 2020	0 I'm not sure there is enough space.	
48	Jan 30 2020	0 I like it, but where will you find the space?	
49	Jan 30 2020	0 Very well	
50	Jan 30 2020	0 NOT AT ALL	
51	Jan 30 2020	0 Uncertain. May be overkill.	
52	Jan 30 2020	0 I am unable to use the sliders. However anything that enhances walkability, bike ability, and safe neighborhood access is important. Also making public transit options more accessible	
53	Jan 30 2020	0 So so	
54	Jan 30 2020	0 Well, especially with youth commuting to school	
55	Jan 30 2020	0 Good fit	
56	Jan 30 2020	0 Superb solution.we are seeing more scooters too. This would calm car traffic too.	
57	Jan 29 2020	1 Does not fit area	
58	Jan 29 2020	1 Very well	
59	Jan 29 2020	1 fine as long as can cross traffic	
60	Jan 29 2020	1 Yes, bikes lanes would definitely be beneficial	
61	Jan 29 2020	1 Wonderfull	
62	Jan 29 2020	1 In theory good but I don't think there is enought room for bike lanes	
63	Jan 29 2020	1 Not well	
64	Jan 29 2020	0 Yes	
65	Jan 29 2020	0 Very well	
66	Jan 29 2020	0 Don't like the look of that	
67	Jan 29 2020	0 Not necessary	
68	Jan 29 2020	0 Meh.	
69	Jan 29 2020	0 Very Well	
70	Jan 29 2020	0 Not well.	
71	Jan 29 2020	0 Good	
72	Jan 29 2020	0 Plastic standpipes are knocked down much. Looks good.	
73	Jan 29 2020	0 I Like them	
74	Jan 29 2020	0 Not at all good	
75	Jan 29 2020	0 Well	
76	Jan 29 2020	0 It seems like too much space is being used	
77	Jan 29 2020	0 I do not like the bike lanes buffered from traffic and separated from pedestrians design features. I do not believe they will enhance nor improve the Grand Boulevard area. I think that	
78	Jan 29 2020	0 Well if there is room	
79	Jan 29 2020	0 No	
80	Jan 29 2020	0 Would require reduction on lanes. I think turn lanes are more important than bike lanes.	
81	Jan 29 2020	0 It would be nice but I think Grand is busy enough to need 4 lanes of car traffic.	
82	Jan 29 2020	0 Bike infrastructure would need to link to 57th and provide a route downtown. In isolation it wouldn't be worth it.	
83	Jan 29 2020	0 can't work the 'slider': bad idea_ would slow traffic	
84	Jan 29 2020	0 Ok	
85	Jan 29 2020	0 If it fits, that would be amazing	
86	Jan 29 2020	0 this fits	
87	Jan 29 2020	0 Somewhat	
88	Jan 29 2020	0 Would be wonderful!	
89	Jan 29 2020	0 Worthles. Hardly ever see a bike in that area.	
90	Jan 29 2020	0 Good	
91	Jan 29 2020	0 Bad	
92	Jan 29 2020	0 Very well	
93	Jan 29 2020	0 Yes, please	
94	Jan 29 2020	0 I won't ride my bike on streets with cars, even if there's a bike lane. So I like the separated bike lanes.	
95	Jan 29 2020	0 I don't like having the physical divider.	
96	Jan 29 2020	0 Bike lanes would be nice but is there room for a buffered area?	
97	Jan 29 2020	0 Love the idea. Not much space to do it.	
98	Jan 29 2020	0 So many kids walk and bike from there this seems like a great idea IF there's space for it.	
99	Jan 29 2020	0 Looks great, just worry about the space. Also fewer bikers in the winter, so an extended walking path may be a better fit (like the picture in #10)	
100	Jan 29 2020	0 Very Good	

101 Jan 29 2020 0 They don't fit well
102 Jan 29 2020 0 I think that is great!
103 Jan 29 2020 0 Suitable for area
104 Jan 29 2020 0 Only a bike lane with a physical buffer will be effective. Traffic is too chaotic and fast for an un-buffered bike land.
105 Jan 29 2020 0 Well
106 Jan 29 2020 0 They would be a good fit
107 Jan 29 2020 0 NO
108 Jan 29 2020 0 minimal impact
109 Jan 29 2020 0 Would these be on both sides of the street? Otherwise bicyclists will be in the pedestrian lane
110 Jan 29 2020 0 Very well!!
111 Jan 29 2020 0 I think that's a GREAT idea. Should be all over the south hill.
112 Jan 29 2020 0 Not at all
113 Jan 29 2020 0 I dont think it should be separated biker already ride in the street at is.
114 Jan 29 2020 0 Okay
115 Jan 29 2020 0 Great fit
116 Jan 29 2020 0 Not at all. Too much traffic and this will slow it down even more.
117 Jan 29 2020 0 Like
118 Jan 29 2020 0 Buffered would help ped and bike safety
119 Jan 29 2020 0 Good fit
120 Jan 29 2020 0 I think it could fit and I'd like to see it, providing there is enough space.
121 Jan 29 2020 0 Neutral
122 Jan 29 2020 0 Not a good fit
123 Jan 29 2020 0 I know we are not to care about cars any more but I don't care about the danm bicycles mainly because they couldn't care less about me a
124 Jan 29 2020 0 designated/deliniated bike lane is sufficient does not need to be seperated
125 Jan 29 2020 0 Good Fit - for middle school children to ride bikes
126 Jan 29 2020 0 not well
127 Jan 29 2020 0 Yes! Let's add protected bike lanes!
128 Jan 29 2020 1 buffered bike kave to 29th. After th the street narrows too much to continue on Grand.
129 Jan 29 2020 0 Would love to see these!
130 Jan 29 2020 0 I think this would be great.
131 Jan 28 2020 0 Good fit
132 Jan 28 2020 0 Would be nice if enough room.
133 Jan 28 2020 0 Great idea
134 Jan 24 2020 0 Would improve walkability and sense of community.
135 Jan 24 2020 0 Very well
136 Jan 24 2020 0 Promising fit.
137 Jan 23 2020 0 very well
138 Jan 23 2020 0 Yes
139 Jan 23 2020 1 Not well. Most streets too narrow.
140 Jan 22 2020 0 not necessary
141 Jan 20 2020 0 I don't see much bikes on Grand, but when I do YIKES. It would be great if bike lanes like the one of the left were available along ALL of grand, but I think separating bike lanes in the
142 Jan 20 2020 0 Good fit
143 Jan 20 2020 1 Great
144 Jan 20 2020 0 Good fit
145 Jan 20 2020 0 Very poor
146 Jan 20 2020 0 Neutral
147 Jan 19 2020 0 Snow plowing?
148 Jan 19 2020 0 Very well
149 Jan 19 2020 0 Exceptionally well
150 Jan 19 2020 0 I think these would be a good improvement if they can be incorperated efficiently
151 Jan 19 2020 0 Should be mandatory.
152 Jan 18 2020 0 good
153 Jan 17 2020 0 Great idea!
154 Jan 16 2020 0 If there is room I think they'd be great. But due to the hill, I'm guessing pedestrians would benefit more from upgrades than cyclists.
155 Jan 16 2020 1 Yes, those look great and would be safe for the Middle School Students.
156 Jan 16 2020 0 I think grand blvd is too small to do bike lanes
157 Jan 15 2020 0 That would be nice
158 Jan 15 2020 0 There is already enough travel in this area with the schools, I think it would be dangerous to encourage more biking in the area.
159 Jan 15 2020 0 Good
160 Jan 15 2020 1 It would make the blvd too narrow
161 Jan 15 2020 1 too narrow
162 Jan 14 2020 1 Good Fit
163 Jan 13 2020 0 It would be a pretty good feature to have
164 Jan 13 2020 0 -
165 Jan 13 2020 0 Can't see any image!
166 Jan 12 2020 0 I think buffered bike lanes from traffic would be great!
167 Jan 12 2020 0 Great fit
168 Jan 12 2020 0 not good
169 Jan 12 2020 0 so much turning traffic would make this hard
170 Jan 12 2020 0 Poor fit
171 Jan 12 2020 1 would be good
172 Jan 11 2020 0 Great love it
173 Jan 11 2020 0 Good fit
174 Jan 11 2020 0 Too wide
175 Jan 11 2020 1 YESSSSS!!!
176 Jan 11 2020 1 Love it!
177 Jan 11 2020 0 Yes
178 Jan 11 2020 1 For future families and children, historically and presently this corridor has never been safe to navigate on foot or bike. Separated bike lanes would create a safe buffer from growing traffic problems.
179 Jan 10 2020 0 This would be a great idea.
180 Jan 10 2020 0 Yes, please!
181 Jan 10 2020 0 Only if continued north on Grand
182 Jan 10 2020 0 There is not adequate room for this. Just slow the traffic
183 Jan 09 2020 0 Good
184 Jan 09 2020 0 Like them!
185 Jan 09 2020 0 Good fit
186 Jan 09 2020 1 not well
187 Jan 09 2020 1 Bike riders don't pay car tab fees. They should have no say. We don't need bike lanes. Get rid of those stupid lime bikes and scooters. They are dangerous.
188 Jan 09 2020 1 GOOD
189 Jan 08 2020 0 I like this idea and any idea that allows for traffic to slow down and allows for pedestrian safety
190 Jan 08 2020 0 Not unless they plan on making it wider!
191 Jan 08 2020 0 Not well! Not enough space
192 Jan 08 2020 1 only moderately
193 Jan 08 2020 1 Looks like a waste of time and money.
194 Jan 08 2020 0 it's too big, would encroach on homes
195 Jan 08 2020 0 creates parking problem!!
196 Jan 07 2020 0 Perhaps very we'll if space allows
197 Jan 07 2020 0 Yes! These would be a great addition. Great fit.
198 Jan 07 2020 0 They'd be great if there was room for them. Wouldn't want them to impact number of traffic lanes.
199 Jan 07 2020 0 Is there enough space for this?
200 Jan 07 2020 0 Like it but is there enough room on the Boulevard?
201 Jan 07 2020 0 Good idea, but where would they fit?
202 Jan 07 2020 1 Currently bikes use the sidewalk because traffic is fast which puts pedestrians at risk. The crosswalk at 33rd has little visibility and cars are reluctant to stop because of their speed.
203 Jan 07 2020 1 No. Bad idea
204 Jan 07 2020 1 Nice!
205 Jan 07 2020 1 Looks great!
206 Jan 07 2020 0 Good
207 Jan 06 2020 0 Worth considering if it does not impact effective snow removal

208	Jan 06 2020	0	That would be a nice feature, i like the one on the right
209	Jan 06 2020	0	Not well
210	Jan 06 2020	0	They would be great
211	Jan 06 2020	0	Not needed.
212	Jan 06 2020	0	n
213	Jan 06 2020	0	bad fit. can currently use side streets
214	Jan 06 2020	1	too much trouble & expense
215	Jan 06 2020	1	Bad fit
216	Jan 06 2020	1	Very well. Good idea.
217	Jan 06 2020	1	No, need to keep multiple lanes. Spokane knows cycle laws already.
218	Jan 06 2020	0	Very well.
219	Jan 06 2020	0	think this would be great
220	Jan 05 2020	1	Indifferent
221	Jan 05 2020	0	No
222	Jan 05 2020	0	Not separated bike lanes Too much space used up.
223	Jan 05 2020	0	Not enough room
224	Jan 05 2020	0	I like this idea!
225	Jan 05 2020	0	Ok
226	Jan 05 2020	1	It would be a good change
227	Jan 05 2020	0	,this is good if you don't narrow the traffic area and flow
228	Jan 05 2020	0	Bad idea
229	Jan 04 2020	0	Good fit
230	Jan 04 2020	0	Not sure they would improve the traffic situation considering how tight the roads are currently
231	Jan 04 2020	0	Ok
232	Jan 04 2020	0	Yes
233	Jan 04 2020	0	no , make it look like Monroe to huckleberries more narrow?
234	Jan 04 2020	0	Possibly, but appears too aggressive change considering the size of our
235	Jan 04 2020	0	not necessary
236	Jan 04 2020	0	Well. (Shouldn't this be a Likert scale?)
237	Jan 04 2020	0	Takes up too much space
238	Jan 04 2020	0	just improve and widen the sidewalks
239	Jan 04 2020	0	these would be nice
240	Jan 04 2020	0	yes
241	Jan 04 2020	0	This would likely be confusing considering the proximity of the schools and how many young children would use the pathways.
242	Jan 04 2020	0	not well
243	Jan 04 2020	0	Not very well wouldn't fit with the area
244	Jan 04 2020	0	Well
245	Jan 04 2020	0	Yes
246	Jan 04 2020	0	Fit it very well
247	Jan 04 2020	0	Bike lines would be okay since it's only 1 lane
248	Jan 04 2020	0	Good fit
249	Jan 04 2020	0	They would be very helpful but might be hard to fit into the area.
250	Jan 04 2020	1	Not needed
251	Jan 04 2020	1	Good idea
252	Jan 04 2020	1	Not a good fit
253	Jan 04 2020	1	Grand is a truck route and very busy. Concerned for cut/through traffic. Alternate option is Arther.
254	Jan 04 2020	1	I like both with higher like on left
255	Jan 04 2020	1	Afraid they would add to congestion. I don't see many bikes on Grand.
256	Jan 04 2020	1	No
257	Jan 04 2020	0	Very well
258	Jan 02 2020	0	not a good fit
259	Dec 28 2019	0	Very well
260	Dec 28 2019	0	Great
261	Dec 24 2019	0	Right now the street is too narrow, so these would not fit.
262	Dec 24 2019	1	I always appreciate well-marked, safe bike lanes
263	Dec 23 2019	0	Protected bike lanes are a must to make our raods safe for all citizens to use.
264	Dec 23 2019	1	no. Can't do snow removal.
265	Dec 22 2019	0	Yes pls
266	Dec 21 2019	0	YES!
267	Dec 20 2019	1	good idea, but Grand would have to be wider
268	Dec 20 2019	0	bad fit
269	Dec 19 2019	0	Neutral
270	Dec 19 2019	0	Not well, too much debris gets into protected bike lanes and they need to be cleaned out
271	Dec 19 2019	0	Very well
272	Dec 19 2019	0	Just so bikes and pedestrians do NOT share same pavement. The little sign on the right is cute, but too small to be effective.
273	Dec 18 2019	0	Not at all!
274	Dec 18 2019	0	No, this will enrage vehicles traveling through.
275	Dec 18 2019	0	Not well!
276	Dec 17 2019	1	Not room for this
277	Dec 17 2019	1	Fine
278	Dec 17 2019	1	Yes
279	Dec 17 2019	0	Potentially
280	Dec 17 2019	0	good fit
281	Dec 17 2019	0	Good fit
282	Dec 17 2019	1	Not at all
283	Dec 17 2019	0	Yes, yes yes,
284	Dec 16 2019	0	Horrible
285	Dec 16 2019	0	Depends on rest of bike network.
286	Dec 16 2019	0	Prefer the left image
287	Dec 16 2019	0	Well
288	Dec 16 2019	0	Neutral
289	Dec 16 2019	0	I think one-lane bike lane is sufficient and doesn't necessarily need to be buffered
290	Dec 16 2019	0	Not well
291	Dec 16 2019	0	Very well! But design the bike lanes to be protected from traffic, not just buffered
292	Dec 16 2019	0	Unless these are carried all the way down Grand, or to another bike corridor, it would not be worthwhile
293	Dec 15 2019	0	Not so good as I favor 2 lanes of traffic north & south plus the turn lanes at 32nd & 31st
294	Dec 13 2019	1	Please please please please include these, cycling infrastructure is already in the neighborhood plan and this would be fantastic
295	Dec 12 2019	0	I like the idea but there is not room
296	Dec 12 2019	0	I am used to cycling with vehicular traffic, but I am not opposed to lanes for cycling that take priority over vehicles and pedestrians

GRAND BOULEVARD PLANNING AREA SURVEY

Do you have any "big ideas" for this part of Grand Boulevard or the wider Planning Area, or is there anything else you would like to say about the area and its future?

Answered 226

Skipped 248

Respondents	Response Date	Responses	Tags
1	Jan 31 2020 1	I live at 25th and Garfield. I'm tired of people running stop signs. I see people driving 50mph on Garfield. We don't want a roundabout! Neck down/narrow the street so caution is required to	
2	Jan 31 2020 0	The old Albertson's building on 37th and Grand would make a good multi-use facility for businesses such as co-working spaces, small performance venue, winery or micro-brew, restaurant/pub and coffee shop.	
3	Jan 31 2020 0	33rd Ave should be developed for walking and bikes and limit fast moving cars and big trucks and buses.	
4	Jan 31 2020 0	Let's not add any new apartment complexes or tear down old houses to make retail/restaurant space. Maybe do something with the old Albertsons building on Grand/37th.	
5	Jan 31 2020 0	Keep the Historic look of the Neighborhood	
6	Jan 31 2020 1	Establishing greenways to enhance options for walking and cycling through the area, especially a network that would link schools and parks	
7	Jan 31 2020 1	More crosswalks between 29th and 34th to accommodate Sacajawea students and other pedestrians. Want bus line that continues south on Grand to 37th. Please expand and support affordable housing for seniors and	
8	Jan 31 2020 0	The best thing is to make the streets and sidewalks we have safe. Broken concrete, unclean sides of roads, overgrown trees and shrubs make walking and cycling challenging	
9	Jan 31 2020 0	No lease it alone	
10	Jan 30 2020 1	More green spaces, fewer billboards, bike lanes, cool street lamp/lights, and just a better communal, engaging feel rather than an arterial throughfare. Thanks for allowing us to give insight!	
11	Jan 30 2020 0	no	
12	Jan 30 2020 0	no	
13	Jan 30 2020 0	It would wonderful to make this area more pedestrian/bike friendly. Especially with the surrounding neighborhoods and schools. I personally would love to see some changes made, 29th and Grand is a mess.	
14	Jan 30 2020 0	In my opinion connectivity of bike lanes on 29th and up to High Drive would be very nice. Right now bike lane ends abruptly on 29th.	
15	Jan 30 2020 0	ALL of 29th, Grand, and 37th should have bike ADA compliant sidewalks. They should also be enforcing mandatory (as the law states) sidewalk snow removal - especially all the businesses that don't! This includes the strip centers,	
16	Jan 30 2020 0	Just traffic calming please... There is very limited opportunities for improvements as the space to do much of anything substantial without negatively impacting the established primarily residential and relatively small business	
17	Jan 30 2020 0	Bike, walking and transit improvements should also focus on connecting to other areas of town. Also, parking minimums should be eliminated to encourage more density and non-auto focused development.	
18	Jan 30 2020 1	This area needs focused planning as a neighborhood center. It is an asset to many people, both those who live within it and those who travel to and through the area.	
19	Jan 30 2020 1	More green spaces, fun retail like Perry district has, cute small restaurants,	
20	Jan 30 2020 1	Please respect the original architecture. This is what draws people to this area. It is distinctive and would never be confused with any other neighborhood. The trees add shade, beauty, and wildlife habitat. Do not increase density. Preserve what we have because it is irreplaceable.	
21	Jan 30 2020 1	I think this area has the potential to become a larger "Perry District" with the right attention to detail and implementation. s	
22	Jan 30 2020 1	I'd like to see it developed something like along the lines of the Monroe or Perry District.	
23	Jan 30 2020 0	Follow the zoning! It is "pedestrian-enhanced, auto accommodating". The initial design concerns should be for pedestrian, bike, and transit. The more amenities we can get here, the more likely people can and will access those in a non-auto way and that will make this an active and inviting area for the surrounding neighborhoods (even beyond the study area).	
24	Jan 30 2020 0	Preserve the historic fabric and street trees. Don't allow incompatible architectural types to displace historic structures; infill with sensitivity.	
25	Jan 30 2020 0	I have never once in my life seen SPD patrol this area for speeding vehicles. Everyone in the area has at least one story of a time they were almost struck by a speeding vehicle, including all of my children. This isn't a freeway and its not a strip mall. We need slower speeds.	
26	Jan 30 2020 0	Please consider adding landscape buffers containing street trees, planters, and stormwater treatment between the street and sidewalk. A pedestrian-centric, walkable hub is what's needed.	
27	Jan 30 2020 0	No	
28	Jan 30 2020 0	Leave it alone. These so-called great idea developers are ruining a neighborhood!!!!!!!!!!!!!!!	
29	Jan 30 2020 0	We drive through this area ... and welcome traffic calming everywhere.	
30	Jan 30 2020 0	We need multi story housing in the commercial core of the area, or perhaps a half block back from grand	
31	Jan 30 2020 0	no	
32	Jan 30 2020 0	Old Albertsons become food and craft retail stalls. Parking lots green space.	
33	Jan 29 2020 1	This area is desperately in need of character identity. Crosswalks with different Hardscape treatment, landscape buffers separating pedestrians from vehicles, traffic calming, etc.	
34	Jan 29 2020 1	Plans that make it hard to change the old neighborhood feel and protects the older homes left on the road or codes that require vintage style architecture	
35	Jan 29 2020 1	I just have trouble currently leaving my bank and crossing the road when busy, hope that will be accounted for	
36	Jan 29 2020 1	I have lived on 27th a couple of blocks of Grand and I think it should pretty much stay the same. It is a lovely neighborhood.	
37	Jan 29 2020 1	Growing up in the area (Rockwood) and now having children attend school there (Sacajawea and Jefferson) I see this as a place for walking, green spaces, the community to	
38	Jan 29 2020 0	Area is losing its neighborhood feel, don't want it to look like a strip mall as has happened to other south hill areas. Lots of kids/teens walk this area, needs to be more bike /	
39	Jan 29 2020 0	There is a fair amount of single family homes where people do not want to feel like they will be forced out. What ever is planned should not put pressure on the residential neighborhood, but be sure to enhance it.	
40	Jan 29 2020 0	I think increasing a community feel would increase safety for pedestrians. I drive in this area 5 days a week to go to work and worry about the safety of the kids at sacajawea. I also frequent the grocery store, sto, rros, and 4 restaurants in this area. I think it has so much potential to be stronger in community but also enjoy some of the housing around here so dont think big apartments complexes would fit well both population and wbe wise. Green space and bike lanes would be great.	
41	Jan 29 2020 0	Albertsons should be used for indoor lacrosse and gym with courts. We need more gym space for kids athletics near our homes. Love the sports Plex downtown but again we need something near home like a large Y or Knox center	
42	Jan 29 2020 0	Seems great now.	
43	Jan 29 2020 0	Remember how many semi trucks use this area from High Dr or Hatch to service the businesses. More retail and more housing would increase the need for wider streets and would dramatically alter the residential quality which is of high value in this area.	
44	Jan 29 2020 0	Bicycle friendly bike safe streets would be helpful for walking and biking. It would also slow down traffic. It is also fairly inexpensive.	
45	Jan 29 2020 0	Leave it alone! It's perfect just the way it is!	
46	Jan 29 2020 0	Yes, please don't do what you did to Lincoln Blvd. It's space that doesn't get kept up ie weeding etc	
47	Jan 29 2020 0	no	
48	Jan 29 2020 0	Without adequate parking, I question whether I would go to that area except for specific tasks, not to linger. I don't consider this a type of neighborhood as it is. I guess the	
49	Jan 29 2020 0	Not yet but now I'm thinking about it. Better mass transit will help. I think STA does a great job so keep them involved. Streets cars on the south hill??	
50	Jan 29 2020 0	See all the input I provided in the comment section under separated bike lanes. That is the only thing that is working when I tried to provide input.	
51	Jan 29 2020 0	Just don't let it turn into regal which is ridiculous. No more big stores. Keep it to a neighborhood feel not a strip mall.	
52	Jan 29 2020 0	Not every street or area needs to look like Kendall Yards or Perry Street. Some are best left with their existing street and good traffic access to Manito Park	
53	Jan 29 2020 0	This survey is great. I wish the same effort was put into Rockwood Blvd prior to creating what is now a freeway and commuter boulevard!	
54	Jan 29 2020 0	Albertsons should be used for indoor lacrosse and gym with courts. We need more gym space for kids athletics near our homes. Love the sports Plex downtown but again we need something near home like a large Y or Knox center	
55	Jan 29 2020 0	Whatever happens with infrastructure for bikes, peds, and transit needs to be wholly integrated and provide access to downtown. For instance, a separated lane should run from at	
56	Jan 29 2020 0	leave it as is more means losing the character of the neighborhood.	
57	Jan 29 2020 0	Keeping the character of the South hill history, and finding a central social gathering area with retail and restaurants is way overdue. Basic services are there but fostering an art,	
58	Jan 29 2020 0	I love the idea of pocket parks (with chess tables, ping pong tables, foursquare and other simple things) to bring community members together.	
59	Jan 29 2020 0	Make more walkable/safe for pedestrians/bicycles. Zone for mixed use development.	
60	Jan 29 2020 0	There are two dog parks near Spokane, and neither are close for most residents. A small dog park would be greatly beneficial to the community. An example of one is on	
61	Jan 29 2020 0	I grew up in this neighborhood and remember the cute mom and pop stores that opened to the sidewalk. Please bring that back and put parking in the back!! (This was generally	
62	Jan 29 2020 0	Leave it alone!	
63	Jan 29 2020 0	Increase safety to pedestrians and boost dwell time for patron through greenspace and community locales	
64	Jan 29 2020 0	We need to consider the neighborhoods...not just 'progress'	
65	Jan 29 2020 0	Mixed use buildings, more greenery, and more community events will transform this area.	
66	Jan 29 2020 0	Green space	
67	Jan 29 2020 0	Grand has a great history that is barely recognized with only the old horse trough and the beautiful houses. These houses on South Hill are what attract people to move there, eat there, and visit the parks. New development and transit need to emphasis the beauty of historic South Hill. Many people forget that Grand isn't just a street people drive quickly down or up to get downtown or back home. People walk to work, restaurants, yoga and go for jogs crossing Grand numerous times. Development of Grand can really set the tone for historic South Hill. Does Spokane want these neighborhoods to grab national attention like historic neighborhoods of larger cities? It's identify has to remain as a neighborhood, however, focused on slowing down and providing amenities for it's residents.	
68	Jan 29 2020 0	Please put in a light between 29th and 37th. It is dangerous at 30th and Grand. There is traffic pulling onto Grand and cars pulling out from the east side shopping mall. There are also cars speeding and people trying to cross the street there.	
69	Jan 29 2020 0	Don't merge traffic on a straight away - make them turn off	
70	Jan 29 2020 0	I think that if you are going to diversify the area, that routing over head cross walks needs to be a topic for the safety of the kids who frequent that area for school.	
71	Jan 29 2020 0	Please leave this area alone. Unless you live in this area, change is not welcome. Do it in someone else's neighborhood.	
72	Jan 29 2020 0	Nope	
73	Jan 29 2020 0	Not at this time.	
74	Jan 29 2020 0	I'd love to see a more cohesive development approach to this area that emphasizes community connections and use of outdoor space. Please no more drive-through restaurants or ugly suburban-style chains! Let's be special, Spokane :) to this	
75	Jan 29 2020 0	Not impressed with vehicles speeding through residential areas.	
76	Jan 29 2020 0	Fix the merging traffic area.	
77	Jan 29 2020 0	No	
78	Jan 29 2020 0	Don't take out the 2 lanes each way!!!	
79	Jan 29 2020 0	Please don't get rid of historic houses	
80	Jan 29 2020 0	Dog park please!	
81	Jan 29 2020 0	I hope that this change is for the good. I have seen the neighborhood change over the last 40 years and I'd hate to have it turn into a Kendal Yards type of area. This area is more Historic than new flip and trendy.	
82	Jan 29 2020 0	Our forefathers had some very good ideas. Now politicians think they were just plain stupid. Think again.	
83	Jan 29 2020 0	pedestrian/bike friendly, mixed use development, trees, services for local community, create a neighborhood identity	
84	Jan 29 2020 0	More density and less requirements for parking would make this a more livable area. There is already so much parking, we don't need to make concessions for more vehicles.	
85	Jan 29 2020 0	I think a roundabout at 29th and Grand would be beneficial. Less wailing and less accidents!	
86	Jan 29 2020 0	No	
87	Jan 29 2020 0	Make it less auto focused, remove parking lots, replace with garages	
88	Jan 29 2020 0	My big idea is to redo the entire intersection at 29th and Grand to be focused on restaurants/breweries, mixed use w/residential, and neighborhood retail. It is such a waste that one of the most visible intersections on the South Hill is dedicated to parking lots, 9-5 offices, and a gas station. This should be a gateway into the Rockwood, Manito, and Comstock neighborhoods, and provide a sense of identity and community. It should also be enhanced for pedestrian and bicycles, and promote walkability. I would like to see more density here with active storefronts with minimal set-backs and dining options. There are too many offices and not enough neighborhood uses. On-site parking requirements should be reduced and should be saved for mobility limited people. No more parking lots! Also, there should not be any single use buildings, like the banks or dental offices. Everything should be mixed use, multi stories, with mixed income housing—especially affordable and low-income housing to help diversify the neighborh	
89	Jan 26 2020 0	Make it more like South Perry District.	
90	Jan 26 2020 0	none of the sliding scales worked as I filled out this survey	
91	Jan 26 2020 0	improve sidewalks. Enforce snow removal from sidewalks	
92	Jan 24 2020 0	Current plans of making it bike and pedestrian friendly is great!	
93	Jan 24 2020 0	Maintain character of residential neighborhood, increase greenery	
94	Jan 22 2020 0	Biggest concern is for the many children walking along & crossing those busy intersections	
95	Jan 22 2020 0	do NOT replace the houses along 34th. They are well built, lovely homes. We do not need more apartments or commercial buildings from 333rd to High Drive. Leave the residential area as it is.	
96	Jan 20 2020 0	We need more multi-modal options for the lower South hill. Many neighborhoods here have no bike lanes, no sidewalks, and no stop signs. We need these elements. Parks in the area seemed under-utilized for community events and I would love if more events like yoga in the park or nightday markets would happen here. I would love more mixed use for businesses with more entertainment. I would love an urban trail system in South Hill! There are some examples of hidden stairs and walkways in some of the wealthier neighborhoods which are whimsical and great to explore but do not serve much of a mobility role.	
97	Jan 20 2020 1	This area needs less strip mall vibes and more character! Thank you for all of the work that's being done to improve this area.	
98	Jan 20 2020 0	Safety needed for walking or biking Students at Sacajawea	
99	Jan 20 2020 0	It's a method to get from here to there Not a party area!	
100	Jan 19 2020 0	All of the presented ideas are for Southern climes.Here	
101	Jan 19 2020 0	I really like the direction this survey was heading. I'm 38 and just purchased a home here. I want to see a vibrant neighborhood personality that increases neighborhood relationships. Restaurants like Remedy and Manito Tap House should be prioritized. I wish the old Albertson's would be turned into something,	
102	Jan 19 2020 0	Let's not add any new apartment complexes or tear down old houses to make retail/restaurant space. Maybe do something with the old Albertsons building on Grand/37th.	
103	Jan 18 2020 0	more greenery, walking/biking lanes good, more businesses/traffic/apartments bad	
104	Jan 18 2020 0	Semi-unrelated, but the grocery store at 37th and Grand has been vacant for years. It's slowly becoming an eyesore and attracting the homeless community. I think a new grocery store or any business would be a huge improvement to the area.	
105	Jan 18 2020 1	Let family homes be neighbors to family homes. I don't want a grocery store as my neighbor or in my backyard.	
106	Jan 18 2020 1	City of Spokane, please stop planting ornamental grass that is brown, that looks like dead hay ;-(. These are plants that are mostly found in Moses Lake, Pullman and Tri-cities, and although these might be great places to live and go to School, they are not Destination Cities. Please review the choices Band, Oregon has made. They have a similar Climate. They decided to use mostly GREEN, bushes and EVERGREEN trees, rather than BROWN grass and Deciduous, that look like stick for 7 months out of the year. The gas station on the corner of 29th and Grand planted Evergreens 20 years ago, they look great!! Landscaping and Green Space make or break the Aesthetic Appeal of a Project. Unfortunately, they planted way too many Brown Ornamental grass variations at Riverfront Park. Hopefully they can pull some and add EVERGREEN variations, ASAP. Please make it safe for the kids walking or on bikes, ADD GREEN. ADD GREEN please remove the cement planter boxes,thank you for your time to read this.	
107	Jan 16 2020 0	I think grand blvd needs a historic looking facelift. I live right at 33rd and grand and the walk ability is also scary because the sidewalks are super close to the road. Grand blvd also looks very worn down. Every other Area has had facelifts but ours and it is much needed	
108	Jan 15 2020 0	Traffic control: We live ON grand and can not utilize our front yard at all for our kids because the traffic is way faster than 35	
109	Jan 15 2020 0	Improved street lighting is my main concern. As someone who runs in the area when it's dark, it's a primary concern. The street lights aren't enough now.	
110	Jan 15 2020 0	The re use of Jefferson school school owned properties is a tremendous opportunity and needs to be explored.	
111	Jan 14 2020 1	South Hill movie theater	
112	Jan 13 2020 0	Bike lanes on a busy street is methane in your lungs!	
113	Jan 13 2020 1	This is Survey is flawed since there are no images?! Please do NOT make Grand Blvd one lane with ugly weed/planter boxes like what was done on Lincoln in the Canyon Hill neighborhood. Taking away all the on-street parking and putting in the concrete "weed" planter boxes was a mistake! They look so unkept and the re-design of that street devalued the homes on the street and the planters are an eye sore.	
114	Jan 12 2020 0	Research or learn what is or isn't working well at popular areas like the Perry District and Kendall Yards.	
115	Jan 12 2020 0	Calm traffic, develop parking lots, build density, establish greenscape safe walking connections to vicinity parks and schools. Bring back the streetcar.	
116	Jan 12 2020 0	pls do not do what was done on Lincoln or Sprague. Lets make improvements not hazards	
117	Jan 12 2020 0	A grocer like My Fresh Basket or Whole Foods (with/Amazon locker) would be great in the vacant Albertsons store on 37th and Grand.	
118	Jan 12 2020 0	Please keep the character of the neighborhood and businesses such as the Perry District.	
119	Jan 12 2020 0	The bus route for the proposed new Sacajawea school should be in and out of a loading area within the school property & not on residential streets as it is now on 33rd. & Lamonte. Also use the main arterials as its main travel with students not historic Manito Blvd.	
120	Jan 11 2020 0	I think having more pedestrian friendly access, street buffers, and community events would fit this area well. Building compact developments and convenient stores would take away from the charm of this area.	
121	Jan 11 2020 0	Keep it "small" don't expand business/commercial use here. Maintain residential, bikes/walk, neighborhood environment and amenities.	
122	Jan 11 2020 0	The most important thing is making sure kids are safe walking to school. The crosswalks need to stand out way more! Having separated biking/cycle tracks, walking, and driving space would be FANTASTIC.	
123	Jan 11 2020 1	Go back to 4 lanes from29th thru 37th. Too much congestion as is. Silly idea to go to one lane each way. It's an arterial!!!	
124	Jan 11 2020 1	Thrilled to see these chanaes comina. thank vou!	
125	Jan 11 2020 0	Would like improved walkability and streetscapes, street-facing businesses that encourage sidewalk use.	
126	Jan 11 2020 1	Safer accessibility for bikes and pedestrians coming from Manito neighborhoods NW of planning area. Why is 27th west forwards Manito-Boulevard not included in the study? Many, many households from (25th ave) west to Division feed this shopping district. Bikes and walkers in this area is perhaps even more isolated from the core shopping district due to lack of safe crossing on 29th.	
127	Jan 10 2020 0	I would love to see improvements that celebrate the historic charm of this neighborhood.	
128	Jan 10 2020 0	Maintain historic residential character. Bury overhead cable lines. Slow speed limit but don't encourage further commercial growth. We don't need or want another Lincoln HS!	
129	Jan 10 2020 0	Keeping the area family-friendly and community focused would be nice. My young family is being raised here and I work in the schools. Keeping a neighborhood feel with a few funriopue features would be ideal. Thank you.	
130	Jan 09 2020 0	DO NOT LIMIT TRAFFIC LANES AND WE DO NOT NEED EXPENSIVE PRETTY NEIGHBORHOOD, FIX THE DAMN ROADS INSTEAD, PLEASE, I AM EMBARRASED TO LIVE IN SPOKANE AFTER 40 YEARS, YOU THINK PRETTY NEIGHBORHOODS ARE IMPORTANT, FIX THE DAMN STREETS, BE SMART ABOUT SPENDING MONEY. YOUR NEIGHBORHOOD DESIGNERS AND ENGINEERS NEED A REALITY CHECK ON PRIORITIES! PEOPLE ARE TIRED OF SPENDING TAX PAYER MONEY ON PRETTY - FIX THE STREETS!	
131	Jan 09 2020 0	A traffic light at Arthur and grand please. There are accidents frequently and it's the main road to Hutton so it gets congested. Turning left is a nightmare and there's not a great alternative.	
132	Jan 09 2020 0	No	
133	Jan 09 2020 1	we have a gas station on the corner of 29th and Grand. We need to be able to access our building with our tanker.	
134	Jan 09 2020 1	Traffic is heavy and getting out on grand is hard. Making it smaller by adding landscaping would make it even harder. Thus causing less people to come to area to shop	
135	Jan 08 2020 1	Leave it alone. You idiots at city hall love to waste my tax money. You are all incompetent.	
136	Jan 08 2020 1	The old Albertsons on 37th and Grand might make a good community building. Also, don't take out housing to put in more retail space!	
137	Jan 08 2020 0	Please make it safer for everyone who is walking and riding bikes in this area and please encourage traffic to slow down through here. There needs to be better access to the businesses that is safer than what is currently present.	
138	Jan 08 2020 0	Grand needs to stay a easy smooth flowing access to downtown!	
139	Jan 08 2020 1	Priority focus on the reactivation of the vacant commercial grocery store space at 37th & Grand with an innovative, lively use. Also, if the old Jefferson Elementary School is torn down, ensure a redevelopment that encourages positive urban infill and further activates that intersection of 37th & Grand. Additionally, also permissive left turns from all directions at the signalized intersection of 37th & Grand.	
140	Jan 08 2020 0	We love our SPH being so close to the school and library, please don't destroy the quality of home life for those homes already in place.	
141	Jan 08 2020 0	Don't take away parking in front of housing!!!	
142	Jan 07 2020 0	Improved sidewalks is a must in this area! Sidewalks are not level, and need some serious TLC makeover.	
143	Jan 07 2020 0	Fix the unlevel sidewalks damaged by old treeroots.	
144	Jan 07 2020 0	School and student safety should be a priority in planning	
145	Jan 07 2020 1	My biggest concern is speed of vehicles and ability to cross grand at sidewalks. My kids are involved in activities at school and at the Methodist church and especially during winter it can be dark and dangerous to try and get across the crosswalk at 33rd and Grand.	
146	Jan 07 2020 1	I don't want to see Grand turn into Monroe by huckleberries.	
147	Jan 07 2020 1	A lot of the services available in this area are boring, like credit unions. It would be great to develop this area more to encourage walking a social elements	
148	Jan 07 2020 1	The old Albertsons on 37th and Grand needs to transformed into something useful and unique that fits with the overall plan.	
149	Jan 07 2020 0	No	
150	Jan 06 2020 0	Better lighting, sidewalks, preserve houses/single family homes, provide effective flow of traffic turning into our if busy locations like post office, middle school & businesses. Preserve green spaces, provide flasher at crosswalk without stop lights to slow/stop cars as the race between lights between 37th& 29th. I walk this stretch almost daily with my dogs & people race their cars, easily going up to 40mph.I would guess at times. They rarely yield or notice pedestrians trying to cross grand. It can be quite dangerous.	
151	Jan 06 2020 0	Flashing pedestrian safety crossing at 33rd like the one at Hamilton and Desmet	
152	Jan 06 2020 0	Please please please add crosswalks on 29th at Arthur or Garfield. It is so dangerous to cross there and is a huge deterrent for our famils in accessing businesses on the south side of 29th.	
153	Jan 06 2020 0	Leave it the way it is. It is a very nice area that has developed nicely on its own without major change imposed. Preserve existing housing and neighborhood feel and don't try to change it into something else that outsiders are trying to impose. We like this community the way it is. Thanks for letting us give input.	
154	Jan 06 2020 0	Keep it simple and keep the South Hill Charm. We're not looking for Kendall Yards.	
155	Jan 06 2020 0	This is the same plan and same issues that have gone round and round for years. If there is anyone who wants to invest in the corridor then help them do it. Extend the corridor to 37th where is already ends. Again, we've gone round and round on this for years.	
156	Jan 06 2020 1	This area consists of mostly single family homes. Would like to keep the population density from being too high, so not a fan of lots of apartment buildings in this area.	
157	Jan 06 2020 1	I think the area needs to focus on traffic ease.	
158	Jan 06 2020 0	prefer area remain primarily residential with business and shopping already readily accessible	
159	Jan 06 2020 0	Please no more multi-family income housing in our neighborhood. Youve already destroyed regal, please do t do the same to our area.	
160	Jan 06 2020 0	With the existing businesses already in locations, I don't know how you would add any more spaces, i.e. new housing/apartments, or several other of the suggestions in the survey. I have lived in the area of study since 1991. The largest concern I have witnessed is the safety for pedestrian crossing at 33rd and Grand without proper street lighting.	
161	Jan 05 2020 0	Whatever is done, we need to make sure it does not add to the traffic level on Grand Blvd. It is already quite busy and loud!	
162	Jan 05 2020 1	Late night transit to downtown for nightlife. Busses that have a cashless option to pay.	
163	Jan 05 2020 0	This area offers exceptional walkable services. Grand has become very congested at peak commute times due to the traffic light at 37th, would be nice to reduce backup at this area. Modeling the grand corridor with services, retail, and other amenities would be beneficial as long as the surrounding neighborhoods can be maintained	
164	Jan 05 2020 0	I would like to have a bookstore	
165	Jan 05 2020 0	Don't narrow the roads there is already too much traffic. Make it easier to turn onto 29th from Arthur (for example) if you're leaving the neighborhoods traveling East. There is no easy way to do that safely.	
166	Jan 05 2020 0	Please update the old Albertson's on 37th and Grand Blvd. with shopping and farmer's market	
167	Jan 05 2020 0	The empty Albertsons building would be nice if it was a grocery or market store again this is a place i am close enough to walk to	
168	Jan 04 2020 0	possible round about at 30th ave for ease of traffic flown from businesses both side of Grand and 30th	
169	Jan 04 2020 0	Keep/develop parks and historic housing, improve walkability, more mixed use areas and bus routes good, more art, love the area already!	
170	Jan 04 2020 0	I love this neighborhood! I live on grand and 27th. I walk a lot! I hardly drive. Making this corridor more walkable for me and my 2 year old son would be so wonderful. A sense of place is important to me and the vibrancy of this and any city. Please contact me at 602-761-5055 (Dana) if you want to talk more	
171	Jan 04 2020 0	I am a single family home and income. I don't want my taxes to go up!! I am sure home value will be increasing?! My neighbors want a whole foods market going in where	
172	Jan 04 2020 0	more trash cans for dog walkers, poop everywhere	
173	Jan 04 2020 0	The sliders did not work on my mac	
174	Jan 04 2020 0	Improve crosswalks and leave everything else the same.	
175	Jan 04 2020 0	this is already a very nice neighborhood, leave it alone and go screw up someone elses neighborhood	
176	Jan 04 2020 0	keep residential areas separate from busier restaurants and shops	
177	Jan 04 2020 0	the center planting strip on 29th is in need of improvement	
178	Jan 04 2020 0	Please do NOT bring more of the scooters and bike bikes - they are dangerous and a menace. People leave them in yards and have no respect for riding them safely. We would	
179	Jan 04 2020 0	There is good nucleus here now, can we build around it to make a destination neighborhood that lifts property values	
180	Jan 04 2020 0	No	
181	Jan 04 2020 0	I think the grand area needs a few more restaurants& shops but not too much to make it more busy	
182	Jan 04 2020 0	I love the area and I'm glad to live nearby	
183	Jan 04 2020 1	Slower traffic, less chain retail	
184	Jan 04 2020 1	Heredity. I am pretty content with the way it is. Walkability could be improved and some more restaurants would be nice, but the identity is just fine the way it is. If I wanted to	
185	Jan 04 2020 1	Require the commercial development be pedestrian oriented. Build to street, parking behind. Refer to Spokane's Comprehensive Plan. Ex: Walgreens is a Shame on planning.	
186	Jan 04 2020 1	Being people friendly is what makes a community not hyped business	
187	Jan 04 2020 1	Please don't add to traffic congestion. It is one of the main north/ south streets and Spokane has north/ south issues.	
188	Jan 04 2020 1	no	
189	Jan 04 2020 1	We have plenty of commercial options all around us, don't need more crammed in unless the old Albertsons is used for something other than the truck stop and dump it is being	
190	Jan 04 2020 1	No	
191	Jan 04 2020 0	Slower traffic, family friendly space	
192	Dec 28 2019 1	The Grand boulevard area has the potential to be a wonderful community space. As it sits now, grand between 29th and 37th-especially, represents a physical and conceptual	
193	Dec 29 2019 1	We love living here and are so excited to see improvements. We live on 30th between Arthur and Garfield and def feel left out of improvements sometimes. It is such a great	
194	Dec 24 2019 1	Please keep it charming and promote non-automobile modes of transportation and keep! Parking should be BEHIND any retail space permitted	
195	Dec 23 2019 1	Preserve the historic character of the area. Not too interested in seeing more houses torn down to build banks and coffee shops.	
196	Dec 20 2019 1	The people living here are forward thinking and are receptive to changes that increase alternative mass transit, pedestrian and bike traffic. There are other through streets that can	
197	Dec 21 2019 0	Don't miss this opportunity to make this part of my home neighborhood a quality space for the 21st Century! Focus on pedestrians, bicyclists and mobility impaired citizens	
198	Dec 19 2019 1	08:43 AM Please keep the SPH! Spending significant funds for this project, insure that they are used to make the neighborhood a better place to live and experience.	
199	Dec 19 2019 1	Please don't destroy ANY low income housing	
200	Dec 19 2019 1	Make it more walkable with crossings for pedestrians that will stop traffic	
201	Dec 19 2019 1	I think good neighborhood retail would be great.	
202	Dec 18 2019 1	From lower grand north to south it's the only street that can move large amounts of cars, put the bike paths on a slower street like Bernard where there is much much smaller	
203	Dec 18 2019 1	Improved traffic flow, not lane reduction that would make it worse. Improved traffic flow for all major roads on south hill	

AGENDA

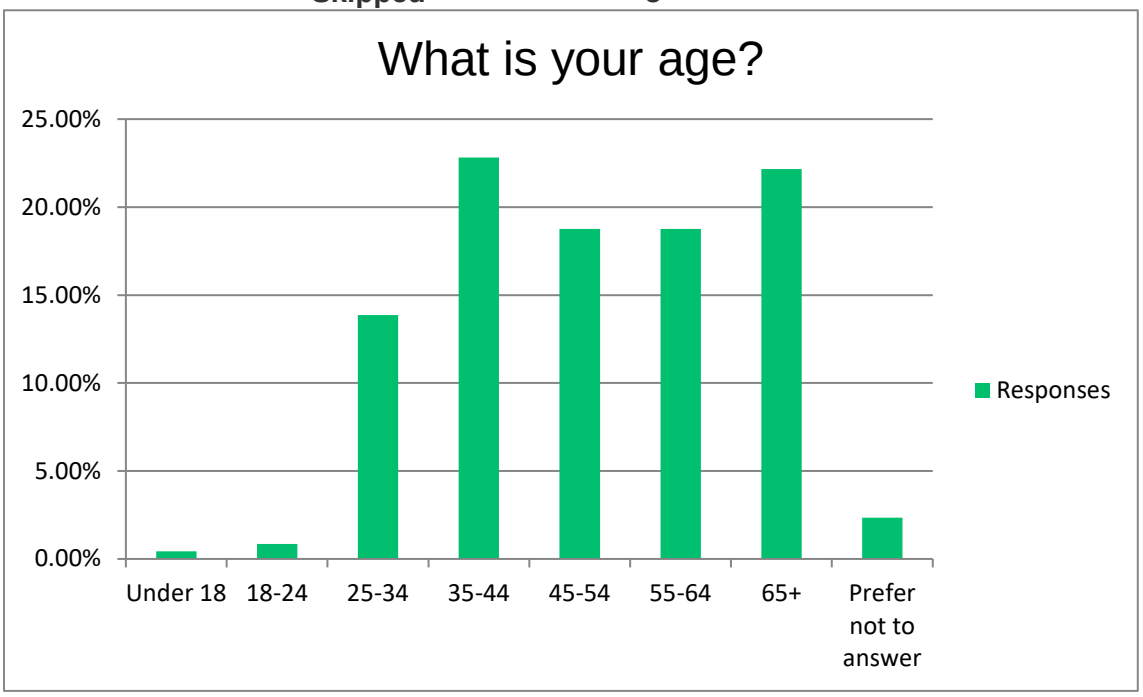
203	Dec 18 2019	Widen street, people are just trying to drive to downtown or go to the restaurants/shopping!
204	Dec 18 2019	I very specifically would,like to see the saving of the existing street island. It, along with the other treed/vegetated islands on Grand and 29th , ans some of the few remaining in
205	Dec 17 2019	Needs to be easier to enter/exit grand from in front of lap house area. When busy - you can't cross. Pedestrians need crossing path at this area also. Bushes need removed to
206	Dec 17 2019	No
207	Dec 17 2019	More trees, safety features including lighting, accessibility and perhaps a water feature inside of a turnabout at 33rd Ave to avoid high speed traffic
208	Dec 17 2019	PLEASE put in a crosswalk at 30th and Grand so it is safe to cross Grand to get to the businesses there
209	Dec 17 2019	The built character should take design cues from Manito Park, the site's history, and the surrounding neighborhoods. Would love to see a campus or parklike look and feel with a focus on bike/pedestrian safety and comfort. Auto traffic, especially to/from the schools, should be encouraged to stay on Grand and not dispersed into surrounding residential areas.
210	Dec 17 2019	I just have concerns with all of the "ideas" listed above for this specific traffic study area that improvements and specific changes MAY drive traffic out into the neighborhood
211	Dec 17 2019	No.
212	Dec 17 2019	no
213	Dec 17 2019	I love living in this area because I can walk to church, grocery store, restaurants, library, post office. I walk in the street at night often (along 32nd), because I know the sidewalks
214	Dec 17 2019	Area needs a roundabout at 29th and Grand with protected bike lane.
215	Dec 16 2019	We have no good routes through south hill, I suggest good development ideas that consider keeping traffic flowing. We don't want another regal area where the city poorly planned
216	Dec 16 2019	Expand multifamily tax exemption to Grand District center.
217	Dec 16 2019	No more commercial buildings, use the empty ones that are already vacant. Bring the leases down so local businesses can afford to lease. Keep businesses local and add more
218	Dec 16 2019	Sidewalks for sure
219	Dec 16 2019	No
220	Dec 16 2019	I would like a an easier crossing or walking bridge connecting the retail/shops/restaurants on the west and east side of Grand at 30th Ave.
221	Dec 16 2019	No
222	Dec 16 2019	I access this area by bicycle frequently and my kids bike to nearby schools. The "fit" feature of the survey didn't work for the bicycle infrastructure question so please don't let this
223	Dec 16 2019	Safe, physically-protected cycling facilities (or robust neighborhood greenways) would be great, but make sure there's a safe, comfortable connection to downtown and other
224	Dec 15 2019	Please don't do to Grand what was done to 29th, ie making it 3 lane with middle turn lane. It worked on 29th as most from High Drive East to Pittsburgh on/Martin, is residential.
225	Dec 13 2019	Density is destiny, we don't want this to just be a drive through neighborhood. Build for bikes, pedestrians, dense housing and the neighborhood will thrive!
226	Dec 12 2019	I think with residential streets and multiple schools safety of kids should be the first priority. housing density that will bring more traffic to the area is a terrible fit.

AGENDA

GRAND BOULEVARD PLANNING AREA SURVEY

What is your age?

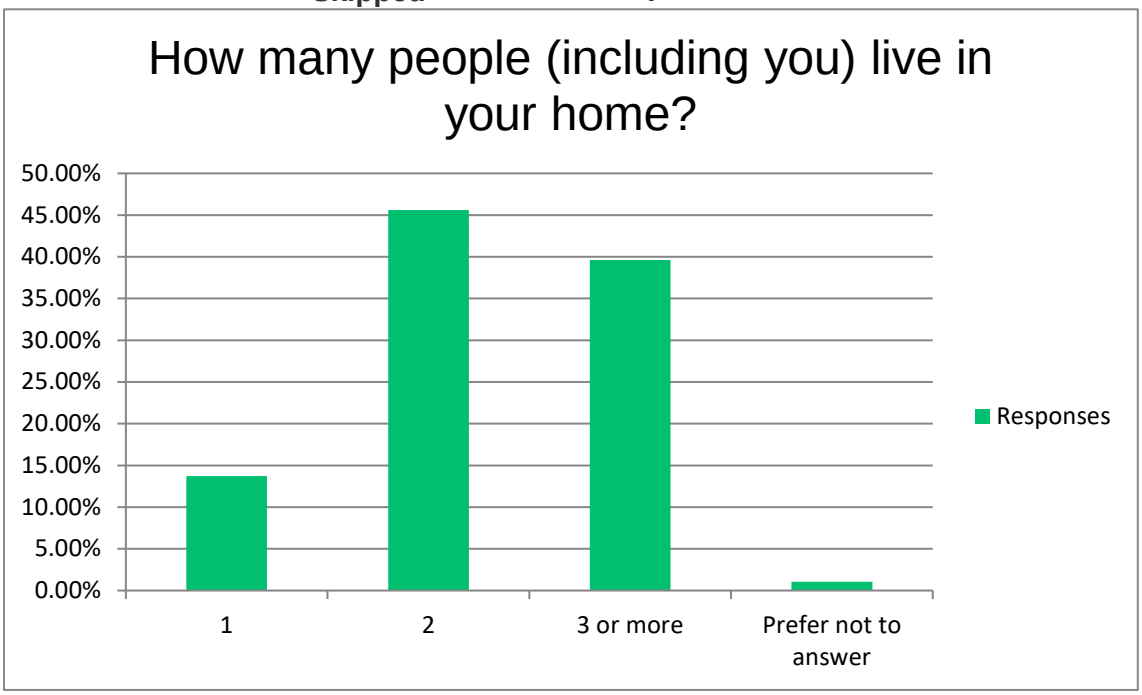
Answer Choices	Responses	
Under 18	0.43%	2
18-24	0.85%	4
25-34	13.86%	65
35-44	22.81%	107
45-54	18.76%	88
55-64	18.76%	88
65+	22.17%	104
Prefer not to answer	2.35%	11
	Answered	**469**
	Skipped	**5**



GRAND BOULEVARD PLANNING AREA SURVEY

How many people (including you) live in your home?

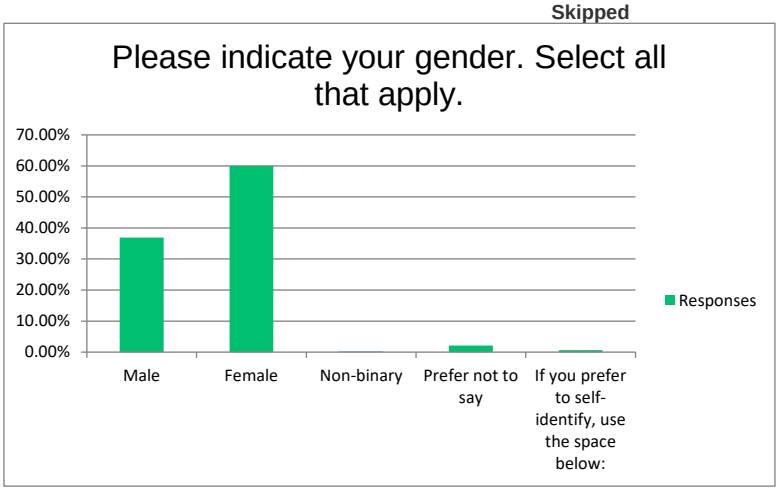
Answer Choices	Responses	
1	13.70%	64
2	45.61%	213
3 or more	39.61%	185
Prefer not to answer	1.07%	5
	Answered	**467**
	Skipped	**7**



GRAND BOULEVARD PLANNING AREA SURVEY

Please indicate your gender. Select all that apply.

Answer Choices		Responses
Male	36.91%	172
Female	60.09%	280
Non-binary	0.21%	1
Prefer not to say	2.15%	10
If you prefer to self- identify, use the space below:	0.64%	3
	Answered	**466**
	Skipped	**8**

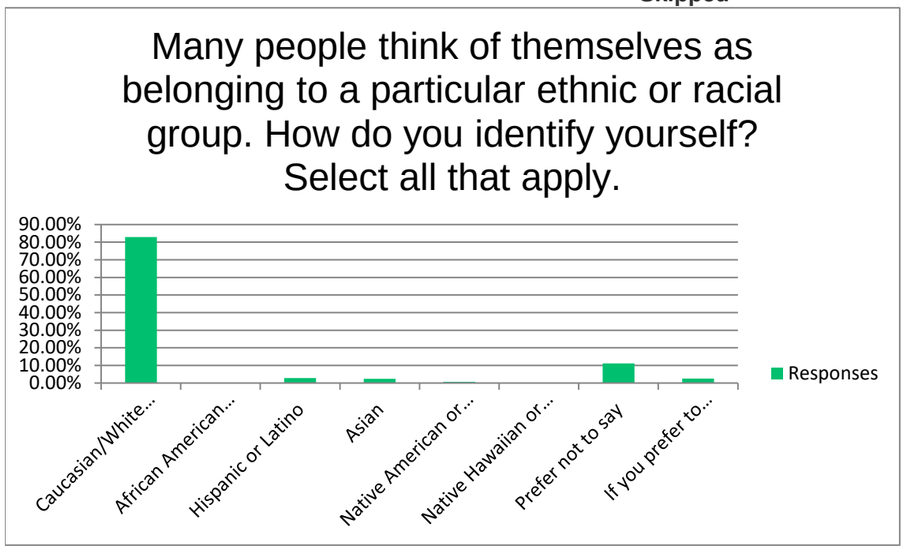


Respondents	Response Date	If you prefer to self- identify, use the space below:	Tags
1	Jan 30 2020 0	Genderqueer	
2	Jan 29 2020 0	BS	
3	Dec 16 2019 0	Male married to a female.	

GRAND BOULEVARD PLANNING AREA SURVEY

Many people think of themselves as belonging to a particular ethnic or racial group. How do you identify yourself? Select all that apply.

Answer Choices	Responses	
Caucasian/White (not Hispanic)	82.83%	386
African American or Black	0.21%	1
Hispanic or Latino	2.79%	13
Asian	2.36%	11
Native American or Alaska Native	0.64%	3
Native Hawaiian or Pacific Islander	0.21%	1
Prefer not to say	11.16%	52
If you prefer to self- identify, use the space below:	2.58%	12
	Answered	**466**
	Skipped	**8**



Respondents	Response Date	If you prefer to self- identify, use the space below:	Tags
1	Jan 29 2020 0	Iranian	
2	Jan 29 2020 0	Eurasian	
3	Jan 29 2020 0	BS	
4	Jan 24 2020 0	Human group	
5	Jan 19 2020 0	Euro-American	
6	Jan 19 2020 0	American	
7	Jan 12 2020 0	Human	
8	Jan 11 2020 1	Jewish	
9	Jan 09 2020 0	American-Italian	
10	Jan 07 2020 0	jewish	
11	Jan 04 2020 1	Gail Prosser	
12	Dec 16 2019 0	We are all a wonderful blend of the world people	

From: Note, Inga
To: ptdadams@comcast.net
Cc: Wittstruck, Melissa; Black, Tirrell
Subject: Grand Boulevard study
Date: Monday, November 4, 2019 3:21:29 PM
Attachments: image004.png
image006.png
image008.png

David,
Here is the link to the Grand Boulevard webpage. https://my.spokanecity.org/projects/grand-boulevard-transportation-and-zoning-analysis/
We had one open house already and received a lot of comments from the neighborhood about traffic concerns, pedestrian safety, bicycle needs, zoning, etc. If you would like to provide comments on the existing conditions you can reply back to this email.

And here is the link to the Lincoln Heights Neighborhood Council page with all of the contacts. All traffic calming requests must go through the neighborhood council.
https://my.spokanecity.org/neighborhoods/councils/lincoln-heights/

Sincerely,
Inga Note

Inga Note, P.E. PTOE | City of Spokane | Senior Traffic Planning Engineer
☎509.625.6331 | inote@spokanecity.org | spokanecity.org

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From: Note, Inga
To: Reah Flisakowski; Alex Dupey; Wittstruck, Melissa
Subject: FW: Grand Ave traffic calming
Date: Tuesday, October 22, 2019 7:52:21 AM

From: Erik Nelson <eriknelson2020@gmail.com>
Sent: Tuesday, October 22, 2019 12:03 AM
To: Note, Inga <inote@spokanecity.org>
Subject: Grand Ave traffic calming

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hi Inga,

I could not attend the meeting tonight.

I would love to see a roundabout on 29th and Grand to calm traffic and to make it less dangerous to cross via foot or bike.

Thanks again for all you do.

Erik Nelson
South Hill

From: Note, Inga
To: Wittstruck, Melissa
Cc: mark@wheelsportbikes.com
Subject: RE: Grand Blvd Study
Date: Monday, December 2, 2019 8:07:58 AM

Melissa,
Can you add Mark to the list?
Thanks,
Inga

From: mark@wheelsportbikes.com <mark@wheelsportbikes.com>
Sent: Monday, November 25, 2019 8:33 AM
To: Note, Inga <inote@spokanecity.org>
Subject: Grand Blvd Study

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Inga, please add me to the Grand Blvd Transportation and Zone Analysis study emailing list.

Thank you.

Mark Neupert
Owner
T: 509-326-3977 | M: 509-220-3249
W: www.wheelsportbikes.com

From: Comstock NHC Chair
To: Wittstruck, Melissa
Cc: Winegar, Cathie
Subject: Re: Grand Blvd Study - Focus Interview Invitation
Date: Thursday, October 17, 2019 11:03:53 AM
Attachments: image002.png
image003.png
image004.png

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Cathie, as the Grand study is now getting underway and the area is getting a thoughtful approach to make this section of Grand a safer place for pedestrian traffic as well as vehicular traffic, I wanted to reopen the discussion and WA Trusts offer to improve upon the ADA ramp at the northeast corner of 32nd and Grand. While I'm sure that the design made sense to some engineer at some point (maybe the same engineer who failed miserably with the 33rd corner?) and is likely a "compliant" minimum design, my contacts at Access 4 All Spokane (http://access4allspokane.org/) continue to advocate for an improved design that better represents accessibility challenges. From a redesign standpoint there is enough room behind the current curbing backdrop towards to utility boxes to have the design look similar to the corner on 32nd. I personally could see an additional beautification project of upgrading the utility boxes so that our Comstock neighborhood logo (see attached) could be applied and act as a northbound "welcome" anchor to the core 29th/Grand business district. If I have understood the rumors regarding the new building going up (maybe it was the next block up) there is to be a community center/ meeting space of sorts in the works. The improved ADA design, utility box upgrade with logo, and community center will be a great way to lead this areas safety and beautification efforts and further represent WA Trust's commitment to the neighborhood. Let me know what your thoughts are and we can collaborate.
John Schram, Comstock Neighborhood Council Co-Chair

On Wed, Oct 16, 2019 at 4:02 PM Wittstruck, Melissa <mwittstruck@spokanecity.org> wrote:

> Hello Cathie,
>
> Thank you! This will be a one-on-one focus interview, similar to what the consultant team is discussing with the NAI Black representative (the shopping center) as well. Generally, the topics would include assets and challenges with the transportation infrastructure on Grand (27^{th}-34^{th}) and how you see it affecting your business, employees, and customers. Ideas for improvements along the corridor, including right-of-way treatments, or thoughts for other changes that could be considered. Since land use and zoning are also being analyzed in this area (up to 39^{th}, actually) there might be some open-ended questions about how the business district is changing and growing, and long-term growth visions.
>
> Your participation is really appreciated – thank you for your interest and investment of time. I'll see you Tuesday, October 22 at 11:00 AM at Manito UMC Rm 201.
>
> I'll be at Comstock NC tonight – maybe John and the group will come up with other questions they are interested in, since ground is broken on the second pad at the branch site!
>
> Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: Winegar, Cathie <CWinegar@watrust.com>
Sent: Wednesday, October 16, 2019 3:55 PM
To: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Cc: Comstock (comstockneighborhoodcouncil@gmail.com) <comstockneighborhoodcouncil@gmail.com>
Subject: RE: Grand Blvd Study - Focus Interview Invitation

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hi Melissa –

I would be delighted to attend this meeting. I appreciate the invitation.

Is there anything in particular that your audience would like to hear about? John, I also would be interested to hear if there are topics your council would like to discuss.

Hope you each have a great rest of your week!

Cathie

From: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Sent: Wednesday, October 16, 2019 3:32 PM
To: Winegar, Cathie <CWinegar@watrust.com>
Cc: Comstock (comstockneighborhoodcouncil@gmail.com) <comstockneighborhoodcouncil@gmail.com>
Subject: RE: Grand Blvd Study - Focus Interview Invitation

Hello Cathie,

I am following up on the email invite to participate in a focus interview regarding possible changes to transportation and zoning in the business district along Grand Blvd. John Schram, with Comstock Neighborhood Council, was kind enough to share your email to provide Washington Trust with this opportunity to participate. I hope you, or your designated alternate, will be able attend the interview time on October 22, 11:00 am – 12:00 pm at Manito United Methodist Church, 3220 S Grand, Rm 201. As a business owner and neighbor in this community your insights and experiences with the new WA Trust branch office are valuable and appreciated. Please let me know if you can attend, or if you have any questions, please contact me.

Below is the original invitation with more background on the project, which can also be found online: https://my.spokanecity.org/projects/grand-boulevard-transportation-and-zoning-analysis/

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

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From: Wittstruck, Melissa

Sent: Monday, October 14, 2019 5:37 PM
To: 'cwinegar@watrust.com' <cwinegar@watrust.com>
Cc: Note, Inga <inote@spokanecity.org>; alexd@migcom.com; Reah Flisakowski <rlf@dksassociates.com>
Subject: Grand Blvd Study - Focus Interview Invitation

Greetings!

The City of Spokane is launching an effort to consider possible changes to transportation and zoning in the business district along Grand Boulevard 27th – 34th Ave. We are hoping you will join planning staff and project consultants for a focused interview on **Tuesday, October 22, 11:00 AM – 12:00 PM. This meeting will be held at Manito United Methodist Church, 3220 S Grand, Rm 201.**

Washington Trust is part of this neighborhood – with customers and staff that are frequent users, as well as a business interest, of this area of Grand Blvd. We hope to hear some of your hopes and concerns in this interview. Your time and insights are valuable, and would be much appreciated!

There will also be a drop-in Community Open House on Monday, Oct 21, from 6:00- 8:00 pm in Manito UMC Fellowship Hall. Please feel free to share the attached Open House flyer to your distribution lists!

Here is a little bit of background on this study.

Spokane's South Hill continues to be a vibrant area in the Spokane community; the area is seeing continued development and improvement projects. As the neighborhoods around the Grand Boulevard business district continue to grow, the City wants to be sure to support opportunities for sustainable improvement and growth in this area.

A transportation and zoning analysis for the business district on Grand Boulevard will is now underway. This study will allow for recommended improvements to meet the anticipated needs and growth of this neighborhood business district.

The study will evaluate Grand Boulevard south of 29th Avenue. The transportation work will focus on the core of the business district on Grand between 29th and 34th avenues. The zoning analysis sub-area will be bounded by 27th Avenue,

39th Avenue, Latawah and Arthur.

Process

The Grand Boulevard Transportation & Zoning Analysis will require coordinated community effort by local stakeholders, key public representatives, technical staff from partner agencies, and City staff. The City has hired consulting firms DKS and MIG to help conduct the analysis.

A continuous public engagement strategy will be key to the study. Please look for opportunities to participate in public engagement opportunities!

Here are the elements of the study:

- REVIEW: Traffic patterns & safety on Grand Blvd.
- DEVELOP: Understanding of bicycle & pedestrian needs.
- EVALUATE: Concepts of lane reduction, bike lanes, wider sidewalks, and green infrastructure. Analyze residential & retail data and conduct market analysis for redevelopment potential.
- STUDY: Land use and zoning boundaries with Comprehensive Plan goals in mind.
-

The City has collected traffic data, including bike and pedestrian counts while school was in session.

Attached is the flyer for the Oct 21 Open House, 6-8 pm at Manito UMC.

This is an exciting project for the neighborhoods! Please let me know if you have any questions. There is a QR code on the flyer that will take people to the Grand project page, or click here: https://my.spokanecity.org/projects/grand-boulevard-transportation-and-zoning-analysis/

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

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From:	Wittstruck, Melissa
To:	James Reierson
Cc:	Note, Inga
Subject:	RE: Grand Blvd Planning Project status
Date:	Monday, November 25, 2019 5:24:17 PM
Attachments:	image002.png image003.png image004.png

Hello Jim,

Your concerns and recommendations are shared by many of the neighbors participating in this project. I will have to check in with Inga on the discussion you had with her. The study is intended to address these safety concerns when it wraps up in mid-2020. I anticipate that it will be a package of changes that will target improving safety for all users. I don't know that singular change,s as you suggest here, can be implemented right away. Engineering requires the data we are collecting right now for their analysis on what changes and where.

I realize this is not satisfactory to you as you observe the these safety issues first hand; I too live on 28th and have lived within 6 blocks of 29th &Grand for 50 plus years, observing the change in traffic conditions. We are working hard with the community towards improving the area for safety and an improved public realm overall. I encourage you to continue to participate. I will get together with Inga early next week to get her input on your suggestions. In the meantime, you can reach out to the South Hill COPS to request the traffic unit increase patrols. If you do, please include location, time of day, and day of week that you believe would be optimum for improving driving behavior.

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

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From: James Reierson <jrreierson@yahoo.com>
Sent: Saturday, November 23, 2019 3:07 PM
To: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Subject: Re: Grand Blvd Planning Project status and video link

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Melissa,

I spoke with Inga N. and made specific -urgent recs, on need for crosswalk at 30th and Grand, as well as having speed limit from 29th to 33rd lowered to25 MPH, similar to Perry St.

What is happening to my recs and others , due the HIGH traffic volumn, and danger to pedestrians in this area, and can anything be done to 'jumpstart' safety concerns???
I am retired career military and county prosecutor, and lack of police enforcing speed limits makes danger even worse. I grew up on 28th and hatch, still live in house parents built after WW2, and the congestion at Grand from 29th to 33rd is out of control. Can controlling parties be copied, and can city council take this area up asap, as hundreds of Sacajawea kids and also senior pedestrians are at great risk daily.
Thank you
Jim Reierson
home msg: 624-5731

On Friday, November 22, 2019, 03:11:31 PM PST, Wittstruck, Melissa <mwittstruck@spokanecity.org> wrote:

Hello!

Thank you to all of you who participated in the Oct 21-22 Grand Blvd Community Open House, very rainy walking tour, or the focus interview sessions held with the City consultant team. Some of you were unable to attend, but have expressed interest in future meeting opportunities, or keeping up with the project online updates.

Your participation and feedback are incredibly valuable. City staff and the consultant team are putting together all the data they gathered, as well as public comment, in preparation for a second community meeting early in the New Year. Meantime, the Grand Blvd online project page has been updated with “What’s Happening Now” and the video of the very hardy group that walked Grand Blvd from 29th to 37th in a chilly rain to observe and comment on both transportation and land use conditions! It is posted here : https://my.spokanecity.org/projects/grand-boulevard-transportation-and-zoning-analysis/. Please share with all who may be interested – many folks outside Comstock, Rockwood, and Manito-Cannon Hill also are interested as employees, property owners, neighborhood schools, business owners, or users of Grand Boulevard.

Staff is also putting together a short overview document of the October Kickoff and an online survey. Look for notification of both of these, hopefully the first full week of December.

Again, thank you very much! And a very warm and Happy Thanksgiving to all of you.

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

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From:	James Reierson
To:	Wittstruck, Melissa; Condon, David; Nadine Woodward Felt; Stuckart, Ben; Beggs, Breean
Subject:	Re: Grand Blvd Planning Project status
Date:	Tuesday, November 26, 2019 1:03:55 PM
Attachments:	image003.png image002.png image004.png

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Melissa,
Thank you for your info, and have great thanksgiving! It really is frustrating to me (after working as dep prosecutor for Kootenai county for 15 yrs - and seeing how CDA police deal with traffic and speeding) to see virtually NO concern on behalf of current police chief/or the city council to really deal with the deadly use of cell phones for tweeting, texting, and talking, to the detriment of pedestrians, who if hit and survive - often have injuries that lead to death or limit ability to walk and enjoy life. The CDA Police actually stop cars and issue tickets and arrest DUI offenders, whereas here in Spokane (and current article in paper about the new calming construction up on 43rd that cost over $240,000) the emphasis has been on putting up cameras and signposts for purpose of getting 'running red light' monies after company takes its cut. What is missing is practical fact that many of speeders are criminals who have committed crimes and making a get-a-way, and if stopped by police, would result in a lot of arrests and ability for victims to get justice. A lot of stolen cars are driven by people who are career criminals as well, who are wanted in other states for violent crimes, including murder, rape, etc.
Also, the one I got, I called to the courthouse area that takes fines, and learned if people show up at courthouse 'windows' -the cost of red=light ticket much lower than the bill from Arizona company for over $100 and up. That is really not fair to non-criminal folks, who have to feed and clothe their families. I yet to see or hear the current Chief ever talk about these issues, other than say they need more police. If he correctly articulated the realistic dangers of trying to apprehend speeders with appropriate number of officers (just 8-10 yrs ago traffic unit had 14-18 officers - now after 1 'sting' operation for TV stations to film in Oct at Rosauers crosswalk on 29th- I spoke to one of motorcyle officers - he said only 4 - that is right 4 officers for entire city. There is a total lack of comprehension by city council and current Mayor about the need to get point to Spokane drivers speeding and ignoring pedestrians will NOT BE Tolerated. Both P. FAlls police dept and CDA PD dept - both do a lot better job and keep accidents and injuries down, and drivers know police are out and watching - so result is safer community. Most of city council here have no law enforcement experience and limited knowledge or concern about the reality about how career criminals operate when driving stolen cars after committing crimes.

With that rant - I have grown up at family house on 28th, and recall the nice -safe -small shopping area, before shopping center went in in 1969-yr after I joined Navy. The streets at 29th and grand had not been widened at all until mid 1960's and only 4 red stop signs were at 29th and Grand. The old Manito Grocery was at 30 and Grand, with old safeway across street on SW corner. The Walther family operated the grocery and delivered food, but they were behind effort to build shopping center, which most people opposed and took yrs in court before being allowed to build. Now - it is a disaster, with cars not able to safely enter or exit the various business outlets, and pedestrians totally at risk. The same is true in Lincoln Hts, and for over 9 yrs, I have tried to coordinate with street dept and city council and mayor office - and nothing of any importance has been done, including the lack of green turn arrow for cars going east - trying to safely enter the shopping center. And yet the city approves virtually any building permit for tax revenue, and to hell with the safety for people, especially children and elderly. I even saw an elderly woman trying to 'run' with her walker to cross over to Rosauers, and both the CEO of Rosaure's and the current Black family member who owns the Senior apartments across 29th tell me "it sounds like a city problem to me."

A lot of pedestrians have been injured or killed on south hill -and other spots in Spokane, and I feel that city officials are indirectly responsible and should be held liable and kicked out of their positions.

And - it is only going to get worse - and developers know they always have a friendly reception at both

city hall with city council and mayor's office.
Jim

On Monday, November 25, 2019, 05:24:18 PM PST, Wittstruck, Melissa <mwittstruck@spokanecity.org> wrote:

Hello Jim,

Your concerns and recommendations are shared by many of the neighbors participating in this project. I will have to check in with Inga on the discussion you had with her. The study is intended to address these safety concerns when it wraps up in mid-2020. I anticipate that it will be a package of changes that will target improving safety for all users. I don't know that singular change,s as you suggest here, can be implemented right away. Engineering requires the data we are collecting right now for their analysis on what changes and where.

I realize this is not satisfactory to you as you observe the these safety issues first hand; I too live on 28th and have lived within 6 blocks of 29th &Grand for 50 plus years, observing the change in traffic conditions. We are working hard with the community towards improving the area for safety and an improved public realm overall. I encourage you to continue to participate. I will get together with Inga early next week to get her input on your suggestions. In the meantime, you can reach out to the South Hill COPS to request the traffic unit increase patrols. If you do, please include location, time of day, and day of week that you believe would be optimum for improving driving behavior.

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

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This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

AGENDA

From: James Reierson <jrreierson@yahoo.com>
Sent: Saturday, November 23, 2019 3:07 PM
To: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Subject: Re: Grand Blvd Planning Project status and video link

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Melissa,

I spoke with Inga N. and made specific -urgent recs, on need for crosswalk at 30th and Grand, as well as having speed limit from 29th to 33rd lowered to25 MPH, similar to Perry St.

What is happening to my recs and others , due the HIGH traffic volumn, and danger to pedestrians in this area, and can anything be done to 'jumpstart' safety concerns???

I am retired career military and county prosecutor, and lack of police enforcing speed limits makes danger even worse. I grew up on 28th and hatch, still live in house parents built after WW2, and the congestion at Grand from 29th to 33rd is out of control. Can controlling parties be copied, and can city council take this area up asap, as hundreds of Sacajawea kids and also senior pedestrians are at great risk daily.

Thank you

Jim Reierson

home msg: 624-5731

On Friday, November 22, 2019, 03:11:31 PM PST, Wittstruck, Melissa <mwittstruck@spokanecity.org> wrote:

Hello!

Thank you to all of you who participated in the Oct 21-22 Grand Blvd Community Open House, very rainy walking tour, or the focus interview sessions held with the City consultant team. Some of you were unable to attend, but have expressed interest in future meeting opportunities, or keeping up with the project online updates.

Your participation and feedback are incredibly valuable. City staff and the consultant team are putting together all the data they gathered, as well as public comment, in preparation for a second community meeting early in the New Year. Meantime, the Grand Blvd online project page has been updated with “What’s Happening Now” and the video of the very hardy group that walked Grand Blvd from 29th to 37th in a chilly rain to observe and comment on both transportation and land use conditions! It is posted here : https://my.spokanecity.org/projects/grand-boulevard-transportation-and-

zoning-analysis/. Please share with all who may be interested – many folks outside Comstock, Rockwood, and Manito-Cannon Hill also are interested as employees, property owners, neighborhood schools, business owners, or users of Grand Boulevard.

Staff is also putting together a short overview document of the October Kickoff and an online survey. Look for notification of both of these, hopefully the first full week of December.

Again, thank you very much! And a very warm and Happy Thanksgiving to all of you.

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

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This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From:	Wittstruck, Melissa
To:	Robert Flowers
Subject:	RE: Grand Blvd Transportation and Zoning Study
Date:	Monday, November 25, 2019 5:05:41 PM
Attachments:	image002.png image003.png image004.png

Hello Robert,
I have added you to the email list for the Grand Boulevard project. Here is the link to the project page: https://my.spokanecity.org/projects/grand-boulevard-transportation-and-zoning-analysis/. As soon as the online survey is ready (target week of Dec 1, probably the end of the week), I will send an update email.
Thank you for your interest!

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org
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This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: Robert Flowers <mr_mouse@comcast.net>
Sent: Sunday, November 24, 2019 4:38 PM
To: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Subject: Grand Blvd Transportation and Zoning Study

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Ms. Wittstruck:

Please add my name to the email list for further information regarding this project.

Thank you.

Robert Flowers
East 18th Ave Traffic Calming Group

From: Robertson, Kellen
To: Neighborhood Services Grand Boulevard Plan
Subject: Grand Boulevard
Date: Monday, November 25, 2019 12:03:09 PM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Dear Spokane Planning Services,

I work at Eyes For Life on the south hill at the corner of Grand Blvd and 30th Ave. I would like to be added to the email update list for this project.

As for suggestions, I do agree that beautification and landscaping is needed for this area. I also feel that it is very difficult and dangerous to turn left from 30th northbound onto Grand Blvd. Possible a middle turn lane would be beneficial for turning traffic and entering traffic. Also I think a crosswalk there would be nice to connect the two shopping centers on both sides of Grad at 30th.

Looking forward to seeing what occurs with this project.

Regards

--
Kellen Robertson, O.D.

From: Elaine Snouwaert
To: Neighborhood Services Grand Boulevard Plan
Subject: Grand Blvd Plan
Date: Saturday, November 23, 2019 7:11:55 PM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hi I would like to be put on the mailing list for the Grand Blvd Transportation and Zoning Plan.

My interest in the plan would be in reducing and slowing traffic. Specifically it needs to be easier for pedestrians to cross at 30th and Grand to enter the Manito Shopping area.

Also currently a lot of people turn off Grand, west onto 30th and cut through the residential streets, and often at too high of speeds for a residential street with uncontrolled intersections. Many travel west on 30th, south on Lamonte, then west on 31st to Division and even on to Bernard. Over the years there have been several accidents at 31st and Division and a several years ago we had three drunk driving accidents on 31st in a 2 year period.

So what ever plan/design that is put into place has to ensure it doesn't push people toward wanting to find "short cuts" through the residential neighborhoods in the area.

Thanks for your consideration.

Elaine Snouwaert
27 E 31st Ave

Sent from Mail for Windows 10

From:	Note, Inga
To:	Wittstruck, Melissa; Alex Dupey; Reah Flisakowski
Subject:	FW: Grand Blvd and 29th Ave Vegetated Islands
Date:	Tuesday, October 22, 2019 11:53:32 AM

From: smtraver@yahoo.com <smtraver@yahoo.com>
Sent: Tuesday, October 22, 2019 9:29 AM
To: Note, Inga <inote@spokanecity.org>
Subject: Grand Blvd and 29th Ave Vegetated Islands

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Dear Ms. Note,

I was unable to attend last night's Grand Blvd plan mtg at the United Methodist Church.

I have read what I can find online concerning the consultant studies and recommendations for GB and 29th Ave.

What I cannot seem to find is where the preservation of the vegetated islands on GB and 29th Ave is specifically called out.

These treed and grasses/flower planted islands are some of the last such street islands left in Spokane, are in desparate need of planter repair and are treasured by both neighborhoods.

Any information clarity you could direct me towards or you could provide on this preservation issue would be greatly appreciated.

Thank you very much for your time.

Sincerely,
Susan Traver

Sent from my Verizon LG Smartphone

From: Wittstruck, Melissa
To: skbmsfan@comcast.net
Subject: Grand Blvd Transportation & Zoning Study questions
Date: Wednesday, November 20, 2019 11:17:05 AM
Attachments: image002.png
image003.png
image004.png

Hello Shane,
I've been out of the office since the week of Oct 28 and am now getting back to people. I did try to call the phone number in your voicemail, but it said the message box was not set up. I found your email though, and would be more than happy to discuss the Grand project concerns you mentioned, and hopefully, correct some of the misperceptions. Please give me a call, or email, at your convenience. I am in the office 8:30 to 5:30.
And thank you for your interest in your neighborhood!

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From:	Winegar, Cathie
To:	Wittstruck, Melissa
Subject:	RE: Grand Blvd Study - Focus Interview Invitation
Date:	Wednesday, October 23, 2019 1:39:07 PM
Attachments:	image002.png image003.png image004.png

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Great to meet you in person yesterday, Melissa. I hope all continues to go well in your endeavors!

I was wondering about Alex and MIG. Was he recommended by the Council or does the City typically work with his organization? I was checking out their other work and they look fantastic!

I'll look forward to connecting again in the future with next steps!

Cathie

From: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Sent: Wednesday, October 16, 2019 4:03 PM
To: Winegar, Cathie <CWinegar@watrust.com>
Cc: Comstock (comstockneighborhoodcouncil@gmail.com) <comstockneighborhoodcouncil@gmail.com>
Subject: RE: Grand Blvd Study - Focus Interview Invitation

Hello Cathie,
Thank you! This will be a one-on-one focus interview, similar to what the consultant team is discussing with the NAI Black representative (the shopping center) as well. Generally, the topics would include assets and challenges with the transportation infrastructure on Grand (27^{th}-34^{th}) and how you see it affecting your business, employees, and customers. Ideas for improvements along the corridor, including right-of-way treatments, or thoughts for other changes that could be considered. Since land use and zoning are also being analyzed in this area (up to 39^{th}, actually) there might be some open-ended questions about how the business district is changing and growing, and long-term growth visions.
Your participation is really appreciated – thank you for your interest and investment of time.
I'll see you Tuesday, October 22 at 11:00 AM at Manito UMC Rm 201.
I'll be at Comstock NC tonight – maybe John and the group will come up with other questions they are interested in, since ground is broken on the second pad at the branch site!
Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: Winegar, Cathie <CWinegar@watrust.com>
Sent: Wednesday, October 16, 2019 3:55 PM
To: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Cc: Comstock (comstockneighborhoodcouncil@gmail.com) <comstockneighborhoodcouncil@gmail.com>
Subject: RE: Grand Blvd Study - Focus Interview Invitation

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hi Melissa –

I would be delighted to attend this meeting. I appreciate the invitation.

Is there anything in particular that your audience would like to hear about? John, I also would be interested to hear if there are topics your council would like to discuss.

Hope you each have a great rest of your week!

Cathie

From: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Sent: Wednesday, October 16, 2019 3:32 PM
To: Winegar, Cathie <CWinegar@watrust.com>
Cc: Comstock (comstockneighborhoodcouncil@gmail.com) <comstockneighborhoodcouncil@gmail.com>
Subject: RE: Grand Blvd Study - Focus Interview Invitation

Hello Cathie,
I am following up on the email invite to participate in a focus interview regarding possible changes to transportation and zoning in the business district along Grand Blvd. John Schram, with Comstock Neighborhood Council, was kind enough to share your email to provide Washington Trust with this opportunity to participate. I hope you, or your designated alternate, will be able attend the interview time on October 22, 11:00 am – 12:00 pm at Manito United Methodist Church, 3220 S Grand, Rm 201. As a business owner and neighbor in this community your insights and experiences with the new WA Trust branch office are valuable and appreciated. Please let me know if you can attend, or if you have any questions, please contact me.

Below is the original invitation with more background on the project, which can also be found online: https://my.spokanecity.org/projects/grand-boulevard-transportation-and-zoning-analysis/

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org
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This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: Wittstruck, Melissa
Sent: Monday, October 14, 2019 5:37 PM
To: 'cwinegar@watrust.com' <cwinegar@watrust.com>
Cc: Note, Inga <inote@spokanecity.org>; alexd@migcom.com; Reah Flisakowski <rlf@dksassociates.com>
Subject: Grand Blvd Study - Focus Interview Invitation

Greetings!

The City of Spokane is launching an effort to consider possible changes to transportation and zoning in the business district along Grand Boulevard 27th – 34th Ave. We are hoping you will join planning staff and project consultants for a focused interview on **Tuesday, October 22, 11:00 AM – 12:00 PM. This meeting will be held at Manito United Methodist Church, 3220 S Grand, Rm 201.**

Washington Trust is part of this neighborhood – with customers and staff that are frequent users, as well as a business interest, of this area of Grand Blvd. We hope to hear some of your hopes and concerns in this interview. Your time and insights are valuable, and would be much appreciated!

_____

There will also be a drop-in Community Open House on Monday, Oct 21, from 6:00- 8:00 pm in Manito UMC Fellowship Hall. Please feel free to share the attached Open House flyer to your distribution lists!

_____

Here is a little bit of background on this study.

Spokane's South Hill continues to be a vibrant area in the Spokane community; the area is seeing continued development and improvement projects. As the

neighborhoods around the Grand Boulevard business district continue to grow, the City wants to be sure to support opportunities for sustainable improvement and growth in this area.
A transportation and zoning analysis for the business district on Grand Boulevard will is now underway. This study will allow for recommended improvements to meet the anticipated needs and growth of this neighborhood business district.
The study will evaluate Grand Boulevard south of 29th Avenue. The transportation work will focus on the core of the business district on Grand between 29th and 34th avenues. The zoning analysis sub-area will be bounded by 27th Avenue, 39th Avenue, Latawah and Arthur.

Process

The Grand Boulevard Transportation & Zoning Analysis will require coordinated community effort by local stakeholders, key public representatives, technical staff from partner agencies, and City staff. The City has hired consulting firms DKS and MIG to help conduct the analysis.

A continuous public engagement strategy will be key to the study. Please look for opportunities to participate in public engagement opportunities!
Here are the elements of the study:
REVIEW: Traffic patterns & safety on Grand Blvd.
DEVELOP: Understanding of bicycle & pedestrian needs.
EVALUATE: Concepts of lane reduction, bike lanes, wider sidewalks, and green infrastructure. Analyze residential & retail data and conduct market analysis for redevelopment potential.
STUDY: Land use and zoning boundaries with Comprehensive Plan goals in mind.

The City has collected traffic data, including bike and pedestrian counts while school was in session.

Attached is the flyer for the Oct 21 Open House, 6-8 pm at Manito UMC.

This is an exciting project for the neighborhoods! Please let me know if you have any questions. There is a QR code on the flyer that will take people to the Grand project page, or click here: https://my.spokanecity.org/projects/grand-boulevard-transportation-and-zoning-analysis/

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org
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AGENDA

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From:	Wittstruck, Melissa
To:	Comstock (comstockneighborhoodcouncil@gmail.com)
Cc:	John Schram - Comstock; "terrylb@comcast.net"; "dengle76@comcast.net"; Ryan, Gabrielle
Subject:	RE: 11/20 Comstock Meeting info - additional!
Date:	Wednesday, November 20, 2019 9:34:00 AM
Attachments:	image002.png image003.png image004.png

Sincere Apologies!
I meant to include a "Thank You" to everyone who attended the Grand Blvd Community Open House, walking tour (complete with very rainy weather), or focus interviews. Your participation and feedback are incredibly valuable. City staff and the consultant team are putting together all the data they gathered, as well as public comment, in preparation for a second community meeting early in the New Year. I will be updating the Grand Blvd online project page later this week – I'll let you know when it is ready.
Again, thank you very much!

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org
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From: Wittstruck, Melissa
Sent: Wednesday, November 20, 2019 9:28 AM
To: Comstock (comstockneighborhoodcouncil@gmail.com) <comstockneighborhoodcouncil@gmail.com>
Cc: John Schram - Comstock <john.schram@lpl.com>; 'terrylb@comcast.net' <terrylb@comcast.net>; 'dengle76@comcast.net' <dengle76@comcast.net>; Ryan, Gabrielle <gryan@spokanecity.org>
Subject: 11/20 Comstock Meeting info

Hello Comstock!
I will not be at the meeting this evening, but wanted to make sure you had access to an updated SNOW FAQ, so that you might be able to answer questions that come up. Now that City snow season (Nov 15) is in place, the thorough FAQ found at this link: https://my.spokanecity.org/streets/maintenance/snow-removal/ should be very helpful for many questions. Scroll to the bottom of the page and click on the FAQ. The full snow brochure for this year is directly above it, as well.

If you have other needs for the meeting, please shoot me an email and I will try to get them addressed for you beforehand.
Happy almost Thanksgiving!

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: Young, Rhonda
To: Neighborhood Services Grand Boulevard Plan
Subject: mailing list
Date: Saturday, November 23, 2019 2:11:52 PM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Please add my email to the Grand Avenue project mailing list. As a resident, shopper, and mother of existing and future Sac Middle schoolers I'm very interested in this area.

Thanks!
Rhonda

RHONDA YOUNG , P.E., PhD
Professor and Chair of Civil Engineering
Gonzaga University
Herak 212
502 E Boone Ave
Spokane, WA 99258-0026
(509) 313-5754
Youngr1@gonzaga.edu

From: Robert Flowers
To: Neighborhood Services Grand Boulevard Plan
Subject: Resident Comments
Date: Saturday, December 21, 2019 9:33:28 AM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Ms Wittstruck:

I have completed my review of the Grand Boulevard Survey but wanted to elaborate on some of the issues I have identified in that area. I have listed those concerns below.

I wish to congratulate you on your planning efforts and the high quality of your presentation. As I am a retired landscape architect, I have spent most of my working life encouraging government and private industry to create pleasant (in function, appearance and sound), accessible and livable community spaces, mostly with a low success rate. I am encouraged after reviewing your presentation and I laude your efforts to bend the tendencies of profit lust so prevalent in our society into a more equitable, verdant and sustainable outcome.

My comments:

- Above all, create safe spaces for people, both pedestrians and vehicle drivers/passengers. But, keep in mind that a pedestrian never wins in a conflict with a vehicle.
- Keep in the forefront of any proposed action that the adjacent residential neighborhoods are of primary importance. Do not allow commercial creep to destroy these areas. Adequate buffers from noise, light pollution and traffic should be designed into the project to protect existing residential areas.
- What you finally build at these locations will remain for many years. The public funds you expend in these areas will be significant. Ensure this project will meet the needs of coming years as unpredictable as they may be. Climate, demographic and population changes have yet to play out for Spokane in general and this area specifically. Your crystal ball will be needed here.
- A livable community means safe and easy access by all forms of transportation. For too many years the automobile has ruled in urban planning. Now, we are beginning to have the opportunity for equity of transportation options and we are on the cusp of a major transition from one mechanized transportation energy source to another – carbon based to electrons. Perhaps the gas station at the corner of Grand and 29th needs to be an EV charging station?
- I didn't see any mention of distributed renewable energy systems or installations in your plan descriptions, perhaps I missed them? Every roof of every building should have solar panels and every building should have a solar battery system. Public spaces should be fitted with solar panels with interpretation for the public. There is really no reason not to do this and there are literally billions of reasons (people on the planet) to do them. The cost is negligible in the overall undertaking of new construction. If you are interested, I can offer my home installation of solar panels and batteries as an example of how a person on a limited income can elect to reduce their carbon footprint – if I can do this, then new and existing commercial facilities can do it, too!

- Green is good. I strongly support the installation of pleasing design accommodating vegetation, especially trees and shrubs which act as sound absorbers and carbon dioxide consumers. Lawns, not so much. Think about establishing volunteer groups (such as we are doing in our neighborhood) to help with enhancing this new environment, using vegetation installations and volunteer management.
- I have concerns about using permeable pavers in areas where seniors and/or disabled individuals will be travelling as pedestrians or with assist devices. Snow and ice removal, as well, could be an issue. I think these materials could be suitable in non-transportation areas, such as vest pocket parks, outside seating areas and the like.
- Separate, as far as possible, pedestrians from vehicles. Although our sidewalks in Spokane are a national disgrace, even if they were in pristine condition they would be underused since many of them are immediately adjacent or very near busy roadways. Pedestrians will avoid areas of fast-moving traffic because it psychologically represents the potential for physical harm. Areas of high vehicle noise are just simply unpleasant. Surely this is one of the tough problems to solve, but it must be overcome to assure maximum pedestrian use of these facilities.
- Consider light pollution to be as bad as noise pollution. Spokane has lost any possibility of ever having "dark skies" again, but limiting new light pollution should remain a priority. Good luck seeing the stars on any night in Spokane.

Thank you for this opportunity to comment. I look forward to future developments in this project. I am on your mailing list.

Solstice Blessings!

Robert Flowers
618 E 18th Ave
Spokane, WA 99203

From: Tomás Guardia
To: Wittstruck, Melissa
Subject: Re: Grand Boulevard Transportation and Land Use Study - Email Request
Date: Tuesday, January 7, 2020 1:05:40 PM
Attachments: image002.png
image003.png
image004.png

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hello, Melissa

I filled the took the survey. Thank you. For that reason, I emailed to the address shown at the end.

I passed the link to my son and my wife. I will distribute it among my neighbors at Parc Grand Apartments.

Thank you so much for your reply.

Have a great day,
Tomás

On Tue, Jan 7, 2020 at 11:31 AM Wittstruck, Melissa <mwittstruck@spokanecity.org> wrote:

> Good Morning,
>
> Thank you for your interest in the Grand Boulevard Transportation and Land Use Study. At your request, your email has been added to the distribution list for future updates and participation opportunities.
>
> There is an online survey available at this link, if you have not already taken it: https://www.surveymonkey.com/r/9X6SFC6
>
> It is open until January 31, 2020.
>
> Please let me know if you have any difficulties accessing the survey link. And pass it along to others you know may be interested in this project!
>
> Survey responses will be compiled and reported out along with other information and data, as building blocks for the second Community Meeting in early 2020. In the meantime, please share the survey link and provide your responses by January 31.

The city project page can be found here, where a short video of the Oct 21-22 Kickoff meeting has been posted, along with other information: https://my.spokanecity.org/projects/grand-boulevard-transportation-and-land-use-study/

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6500 | mwittstruck@spokanecity.org |spokanecity.org

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From: Sarah
To: Neighborhood Services Grand Boulevard Plan
Subject: Comment
Date: Saturday, December 28, 2019 8:19:12 AM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

We live on 30th between Garfield and Arthur—our street serves as an entrance and exit to Super One. I would love to see some beautification and pedestrian upgrades crossing Garfield to the Super One. We have a lot of apartments to the east of us and many people with mobility issues. We love how walkable our neighborhood is, but this crossing can be dangerous because cars come from 29th and speed down Garfield toward 32nd.

I also have a lot of concerns about Arthur between 29th and 37th. Cars use this as an arterial and there are rather a lot of accidents. The cross streets are rather long too, so it seems like everyone drives too quickly and very few cars yield. It makes it a very stressful place to drive and walk—even with the new sidewalks (which we love—thank you!).

Sarah Robertson

From:	Linda Milsow
To:	Wittstruck, Melissa
Subject:	RE: Grand Blvd Update and SurveyMonkey Link - Re-sending
Date:	Thursday, January 2, 2020 3:09:00 PM
Attachments:	16F2441A21F2487D9D2F0EB51B27B9D2.png ADEC4A65A22B4EE3AE83009DFF1A204E.png 0A6C6482A234483F8FDD10347F890A7D.png

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Sorry for the long delay in responding. Not sure if this still helps, but the problems I had was filling in the dots which then seemed to change or moving and arrow along a line. At least that is how I remember it now! I think you are doing a good job and I appreciate the opportunity to give input.

Linda Milsow 509-220-4438
Sent from Mail for Windows 10

From: Wittstruck, Melissa
Sent: Monday, December 16, 2019 4:32 PM
To: Linda Milsow
Subject: RE: Grand Blvd Update and SurveyMonkey Link - Re-sending

Hi Linda,
I just left you a voicemail. Thank you for your feedback – that's really helpful to know, so that I can improve it next time around! If you have a few minutes, would you please give an example or two that contributed to the lack of "user friendly?" Feel free to give me a call, if that would be easier.

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org
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From: Linda Milsow <lindacmilsow@msn.com>
Sent: Monday, December 16, 2019 3:43 PM
To: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Subject: RE: Grand Blvd Update and SurveyMonkey Link - Re-sending

[CAUTION - EXTERNAL EMAIL - Verify Sender]

I tried to fill out your survey, but did not find it very "user-friendly" so not really sure how helpful I was.

Linda Milsow 509-220-4438
Sent from Mail for Windows 10

From: Wittstruck, Melissa
Sent: Monday, December 16, 2019 12:46 PM
Cc: Black, Tirrell; Note, Inga; Reah Flisakowski; alexd@migcom.com; Beggs, Breean; Allers, Hannahlee; Byrd, Giacobbe; Kinnear, Lori; Davis, Kirstin; Miller, Katherine E
Subject: Grand Blvd Update and SurveyMonkey Link - Re-sending

My sincere apologies if you have already received an email with the Grand Boulevard update and survey link! Unfortunately, I had this email on auto-send for Thursday Dec 12 6:30 PM - it does not appear to have cleared my Outlook "send" folder!

To: *Grand Boulevard Transportation & Zoning Analysis* Requested Email Distribution List Members

Thank you all for your continuing interest and participation in the *Grand Boulevard Transportation & Zoning Analysis project*! Attached is a flyer giving you the online survey access location, as well as the project page location where will you find updated information from the work done at the October community meetings. The survey link is live, and the web updates will in place by Friday December 13. You can access the survey on the project webpage along with the updated information here: https://my.spokanecity.org/projects/grand-boulevard-transportation-and-zoning-analysis/

There are a few more incoming materials from the consultant team – those will be uploaded early the week of December 16.

Just for ease of email subject line, future email will be titled "Grand Boulevard Planning Study," or even shorter, but with "Grand" in the subject! The long form project title is a bit unwieldy and may get lost with incoming holiday emails.

Please let me know if you have any difficulties accessing the survey link. Please pass it along to others you know may be interested in this project. As this transportation and zoning analysis was initiated by Comstock and is being followed closely by Rockwood and Manito-Cannon Hill Neighborhood Councils, there are likely also other community-wide residents with feedback or information to share. We want to hear from as many people as possible, all along the project timeline.

Comments, or requests to be added to the Grand email distribution list, may be sent here: grandboulevardplan@spokanecity.org

Again, many thanks for your attention and interest in the Grand Study!

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6300 | mwittstruck@spokanecity.org |spokanecity.org

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This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: vmunch@icehouse.net
To: Neighborhood Services Grand Boulevard Plan
Subject: Suggestion
Date: Monday, January 13, 2020 3:57:53 PM
Attachments: image001.png

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Please consider investing in underground utilities here. All of the poles and wires are most unsightly and the neighborhood could once again be cooled by magnificent shade trees instead of those small ornamental trees selected to remain lower than the overhead lines.

Vickie Munch / *Broker, Realtor,SRES,ABR,CNE*

WINDERMERE MANITO LLC

2829 S. Grand Blvd – Suite 101
Spokane, WA 99203
DIRECT 509.994.2974
FAX 509.747.9160

From:	Vince Bakulich
To:	Wittstruck, Melissa
Cc:	Note, Inga; Neighborhood Services Grand Boulevard Plan
Subject:	Grand Blvd Plan & South Hill Coalition Connectivity &Livability Strategic Plan (25th & Garfield)
Date:	Friday, February 7, 2020 5:20:42 AM
Attachments:	25th & Garfield Traffic & Greenway Plan Idea - Bakulich 02-07-2020.pdf 25th & Garfield Current Layout.pdf

---

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hello Melissa,

First off thank for working to beautifying our City while bringing form and function into our neighborhoods. I'm a little behind and haven't been able to participate as much as I'd like. I did however take the survey and am following along on the website and mailing list. Spokane is growing and in time many intersections will become cumbersome or dysfunctional, nor do they do justice to the beauty of the City. Even now I have to plan my routes to avoid making any left turns onto 29th!

I am however most interested at the intersection of 25th & Garfield (of course) as I live at the epicenter of this unique intersection where bumper cars on ice (that is a real thing!) meets 5AM joggers, kids walking to school, followed by the dog walkers, the lunchtime joggers, the kids going back to school, and the speeding car that doesn't even slow at the stop sign. If only people just minded their manners...anyway moving on.

I took the liberty of drawing up a traffic plan which may help spur some ideas. This plan provides the following improvements.

1. A dedicated Pedestrian X-ing, with a path through the park; most people just walk across the parkways and driveways.
2. Added planting area to contribute to the 30% canopy increase and Greenway through this intersection.
3. Increases the size of Triangle Park.
4. Eliminates the need for stop signs on Garfield (as an option)
5. Planted medians which also serve to prevent driving the 'straight shot' through the intersection.
6. Eliminates the confusion of the 'widest intersection ever' where turning left and going straight are confusing.
7. Necks down the road to slow people down
8. Adds a gentle curve to slow people down
9. Most importantly provides a noticeable Crosswalk so drivers are aware, rather than people crossing at all areas and
   angles in the intersection.
10. Eliminates the blind curve going E to S from 25th onto Garfield (can't see around the curve)
11. Eliminates the 'almost u-turn' going W to S from 26th to Garfield (cars don't see each other)

12. Eliminates the illegal 'driveway to nowhere' where people park in the parkway, even though the driveway does not lead to a house.

Please see the attached drawing.

I would love to speak with or meet with someone to review this intersection and any other areas of the Grand Blvd and South Hill plan.

Regards,

Vince Bakulich
2510 S Garfield Rd
Spokane WA 99203
(714) 381-0595 cell/text
vinbak@yahoo.com

Snippit of Connectivity and Livability Plan - Page 41

Bumper cars on ice!

From: Inga Jablonsky
To: Neighborhood Services Grand Boulevard Plan
Subject: Correction Survey
Date: Monday, January 13, 2020 6:02:38 PM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

On my survey webpage, it only registered ONE possibility for gender of residents. I needed two, so that info came over incorrect on the survey webpage. Please correct. Thanks,

Inga Jablonsky

From: Inga Jablonsky
To: Neighborhood Services Grand Boulevard Plan
Subject: Re: Correction Survey
Date: Saturday, January 18, 2020 2:39:32 PM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hi Melissa,

pretty much at the end of the survey it asks for demographics: gender of the members of your household. Well, in my household there is one male and one female, but I was only allowed one choice: EITHER male or female.

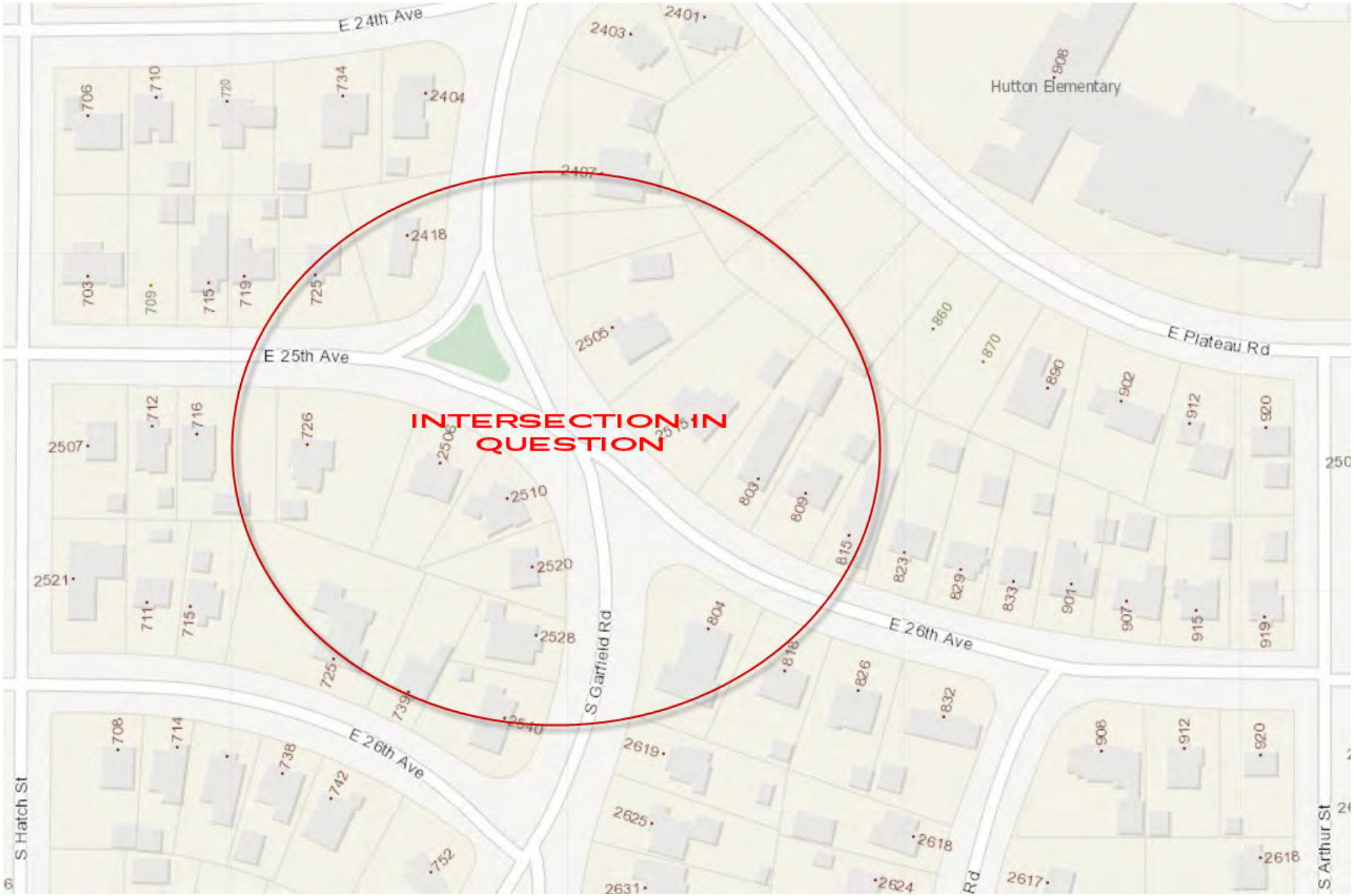
I hope that clears up my suggestion. Thanks,

Inga

From: Malika Oudes
To: Neighborhood Services Grand Boulevard Plan
Subject: leave Grand Boulevard alone...develop 29th.
Date: Wednesday, January 29, 2020 5:57:45 PM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

AGENDA


INTERSECTION IN QUESTION
E 24th Ave
E 25th Ave
E 26th Ave
E Plateau Rd
S Garfield Rd
S Hatch St
S Arthur St
Hutton Elementary
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832
908


26th
29th
GRAND
PARKED CAR (TYP)
PARKWAY
SIDEWALK
GARFIELD
SIDEWALK (TYP)
PARKWAY (TYP)
DWG BY:
Vince Balkulich
2510 S Garfield Rd
Spokane WA 99203
2/7/20
25th
PED XING
TRIANGLE PARK (EXT)
PLANTED MEDIAN (TYP)
TREES (TYP)
GARFIELD
NORTH
HUTTON ELEMENTARY
AGENDA

From:	Wittstruck, Melissa
To:	Robert Flowers; Beggs, Breean; Wilkerson, Betsy; Kinnear, Lori
Cc:	Quinn-Hurst, Colin; Leyna Bernstein; Mary Winkes
Subject:	RE: Grand Avenue Study and Manito Park
Date:	Monday, March 2, 2020 12:11:02 PM
Attachments:	image002.png image003.png image004.png

Good Afternoon Mr. Flowers,
Thank you for attending the Community Open House/Workshop for the Grand Blvd Transportation and Land Use Study on February 27. I appreciate your thoughtful comments and have added them to the public record, as well as forwarding to the project team.
We received a great deal of feedback at the workshop, some of which definitely touches on the points raise around protected bike lanes. I am working on compiling all the feedback received and will add it to the material on the project page online, hopefully by the end of this week.

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| *main* 509.625-6500 | mwittstruck@spokanecity.org |spokanecity.org
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This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: Robert Flowers <mr_mouse@comcast.net>
Sent: Friday, February 28, 2020 10:10 AM
To: Beggs, Breean <bbeggs@spokanecity.org>; Wilkerson, Betsy <bwilkerson@spokanecity.org>; Kinnear, Lori <lkinnear@spokanecity.org>
Cc: Wittstruck, Melissa <mwittstruck@spokanecity.org>; Quinn-Hurst, Colin <cquinnhurst@spokanecity.org>; Leyna Bernstein <msleynab@gmail.com>; Mary Winkes <mmcspo@yahoo.com>
Subject: Grand Avenue Study and Manito Park

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Dear Council President Beggs, Council Member Kinnear and Council Member Wilkerson:

I have been following the efforts the city is making to study and eventually reconstruct the area of Grand Boulevard from E. 29th Street south. As you know this area has been a problem for pedestrians and motorists alike and is now undergoing rapid redevelopment of

commercial businesses.

After reviewing and commenting on the initial plans for redevelopment of transportation infrastructure of this area and thinking about the longer term impacts of this work not only to the area in question but, also, to the surrounding neighborhoods, I wanted to relay to you some concerns and some opportunities that may be associated with this work.

First, about the study area:

- The draft proposed plan does not adequately address bicycle traffic safety within and adjacent to the study area.
    - A painted stripe on a busy roadway rarely provides the psychological or physical security to allow the average bicyclists to feel safe enough to use the route. At a recent bike and pedestrian presentation, information indicated that well over a majority of bike riders in Spokane will not ride bikes on city streets as a result of feeling unsafe, I am one of those bike riders.
      The lack of physical and psychological separation and, therefore; an unsafe feeling is the primary rationale. Physical and structural separation is essential for rider confidence.
    - The bike route indicated in the proposed plan essentially has no viable connections to other safe bike routes on adjacent streets. Grand Boulevard from E 29th North is unusable by bicyclists because of the high traffic volumes, speed of vehicles and lack of route delineation. The same is true for E 29th. So, the utility of the route is local – beneficial to the neighborhood within the study area. This utility, in order to be a positive attribute, must be constructed in a way to allow the majority of bike riders living in this area an atmosphere of safety as well as convenience.
    - The city will be expending significant funds to create this bike route and I believe the desired result, increased bike ridership, will not be achieved under the current plan. There is no reason to spend a significant amount of funds designating bikeways if the majority of bike riders will not use them. So, please consider spending a little more to provide physical and psychological security to bike riders for this new route so people will actually use the new facility.
- The draft proposed plan does not adequately address pedestrian traffic issues within and adjacent to the study area.
    - Psychological and physical impediments to optimal pedestrian use of the study area will remain after the plan is implemented unless altered prior to construction. A wider strip between sidewalks and the street is a good thing, but a grassed or level area of some unknown surface does little to reduce impacts of traffic noise, roadway moisture ejection by passing vehicles or the impacts of unpleasant air movements. I know most of you have walked along S. Grand Boulevard and are fully aware of the impacts of traffic noise, exhaust fumes, unpleasant air movement, insecure street crossings and other, similar issues related to being a pedestrian in this environment.
    - The plan, as stated, will not mitigate these impacts and will not appreciably increase pedestrian traffic in these areas. To become a viable local neighborhood commercial node, these issues must be addressed.
    - The proposed plan has adequately addressed the issue of crossing S. Grand

Boulevard east – west and I applaud this addition.

- Again, why spend the funds to do a major renovation of pedestrian routes in this area without completing the job by providing the necessary psychological and physical security needed to insure people will actually use then new facilities? Spend a little more to insure the initial, much larger investment, is spent wisely.

- Reviewing and thinking about the city's efforts to study and revise the S. Grand to E. 37th area has given me the opportunity to think about unintended consequences and/or adjacent impacts to the area south of the study along S. Grand Boulevard.
  - Increased commercial activity in the E. 29th and S. Grand Boulevard area will impact S. Grand north of E. 29th. These impacts will include increased vehicle trips along S. Grand along Manito park and adjacent neighborhoods and will, also, encourage additional commercial creep into the S. Grand Boulevard neighborhoods north of E. 29th Ave. Already this commercial creep has been happening along this section of S. Grand and, when looking at the land use plan, may be accelerated as a result of the activities north of E. Grand. It is essential for the long-term maintenance of the values present in Manito Park and the adjacent neighborhoods that future development maintain the architectural, residential character and neighborhood park attributes that enhances, surrounds and protects Manito Park.
  - Already, discordant architectural developments are springing up along this route, some which were poorly planned and create off-site impacts to existing residents. The City Council would, I hope, understand that the park atmosphere provided by Manito Park extends well beyond the actual boundary of the park. The character of the surrounding neighborhoods and that provided by Manito Park are mutually beneficial not only to adjacent residents but, also, to all visitors of the park. This ambiance must be maintained.
  - Recent commercial activity north of E. 29th along S. Grand will inevitably generate renewed interest in the commercial strip between E. 14th and E. Sumner Avenue. This area is confusing for motorists and pedestrians alike and needs attention. <u>Therefore, for many of the reasons listed above, I respectfully request that a similar corridor study be</u>
  - <u>implemented for S. Grand Blvd. between E. 29th and E. Sumner Ave.</u>

Thank you.

Robert Flowers

From: Wittstruck, Melissa
To: clcorrigan@aol.com
Subject: Grand Blvd Transportation & Land Use Study
Date: Wednesday, March 4, 2020 3:20:36 PM
Attachments: image002.png
image003.png
image004.png

Hello Cindy,

Thank you for our phone call this afternoon. As we discussed, this planning project is a Study, primarily looking at various alternatives the community has in mind to improve safety for all users on Grand. Here is the link to the project page https://my.spokanecity.org/projects/grand-boulevard-transportation-and-land-use-study/, where you will find more background information and what has been happening. The second Community Meeting was held February 27. As soon as I have the maps, survey graphics, and completed market analysis from the consultant team I will post those as well. If you like, I will add you to the email update list, so that you will know when the information is updated.

It was very helpful to talk with you – I appreciate your time. Please feel free to contact me with questions or feedback, or I would be happy to meet with you in person as well.

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6500 | mwittstruck@spokanecity.org |spokanecity.org

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From:	Wittstruck, Melissa
To:	tonyhampel@yahoo.com
Cc:	spohl@naiblack.com; jlarsen@naiblack.com
Subject:	Grand Boulevard Transportation and Land Use Study, Spokane WA
Date:	Wednesday, March 11, 2020 11:03:20 AM
Attachments:	image002.png image003.png image004.png Land Use Map.pdf

Good Afternoon Mr. Hampel,

City of Spokane Planning Services is conducting a transportation and land use planning study along Grand Boulevard. TNC Property Investments LLC owns property, the Manito Shopping Center, which is within the study area. The Manito Center is an important hub for the neighborhoods surrounding it, for groceries, other retail, and restaurants. The intent of the study is two-fold. One, to look for opportunities to design and evaluate traffic alternatives that will enhance safety for all modes of travel and for users of all ages, including biking and walking, with additional streetscape elements such as landscaping. The second focus of the study is evaluating land use policy through a market analysis to determine redevelopment potential or other city policies that would support additional and diverse residential and commercial growth in this targeted area. A map of the study area is attached.

The planning team was fortunate to interview David Wright, with NAI Black, in October. Mr. Wright has since retired and as the Study has moved into the development of alternative designs for Grand Boulevard between 28th Avenue up to 37th Avenue, I would like to make sure you and your representatives have the opportunity to review the work done to this point, provide your feedback, and get additional information as needed. We have conducted two Community Meetings, and an online survey – I would be happy to share materials from our community outreach, or here is a link to the project website: Grand Boulevard Transportation and Land Use Study, where background information and recent study materials are updated.

I am the Planning Services lead and Inga Note is the Senior Traffic Planning Engineer. We are both available to meet and answer any questions you, or your representatives, may have. I look forward to hearing from you at your convenience.

Sincerely,

Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6500 | mwittstruck@spokanecity.org |spokanecity.org

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disclosure.

From: Antonia DePasquale
To: Wittstruck, Melissa
Subject: Re: Update - Grand Blvd Transportation & Land Use Study webpage
Date: Thursday, March 12, 2020 12:42:37 PM

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hey Melissa, I hope all is well, Rockwood neighborhood Council had a question..how far from the intersection will you be extending out the new & improved planter boxes for the grand project? All those medians need a re-vamping ;-/.

Thank you for your time,
Toni Sharkey

Sent from my iPhone

> On Mar 12, 2020, at 10:40 AM, Wittstruck, Melissa <mwittstruck@spokanecity.org> wrote:
>
> Good Morning,
>
> The City project page for the Grand Boulevard Transportation & Land Use Study has been updated this week. You are receiving these project updates at your request. Please continue to provide feedback and questions to the email address: grandboulevardplan@spokanecity.org
> Thank you very much to all those who were able to attend the February 27 Open House at St. Mark's Lutheran Church. The turnout was great all day and the planning team heard valuable comments, concerns, and ideas to improve this often traveled business area of Grand Boulevard.
>
> Please visit the project page online: https://my.spokanecity.org/projects/grand-boulevard-transportation-and-land-use-study/
>
> There you will find the Open House survey posters, consultant market analysis, PowerPoint presentations to Plan Commission and City Council this week, and other project information.
>
> Next steps include drafting the final traffic analysis and street concepts with recommendations to present to Plan Commission and City Council later this Spring. Your comments, concerns, issues, the places you feel are important and valued, and what you hope to see in the future are all very important to shape the project. You will receive email notices of dates for Plan Commission and City Council hearings, anticipated to be set early in May.
>
> Sincerely,
> *Melissa*
> **<image001.jpg>**
>
> **Melissa Wittstruck** | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6500 | mwittstruck@spokanecity.org |spokanecity.org

This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: Wittstruck, Melissa on behalf of Neighborhood Services Grand Boulevard Plan
To: Malika Oudes
Subject: RE: review of Feb. 27 meeting
Date: Monday, March 16, 2020 12:31:54 PM

Good Afternoon,
Thank you for your comments, and the detail you added. In addition, I will double-check the version of the market analysis uploaded to the project page. I had also flagged the use of the descriptor "recalcitrant" as it did not accurately reflect the motivations of developers. Thank you for bringing it to my attention.

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| main 509.625-6500 | mwittstruck@spokanecity.org |spokanecity.org

This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

-----Original Message-----
From: Malika Oudes <moudesall@gmail.com>
Sent: Saturday, March 14, 2020 2:19 PM
To: Neighborhood Services Grand Boulevard Plan <eransgbp@spokanecity.org>
Subject: review of Feb. 27 meeting

[CAUTION - EXTERNAL EMAIL - Verify Sender]

I appreciate the clarity of the plans. I'm glad to see the character of the area is a concern to residents, with physical safety ie traffic, bike lanes, planting trees being generally approved. I'm also glad to see the areas identified and discussed as to 'infill' housing in the development areas being considered. The Albertson's lot, and the other areas identified around 30th and Grand, are good locations. However, I would approve of the development of the Albertson's lot as a 130 unit, but NOT over 200 unit development. Look to the development of Kendall Yard, and its success and attractiveness as an example: few if any 3 story apartments, but really nice townhouses, apartments, and condos, creating an attractive mix. I think that type of development would be welcome. I didn't like the use of the phrase "recalcitrant" owners as it relates to building infill housing. The work Greenstone did with the community was valuable in creating Kendall Yard. I think the same consideration is due this neighborhood. I am a resident: near 37th and Bernard.

From:	Wittstruck, Melissa
To:	Pamela Starbuck
Cc:	Note, Inga
Subject:	Grand Blvd Study Comments & Information
Date:	Thursday, May 7, 2020 2:54:00 PM
Attachments:	image002.png image003.png image004.png

Hello Pamela,

Thank you for your call today regarding the Grand Blvd Transportation & Land Use Study, and in particular, your concerns about safety at the mid-block crossing on 29th at the median, or Latawah, used by Manito Gardens residents and Manito Presbyterian Church staff to get to Walgreens. You also expressed concerns about lack of safe crossings from 30th across Grand and 31st across Grand, especially with the new bus stop at that location. I know you were unable to attend the Open Houses due to staff emergencies, but please provide your feedback.

I am copying my colleague, Inga Note, in order to explore ideas for safety in that mid-block area on 29th to Walgreens. There are some bike safety recommendations in the draft study for this area, but I am not sure they reflect pedestrian informal crossing there.

Here are the links I mentioned to you:
The Grand Boulevard Transportation & Land Use Study project page:
https://my.spokanecity.org/projects/grand-boulevard-transportation-and-land-use-study/
Here you will find information and materials from handouts, survey, and Open Houses. When the Draft Study is completed, it will be posted here. Materials from upcoming Plan Commission and City Council meetings (when the City is allowed to schedule them) will also be posted here. I will also send emails to my Grand Blvd distribution list to alert all interested people of changes, meetings, and so on.

The Manito/Cannon Hill Neighborhood Council information is on this Office of Neighborhood Services page: https://my.spokanecity.org/neighborhoods/councils/manito-cannon-hill/ Contact information for the Manito/Cannon Hill NC is listed here. At this time, they are not meeting due to Covid-19 Stay at Home, Stay Health orders.

Please contact me with further questions or comments. I have added this email address to my distribution list for the Grand Study!

I will be working remotely until further notice and will respond to emails as quickly as possible. Thank you for your patience!

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II

509.625-6087| *main* 509.625-6500 | mwittstruck@spokanecity.org |spokanecity.org

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This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From:	Wittstruck, Melissa
To:	Pamela Starbuck
Subject:	RE: questions for 29th and Grand traffic study
Date:	Wednesday, May 6, 2020 3:41:18 PM
Attachments:	image002.png image003.png image004.png

Hello Pastor Starbuck,
Thank you for reaching out to me. I am one of the City employees working from home, and I have to say, the Grand project is one that has also taken a slower path since CoVid-19. I hope you are well, and your community as well.
We received many comments regarding making the crossings and access to public transport safer for the 29th-31st and Grand Blvd crossings in particular. I would be happy to talk further with you tomorrow. I have a WebEx meeting at 10:30 with work, and could connect with you after that – 11, if that works?

I am sorry to hear of your vertigo; when you are in the grip of the attack it is such a helpless feeling.

I will be working remotely until further notice and will respond to emails as quickly as possible. Thank you for your patience!

Sincerely,
Melissa

Melissa Wittstruck | City of Spokane |Assistant Planner II
509.625-6087| *main* 509.625-6500 | mwittstruck@spokanecity.org |spokanecity.org
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This email is subject to Washington State Public Records Act, Chapter 42.56 RCW, and may therefore be subject to public disclosure.

From: Pamela Starbuck <pamelas@manito.org>
Sent: Wednesday, May 6, 2020 11:08 AM
To: Wittstruck, Melissa <mwittstruck@spokanecity.org>
Subject: questions for 29th and Grand traffic study

[CAUTION - EXTERNAL EMAIL - Verify Sender]

Hello,

Thank you for your concern for this intersection!!

I am a pastor at Manito Presbyterian. I missed the survey, but I wondered if we could chat. I want to see if the needs for good crosswalks and bus stops that affect our HUD housing Senior or disabled residents who live at 500 East 29th Avenue.

The chair of that HUD housing who normally would have been the lead in advocating for our residents has had a wife who had to have a transplant in January and I am trying to pick up some of the things he would normally do.

Sadly, with COVid, I am weeks behind on many things.

Also, I have personal experience as I have had chronic vertigo since 2017 that means I have used the bus and crosswalks between my home on 25th and Bernard and 29th and Grand as I get to church and shopping. Not driving for 3 years means I see the world very differently.

My cell is the best number, but I'd love to set up a phone date via e-mail.

Tomorrow is wide open with no zoom meetings after 9:30 AM. Or Friday, has some openings too.

Thank you,
Pamela Starbuck

Rev. Pamela Starbuck, M.Div. & M.A

Pastor for Youth and Families & Pastoral Care
Manito Presbyterian Church

pamelas@manito.org
509.590.9772 cell

RESOLUTION NO. _____

A RESOLUTION RECOGNIZING THE ATTACHED GRAND BOULEVARD TRANSPORTATION AND LAND USE STUDY AS A DECLARATION OF THE DESIRED FUTURE CONDITIONS, PROVIDING DIRECTION FOR NEIGHBORHOOD-BASED IMPROVEMENT ACTIVITIES, AS WELL AS NEIGHBORHOOD PRIORITIES INVOLVING FUTURE PROJECTS.

WHEREAS, the City of Spokane is currently divided into 29 neighborhoods, including Comstock, Rockwood, and Manito-Cannon Hill neighborhoods which together generally comprise those portions of the City lying south of downtown from 17th Avenue to 54th Avenue, High Drive to Perry Street; and,

WHEREAS, the City of Spokane Charter, Section 73, provides for the establishment of Neighborhood Councils. Comstock, Rockwood, and Manito-Cannon Hill Councils have been formed and recognized according to City requirements; and,

WHEREAS, according to City of Spokane Charter Section 74, Neighborhood Councils may review and recommend a plan to the City Council and the Plan Commission regarding matters affecting the neighborhood; and,

WHEREAS, the Comstock Neighborhood Council allocated Traffic Calming program dollars for the Grand Boulevard Transportation and Land Use Study to emphasize safety through the Grand District Center with more opportunities for safe travel by all modes and all users and Spokane City Council allocated $50,000 in to analyze existing land use in the Center and identify capacity for future growth; and,

WHEREAS, the City of Spokane secured the services of a consultant team for the purpose of preparing the plan (OPR 2019-0509), and signed a contract on July 15, 2019. DKS Associates (“the consultant”) was selected as the prime consultant; and,

WHEREAS, the City, neighborhoods, and the consultant held a series of focus interviews including neighborhoods, business owners, and Spokane Public Schools, two combined workshops and open houses and an online community survey for the purposes of collecting information from stakeholders and the public and developing the features of the Study from October 2019 to February 2020; and,

WHEREAS, a draft Study was completed by the consultant and presented online in June 2020 due to safety considerations for the public during the Covid-19 pandemic conditions; and,

DRAFT

WHEREAS, the Plan Commission recommended the Spokane City Council approve the resolution recognizing the plan on July XXXXX; and,

WHEREAS, the plan's recommendations do not direct nor result in any change to land use or zoning in the Comstock, Rockwood, and Manito-Cannon Hill Neighborhood Councils ; and,

WHEREAS, the plan documents the desires of the neighborhood for City decision-makers as they consider future funding and implementation measures for City plans and projects, specifically as they relate to future actions in the Grand District Center; and,

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL that the Grand Boulevard Transportation and Land Use Study is recognized as a written record of the Comstock neighborhood's and ongoing desire and effort to continue building a vibrant, health, active, safe, and connected neighborhood for all neighborhood and community residents.

DRAFT

PLANNING SERVICES
808 W. SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3329
509.625.6300
FAX 509.625.6013
my.spokanecity.org

June 18, 2020

President Beyreuther and Plan Commissioners
City of Spokane

Re: South University District Subarea Plan

Dear President Beyreuther and Plan Commissioners,

In order to prepare for the July 8, 2020 public hearing on the South University District Subarea Plan, we will be reviewing the work to date on this project at the Plan Commission workshop on June 24, 2020. The previous hearing had been scheduled for March 25, 2020, but was postponed due to public health measures enacted to limit the spread of the COVID-19 virus.

Prior to the workshop, you may want to review the attached staff report and the decision criteria for a Comprehensive Plan amendment at Spokane Municipal Code section SMC 17G.020.030. Staff has not received any comments on the proposal since the initial hearing notice, but will forward written or emailed comments to you as they are received. Public comments will also be taken at the hearing.

Additional information about the South University District Subarea Plan visit the project website at the following web address:

https://my.spokanecity.org/projects/south-university-district-sub-area-planning/

If you are able to visit the subarea prior to the hearing, there are a lot of recent changes to see, especially new public and private construction projects.

Thanks for all your hard work on behalf of the City of Spokane. I look forward to seeing you all online during the meeting.

Sincerely,

Christopher Green, AICP, Assistant Planner II
Department of Neighborhood and Planning Services
509-625-6194
cgreen@spokanecity.org

STAFF REPORT

DEPARTMENT OF NEIGHBORHOOD AND PLANNING SERVICES

To:	Spokane Plan Commission
Subject:	• South University District Subarea Plan • Amendments to Comprehensive Plan Land Use Plan Map, Zoning Map, and Overlay Zones
Staff Contact:	Christopher Green, AICP, Assistant Planner (509) 625-6194 cgreen@spokanecity.org
Report Date:	**DRAFT** REVISED June 18, 2020
Hearing Date:	July 8, 2020
Recommendation:	Approve

I. SUMMARY

Department of Neighborhood and Planning Services staff, working with consultant MAKERS Architecture & Urban Design and district stakeholders (collectively the "Project Team"), have developed a draft *South University District Subarea Plan* to guide future development in a 214-acre area just east of the Downtown core. Based on the framework provided by the subarea plan's goals and policies, a proposed Comprehensive Plan Amendment and corresponding map changes would focus higher-density commercial development and more detailed design requirements along the Sprague Avenue and Sherman Street corridors.

II. RECOMMENDED ACTION

Staff recommends that the Plan Commission adopt the facts and findings of the staff report and recommend that City Council approve the following proposed actions:

(1) Approve a resolution recognizing the *South University District Subarea Plan* as a declaration of the subarea's desired future condition, and reflecting stakeholder priorities for subarea-specific implementation of land use and economic development goals adopted in the Comprehensive Plan.

(2) Approve an ordinance adopting the following actions:

- A Comprehensive Plan Amendment to amend the Land Use Plan Map designation of a 90-acre area from General Commercial Land Use Plan Map designation to Downtown Land Use Plan Map designation, as shown in Exhibit A.
- A concurrent Zoning Map change for the same area from GC-150 (General Commercial with 150-foot height limit) to DTU (Downtown University) is also proposed, as shown in Exhibit B.
- Amendment of downtown plan Map 5.1 "Streetscape Improvements," to designate Complete Streets within the area of the zone change, as shown in Exhibit C.
- Amendment of the Surface Parking Limited Area map (SMC 17C.124-M1) to extend the Surface Parking Limited Area to include the area of the zone change, as shown in Exhibit D.
- Amendment of the Downtown Design Review Threshold Map (SMC 17G.040-M1) to include the areas zoned DTU within the Perimeter Area identified on the Downtown Design Review Threshold Map, as shown in Exhibit E.

III. BACKGROUND

EXISTING CONDITIONS

SUBAREA BOUNDARIES

The subarea planning process for the South University District considers a 214-acre area just east of the Downtown core, bounded by Division Street to the west, Hamilton Street and its interchange with I-90 to the east, I-90 to the south, and the right-of-way for the Burlington Northern Santa Fe (BNSF) railway to the north.

CONNECTIVITY

The University District Gateway Bridge, constructed in 2018, provides a direct bicycle and pedestrian crossing over the BNSF tracks to the Riverpoint campus of Washington State University-Spokane and other higher education institutions immediately to the north of the tracks. The subarea is also directly adjacent to the Downtown core (across Division Street), the Sprague Union District (just to the east of the Hamilton interchange ramps), and the South Perry district and concentration of health care providers on the lower South Hill via the Sherman Street and Arthur Street overpasses.

The two most prominent motor vehicle transportation facilities in the region intersect at the southwest corner of the subarea; the I-90 freeway running east-west, and the Division/Browne Street couplet (U.S. Highway 395/Thomas S. Foley Memorial Highway). The 2nd/3rd Avenue couplet provide an additional point of direct access to the I-90 freeway. Several Spokane Transit Authority (STA) routes provide service within and adjacent to the district, including the Route 90 High Performance Transit line on Sprague Avenue and the Route 12 Southside/Medical Shuttle between the south landing of the University District Gateway Bridge to lower South Hill health care providers. In 2022,

the STA City Line will provide Bus Rapid Transit service at the north bridge landing, just outside of the district boundary.

ENVIRONMENTAL CONDITIONS

The subarea generally slopes downward from north to south, ranging from approximately 2000 feet above sea level near the Sherman Street crossing of I-90 to 1918 feet above sea level where Sprague Avenue intersects with Division Street and where it passes under the Hamilton Street overpass. A long bluff runs along the entire boundary of the subarea, rising about 15 feet above the BNSF railroad tracks, Martin Luther King, Jr. Way, and the WSU-Spokane campus. Exposed and subsurface basalt throughout the district present challenges for excavation, extension of utilities, and stormwater infiltration, and has likely constrained development on some sites where outcroppings are especially prominent.

Due to the history of industrial, railroad, and other business types located in and around the South University District, concerns about past contamination looms over some potential redevelopment sites. Separate from the subarea planning process, the City of Spokane is working with a coalition of district partners to assess and clean up properties in the University District through a combination of State of Washington and U.S. Environmental Protection Agency funding.

LAND USE AND DEVELOPMENT PATTERN

Most of the subarea was originally platted in the late 1800s, followed by the emergence of a commercial corridor on Sprague Avenue alongside a streetcar line (and later highway route), and single family residences developing intermittently on the narrow lots platted on the blocks to the south. The commercial buildings that developed during the early 1900s rarely included more than a few off-street parking spaces. Through the second half of the 20th Century, the subarea was zoned light industrial, and small scale industrial uses filled in many of the gaps between the residences.

Overall, these distinct phases of historical development have led to a wide range of building types and land uses within the subarea. Reflecting the long time roles of the subarea as both a light industrial enclave and a regional center for durable goods retail and wholesale trade, most of the South University District was zoned GC-150 (General Commercial with a 150 foot height limit) when a full revision of the zoning and development code was completed in 2006.

SMC 17C.120.030 characterizes the General Commercial zone as:

"A full range of retail and service businesses with a local or regional market as well as industrial uses are allowed. Industrial uses are limited in size to avoid adverse effects different in kind or amount than commercial uses and to ensure that they do not dominate the character of the commercial area."

There are approximately 1,589 acres of land zoned either GC-70 or GC-150 within the City of Spokane. Outside of the South University District, most of this acreage is concentrated along N Division Street, N Newport Highway, E Francis Avenue, and near the Spokane International Airport.

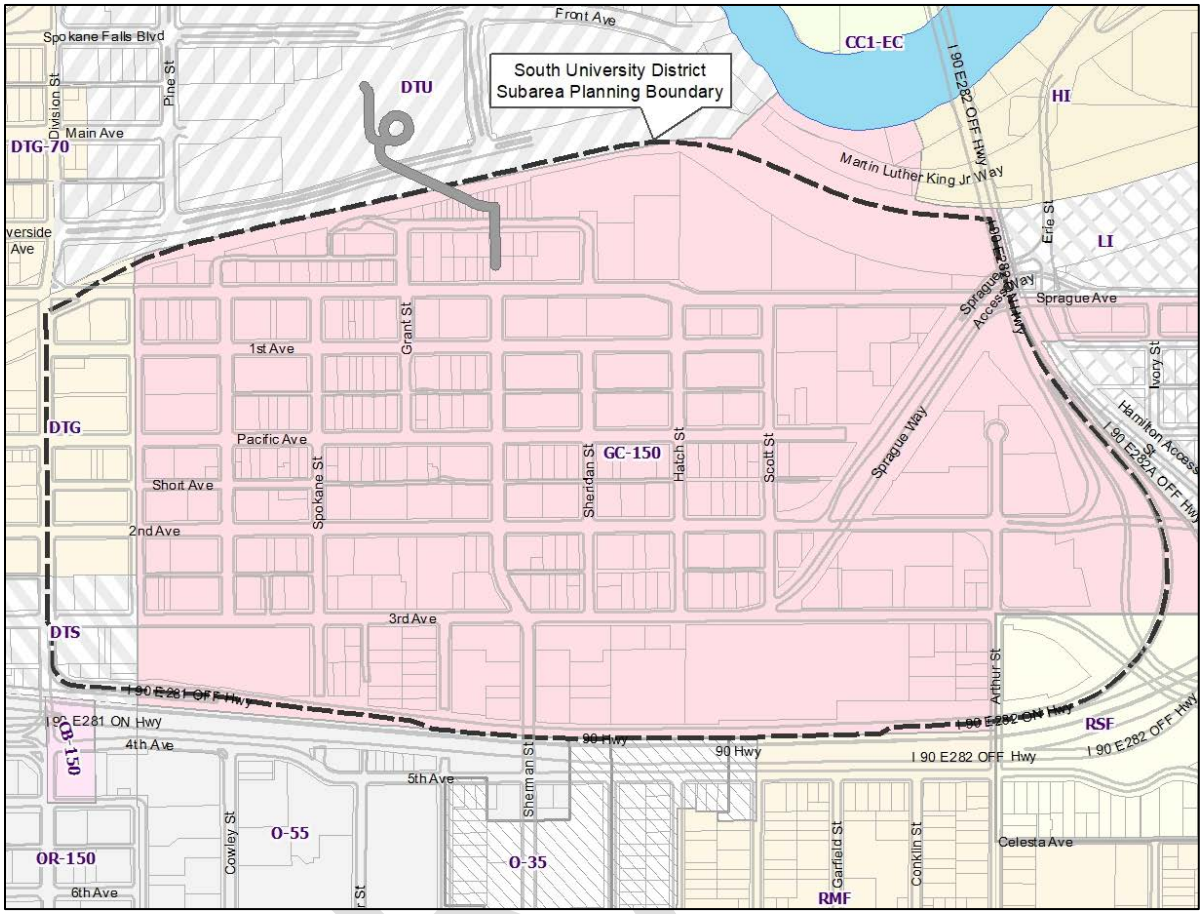

Figure 1 – Existing zoning in the South University District.

RECENT PLANNING EFFORTS

The South University District is part of the larger 770-acre University District, one of the six Target Investment Areas identified in the City's adopted Economic Development Strategy,[1] with many revitalization projects directed by the University District Public Development Authority (PDA) and funded by revenue sharing districts adopted by the City, County, and State. Due to its location between the university campuses to the north and the concentration of hospitals and health care providers on the lower South Hill, the South University District has been envisioned as a future "innovation district" providing a hub for job growth in health sciences and related fields. Several infrastructure projects have been completed in and around the subarea in recent years, including the University District Gateway Bridge, the extension of Martin Luther King, Jr. Way, the Sprague Phase 2 streetscape project, and implementation of High Performance Transit routes by STA.

At the same time, existing conditions present a number of potential barriers to further development and complementary employment growth in the South University District. Recent studies of

[1] City Council Resolution 2015-0084.

development capacity in the district have suggested that the flexibility of allowed uses and design outcomes permitted under the existing GC-150 zoning is sometimes counteracted by the constraints imposed by a low maximum Floor Area Ratio (FAR) for non-residential uses and relatively high off-street parking requirements.[2] Unlike other development barriers, such as issues around market and topographic conditions, these concerns can be addressed within the scope of the subarea planning process.

Since a team of University District stakeholders completed the *University District Strategic Master Plan* in 2004, a series of public and privately-commissioned plans have envisioned the future of the South University District subarea, with most identifying a "T" shape focused on the intersection of Sprague Avenue and Sherman Street as a key node for future mixed-use development. Most recently, the University District PDA adopted an update to the Strategic Master Plan for the district in 2019. Each of these previous plans have built a better understanding of existing conditions and stakeholder visions for the future of the subarea, but have not been implemented through changes to zoning or development standards. The current process used the Sherman and Sprague "T" concept as a starting point, with an end goal of implementing whatever land use and zoning changes (if any) are necessary to implement the community's vision for future development of the subarea.

IV. PROCESS

COMPREHENSIVE PLAN AMENDMENT PROCEDURE

The Washington Growth Management Act (RCW 36.70A) provides that proposed amendments to a comprehensive plan may be considered by the governing body of a city no more frequently than once per year, but further provides that, so long as a subarea plan clarifies, supplements, or implements city-wide comprehensive plan policies, and so long as the cumulative impacts of the proposed subarea plan are addressed by appropriate environmental review under RCW 43.21C, the initial adoption of a subarea plan may occur outside of this annual process.

As described in further detail in Section V of this report, the proposed amendments implement policies adopted under citywide Comprehensive Plan Land Use Goals LU 2 and LU 3 and Economic Development Goals ED 2 and ED 3. Environmental review under the Washington State Environmental Policy Act (SEPA) addressed the cumulative impacts of the proposed amendments. A Determination of Non-Significance was issued on February 21, 2020.

ROLE OF THE PLAN COMMISSION

The proposed amendment to the Comprehensive Plan Land Use Plan Map and zoning and overlay maps require a review process set forth in Spokane Municipal Code (SMC) Chapter 17G.020. The Plan Commission is responsible for holding a public hearing and forwarding a recommendations to the City Council.

[2] *University District Strategic Master Plan Update,* 2019, pg. 86.

The Plan Commission may incorporate the facts and findings of the staff report as the basis for its recommendation to the City Council, or may modify the findings as necessary to support their final recommendations.

ROLE OF CITY COUNCIL

The City Council will also conduct a review process, considering public comments and testimony, the staff report, and the Plan Commission's recommendation. The final decision to approve, modify or deny the proposed amendments rests with the City Council.

COMMUNITY ENGAGEMENT

Each stage of the subarea planning process has incorporated engagement with the numerous stakeholders within the district and the broader community. City of Spokane staff, with the assistance of MAKERS, have conducted the following community engagement activities to help craft this plan:

- More than 1,000 mailers sent to property owners, residents, and occupants in and around the subarea
- An email list of nearly 200 contacts to share project updates and other announcements
- A project page on the City website with up-to-date information about events and project progress
- Community Design Workshop and Stakeholder Focus Groups (July 30-31, 2019)
- Open House on Draft Vision Statement, Goals, and Policies (October 2, 2019)
- An online survey conducted from July 27-August 12, 2019, with 308 responses
- Video on City Cable 5 (also available on City website)
- Table at University District Gateway Bridge grand opening celebration (May 7, 2019)
- In-person presentations to East Spokane Business Association, East Central Neighborhood Council, the Spokane Community Assembly, the Community Assembly Land Use Committee, Downtown Spokane Partnership, University District Development Association/University District Public Development Authority Board

A more detailed Results of the Community Design Workshop and Stakeholder Focus Groups are described in further detail in the *South University District Subarea Plan* (see pages 11-14).

In addition, the project team has provided updates on the plan at key points in the process to elected and appointed officials, and to staff from City departments and interested agencies.

- Staff and Agency Technical Team Workshops (July 31, 2019 and November 14, 2019)
- Plan Commission Workshops (October 23, 2019; November 13, 2019; March 11, 2020)
- Design Review Board Workshop (November 13, 2019)
- City Council Study Session (October 31, 2019)

PUBLIC NOTIFICATION AND SEPA REVIEW

- A Notice of Intent to Adopt was filed with Washington Department of Commerce on February 28, 2020.
- Notice of Application, Notice of SEPA Determination, and Notice of Plan Commission Hearing were mailed to all affected property owners, taxpayers, and occupants in addition to those within 400 feet of the boundary of proposed map changes on February 21, 2020.
- A SEPA Determination of Non Significance (DNS) was issued on February 21, 2020. The comment period ended on March 24, 2020.
- Notice of SEPA Determination and Plan Commission Hearing was published in the *Spokesman-Review* on March 11 and 18, 2020.
- A Plan Commission Hearing was scheduled for March 25, 2020. The hearing was postponed to July 8, 2020 due to public health measures enacted to limit the spread of the COVID-19 virus.
- A notice of the rescheduled hearing date was mailed to all affected property owners, taxpayers, and occupants in addition to those within 400 feet of the boundary of proposed map changes on June 22, 2020.

COMMENTS RECEIVED

[This section will include a summary of comments received prior to Plan Commission hearing]

COORDINATION WITH DOWNTOWN PLAN UPDATE AND OTHER SUBAREA PLANS

The *South University District Subarea Plan* has been developed in close coordination with ongoing subarea planning efforts in the North Bank and Downtown. Appendix B of the draft *Subarea Plan* lists potential policy, map, or code issues which were identified during the planning process that have implications across the entire Downtown area. These issues exceed the scope of the South University District subarea planning process but may be worth considering in future updates of the Downtown Spokane Plan.

V. ANALYSIS

SUMMARY OF PROPOSAL

The subarea plan proposes a targeted zone change from GC-150 to DTU in a 63-acre area the vicinity of the south landing of the University District Gateway Bridge, along Sprague Avenue, and along the portion of Sherman Street closest to the intersection with Sprague Avenue. A change to the DTU zone would increase the maximum floor area ratio (FAR) for non-residential development permitted in these areas from 2.5 to 6, allowing higher intensity office and institutional uses in close proximity to the WSU-Spokane Health Sciences campus, where near-term demand for this development type is anticipated to be the highest. Like the existing GC-150 zone, the DTU zone supports development of housing and mixed-use developments that include housing by allowing unlimited FAR for residential uses.

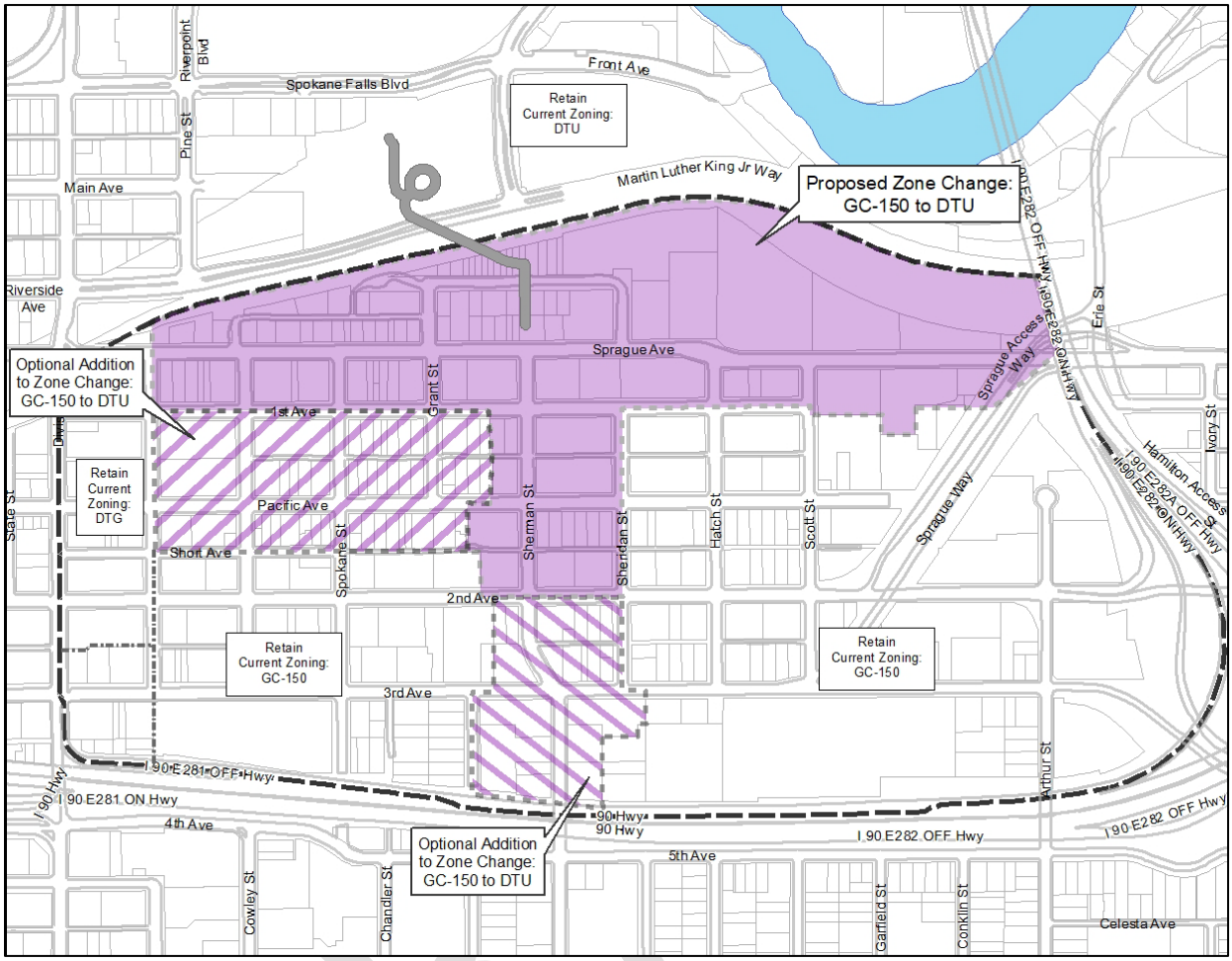

Figure 2 – Proposed area of zone change from GC-150 to DTU, with two optional additions to the DTU-zoned area shown in cross-hatch.

At the same time, the DTU zone includes more detailed standards for building orientation, the public realm, and design review for large projects. The proposed map changes focus these standards on the portion of the district along the key pedestrian-oriented streets (and focal intersection at Sprague and Sherman) identified by stakeholders in the planning process, and in alignment with recent investments in multimodal infrastructure, such as the University District Gateway Bridge, Sherman Plaza, and Sprague Phase 2 streetscape improvements.

The proposal leaves the remainder of the subarea in the existing GC-150 zone, which allows for these portions of the South University District to continue to serve the important functions of providing a space for wholesale and large durable goods retail, complementary services, and affordable light industrial/makerspace adjacent to the Downtown core. Because the GC-150 zone limits FAR for most uses to 2.5, but allows unlimited FAR for residential uses, the proposed zoning configuration also encourages development of housing throughout the subarea.

AGENDA

POLICY OPTIONS CONSIDERED

CHOICE OF ZONING DESIGNATION FOR THE SPRAGUE/SHERMAN "T"

During the planning process the project team considered whether a change to the base zoning or the implementation of special overlay for all or part of the subarea was necessary to implement the stakeholder vision for the South University District. Compared to the additional regulatory complexity of creating and administering a new overlay district, the Downtown General (DTG) and Downtown University (DTU) zones provide a more direct path to implementing more pedestrian-friendly standards for building orientation and streetscape design, while at the same time alleviating the development barriers posed by the FAR and off-street parking standards of the GC-150 zone.

There is almost no difference in the development standards that apply in the DTG and DTU zones. The draft subarea plan **recommends extending the DTU zone** rather than the DTG zone in the South University District because:

- The portion of the subarea proposed for the Downtown zoning extension is contiguous with the existing DTU zoning on the WSU-Spokane Health Sciences campus and private properties immediately to the north.
- The vision statement for the subarea developed by stakeholders more closely resembles the characteristics of the DTU zone, as described in SMC Section 17C.124.030.C: *"The downtown university zone encourages a wide range of uses that support the ongoing development of an urban inner city university. A pedestrian friendly and safe urban environment is encouraged along with a wide range of residential, office, retail, and other supporting commercial uses."*
- While the standards contained in the DTU and DTG zone are nearly identical at this time, the DTU zone is limited to the WSU-Spokane Health Sciences campus and immediately adjacent areas. Therefore, if a future need arose for standards specific to the University District or campus-adjacent areas, modifications could be made to the DTU zone only, without impacting the many other parts of Downtown currently zoned DTG.

OPTIONAL EXTENSIONS OF DTU ZONING

The boundary of the 63-acre area proposed for extension of the DTU zone was selected to provide consistent DTU zoning on both sides of Sprague Avenue and Sherman Street, and the entire extent of the south landing area north of Sprague Avenue. Where practical, the boundary follows mid-block parcel boundaries.[3] The advantages and disadvantages of two potential further extensions of the DTU zone are discussed below.

[3] Street centerline boundaries are proposed along Sheridan Street, to avoid splitting developments spanning the entire block; and on 1st Avenue, where the shallow depth of the block to the north (approximately 166 feet) causes this street to function primarily as service access at the rear of building fronting on Sprague Avenue.

OPTIONAL DTU EXTENSION #1 – SOUTH SHERMAN STREET SOUTH TO I-90

Optional DTU Extension #1 would continue DTU zoning along both sides of Sherman Street beyond 2nd Avenue to I-90, with the objective of continuing a pedestrian-oriented, storefront development pattern along Sherman Street to the edge of the subarea, potentially strengthening connections to neighborhoods across I-90 to the south. This extension was not included in the original proposal due to the effects of high traffic volumes and more auto-oriented development patterns on the couplet formed by 2nd and 3rd Avenues.[4]

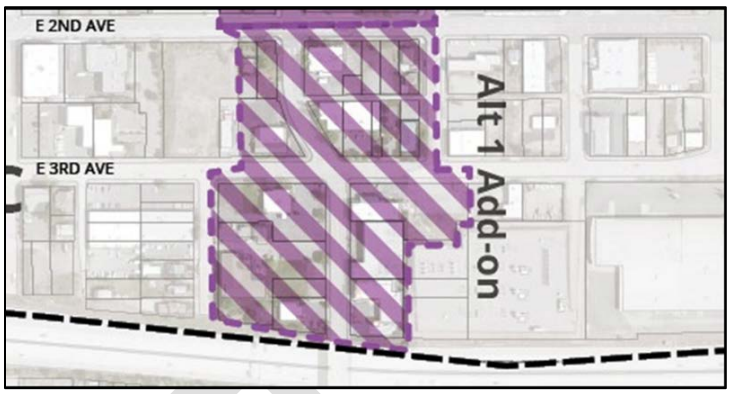

Figure 3 – Optional DTU Extension #2 would extend DTU zoning further south along S Sherman Street from E 2nd Avenue to the I-90 freeway

OPTIONAL DTU EXTENSION #2 – PACIFIC AVENUE WEST TO PINE STREET

Optional DTU Extension #2 would extend westward along the south side of 1st Avenue and both sides of Pacific Avenue. This extension would take advantage of the mix of uses, older buildings oriented to the street, and potential for pleasant bicycle and pedestrian travel within a right-of-way that is wide but carries relatively low volumes of automobile traffic. This extension was not included in the original proposal due to a higher presence of auto-oriented and light industrial uses and a less visible location for retail and other storefront businesses than along Sprague Avenue and Sherman Street. In addition, the lower non-residential FAR allowed in the GC-150 zone helps to incentivize the development of housing for redevelopment projects interested in exceeding an FAR of 2.5.

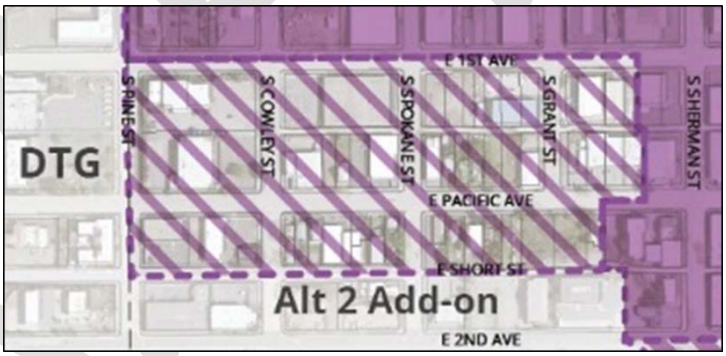

Figure 4 – Optional DTU Extension #2 would extend DTU zoning between E 1st Avenue and E Short Street, along E Pacific Avenue

EXTENSION OF OVERLAYS ASSOCIATED WITH DOWNTOWN ZONING

In addition to the base zones (e.g. DTU), several overlay zones implement supplemental standards across all or part of the areas with a Downtown zoning designation. The project team presented and

[4] The City's 2017 Average Weekday Traffic Map shows between 10,300 and 11,500 vehicles per day on 2nd Avenue near the intersection with Sherman Street, and between 6,700 and 7,100 vehicles per day on 3rd Avenue near the intersection of with Sherman Street.

Sherman Street itself averages 10,100 vehicles per day south o4f 3rd Avenue, 7,100 vehicles per day between 2nd and 3rd Avenues, and 3,100 vehicles per day between 2nd and Sprague Avenues.

gathered input on different scenarios for overlay zone boundaries at the October 2019 open house and other community engagement events. The analysis and recommendations contained in the draft *Subarea Plan* consider each of these overlays individually, and whether or not they should be extended to coincide with the part of the subarea proposed to be zoned DTU.

DOWNTOWN PARKING REQUIREMENT AREA BOUNDARY (SMC 17C.230-M1)

The Downtown Parking Requirement Map provides an overlay in which no minimum number of off-street parking spaces are required for new development. New development within the Downtown Parking Requirement Area can still provide off-street parking as needed, and project financing is often contingent on certain amounts of off-street parking being included in a development, regardless of standards in the local development code. The Downtown Parking Requirement Area (overlay) currently includes all 788 acres within "Downtown" zones (DTC, DTG, DTU, and DTS), as shown in Figure 5.

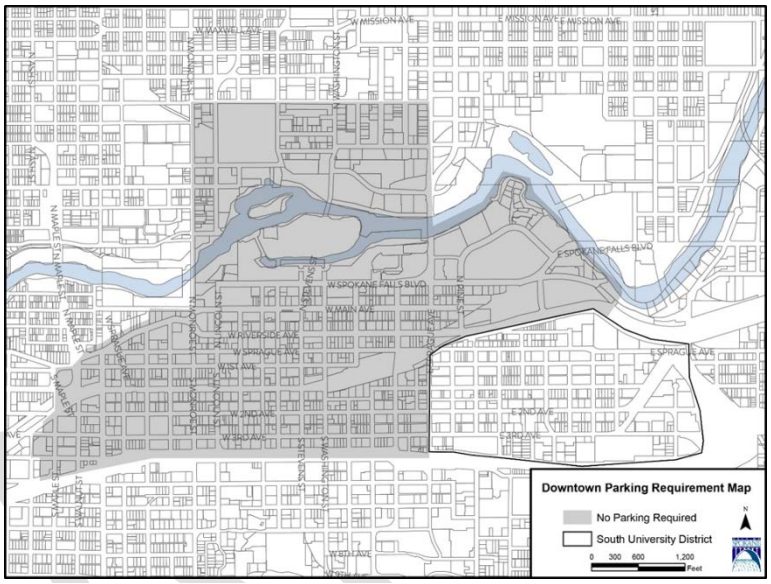

Figure 5 – Existing Boundary of Downtown Parking Requirement Area SMC 17C.230-M1 / (No minimum parking required overlay)

In the draft *South University District Subarea Plan,* consultant **MAKERS Architecture & Urban Design <u>does not</u> recommend extending this overlay into the portion of the subarea zoned DTU, and staff concurs.** Previous studies of the subarea, and stakeholder feedback during the planning processes indicated that the added costs of land for surface parking lots or the construction of structured parking significantly impact the feasibility of all development types.[5] The proposed zone change for the "T" area to DTU (Downtown University) addresses this development barrier. In the absence of the overlay, the DTU zone requires 1 space per 1,000 square feet of floor space, amounting to one-half or less the amount of parking required for most uses under the existing GC-150 zone.[6] The reduction also provides flexibility to adaptive reuse and infill projects on the smaller lots found throughout the subarea, and takes advantage of the pedestrian, bicycle, and transit connectivity that recent investments in the district have provided.

Unlike the Downtown core or North Bank, where the no minimum parking overlay is already in place, the South University District does not have an existing supply of sharable off-street parking spaces in

[5] Pro forma modeling of several standard development types contained in the *2019 University District Strategic Master Plan Update* indicate that offices, labs, and other development types with high per-square-foot costs are particularly sensitive to the additional project costs imposed by construction of on-site parking.

[6] In the GC-150 zone, general and medical office uses require 1 space per 500 square feet; most retail uses 1 space per 330 square feet; and restaurants and bars require one space per 250 square feet, as examples.

commercial garages or surface parking lots. Due to the time period in which the South University District originally developed, the existing inventory of off-street parking is very limited relative to the demand of uses already present in the subarea. Given this scarcity, business operators, employees, customers, and residents often rely on available on-street parking spaces to meet demand. Business and property owners have expressed concern throughout the planning process that increased development activity in the subarea could further strain the parking supply without corresponding development of off-street parking spaces. Under these circumstances, the reduction in minimum parking requirements afforded by the DTU base zone represents a middle ground.

SURFACE PARKING LIMITED OVERLAY (SMC 17C.124-M1)

The Surface Parking Limited Overlay prohibits new standalone commercial parking lots as a primary use. Within the overlay, surface parking lots may still be developed in support of new or existing uses, and commercial parking may still be developed within parking structures. The overlay is currently applied to a 173-acre area in the Downtown core, as shown in Figure 6.

In the draft *South University District Subarea Plan,* **MAKERS recommends extending this overlay into the portion of the subarea zoned DTU, and staff concurs.** In addition to the challenging parcel pattern and topography mentioned above, the Sprague Avenue and Sherman Street and lined in many segments by older buildings that occupy a large portion of the parcels they are located upon. The South University District is adjacent to two potential sources of "spillover" parking demand; the metered parking district in the Downtown core just across Division Street, and the WSU-Spokane Health Sciences campus to the north. In the absence of the protection provided by the Surface Parking Limited Overlay, the existing building stock at the heart of the subarea could see increased pressure for demolition in favor of surface parking lots. Due to sources of demand from outside of the subarea boundary, these additional surface parking lots may not increase the actual supply of parking for businesses located in the South University District.

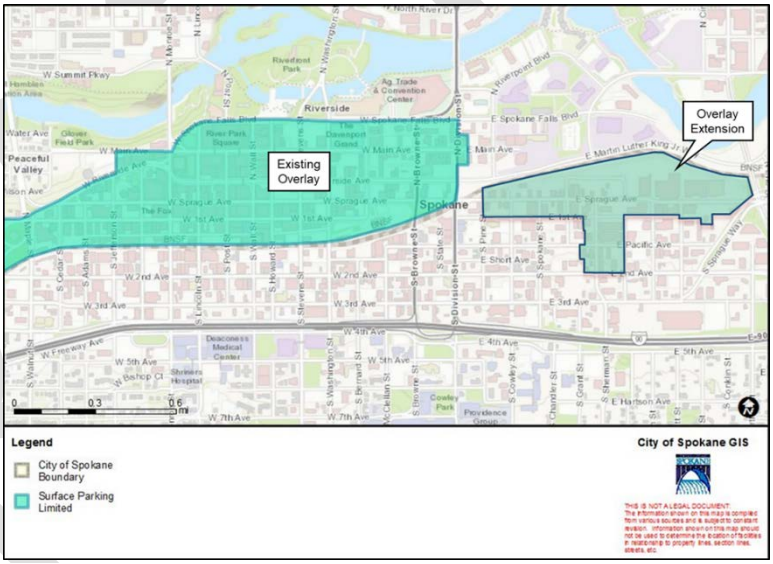

Figure 6 – Proposed extension of Surface Parking Limited Area. SMC 17C.124-M1

DESIGNATION OF COMPLETE STREETS (DOWNTOWN PLAN MAP 5.1)

The Downtown zones (including DTU) are implemented in part by a street classification system adopted in the 2009 Fast Forward Spokane Downtown Plan update. The system uses four types of "Complete Streets," which are used to determine what streetscape improvements, design and site

planning requirements, and types of access are allowed along street frontages.[7] All streets within Downtown zones are classified as one of the Complete Street types described in SMC 17C.124.035; accordingly the proposal includes Complete Streets classifications for streets within the section of the subarea that would be zoned DTU.

Complete Streets designation types include the following:

- ***Type I – Community Activity Street*** *– slow, two-way streets with wide, well-maintained sidewalks and pedestrian amenities to encourage strolling, walking, and shopping.*
- ***Type II – Community Connector*** *- move traffic and pedestrians into and around downtown. There streets provide some of the major pedestrian connection to surrounding neighborhoods and districts.*
- ***Type III – City-Regional Connector*** *- move auto traffic through downtown and provide connections to the rest of the City and region. These attractive, landscaped arterials are to be improved with street trees, sufficient sidewalks for pedestrian circulation and pedestrian buffer areas, and safe pedestrian crossings.*
- ***Type IV – Neighborhood Streets*** *- carry little through traffic and tend to have less commercial activity than the other types of complete streets. These tend to have generous sidewalks, landscaping, and street trees. All downtown streets will meet Type IV criteria to a minimum.*

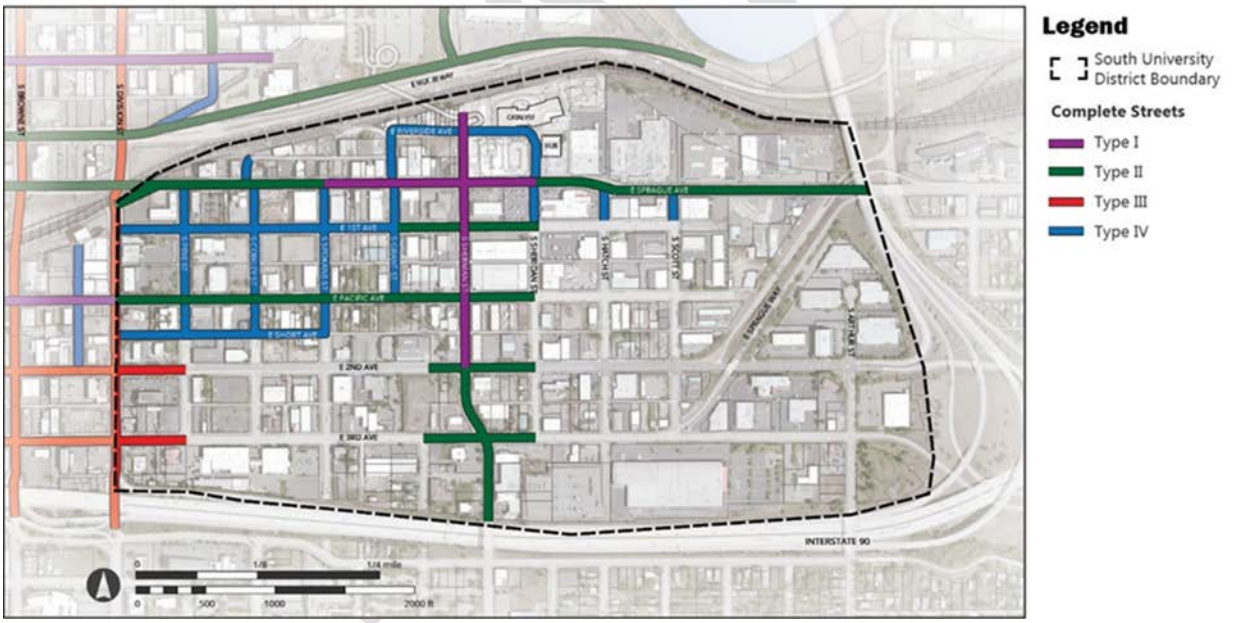

Figure 6 – Proposed Complete Streets Designations for Areas within DTU Zone

The Community Design Workshop, online survey, and other community engagement efforts involved stakeholders in prioritizing key streets for pedestrian activity and storefront-oriented building frontages. These priorities are shown on the Block Frontages and Complete Streets Concepts map in

[7] The Complete Streets designation contained in Downtown zones is distinct from the Complete Streets Program set forth in the City's Engineering Standards in SMC Chapter 17H.020. The Complete Streets Program focuses on overall roadway design and safety of multimodal users.

the draft *Subarea Plan*,[8] and serve as the basis for the proposed Complete Streets designations shown in the plan and as Figure 7 of this report.

Consistent with stakeholder-identified priorities for block frontages, MAKERS' proposed Complete Streets designations concentrate the most pedestrian-oriented classification (Type I – Community Activity Street) on the Sprague Avenue and Sherman Street intersection, with Type II – Community Connector streets designated on the eastern and western portions of Sprague, on Sherman south of the intersection with 2nd Avenue, on Pacific Avenue west of Sherman, and on block frontages immediately east and west of Sherman. **Staff recommends adopting the proposed designations in the draft *Subarea Plan,* with the following revisions** for the purpose of continuity with existing streets in the system:

- Designate Pacific Avenue west of Sherman (within DTU zone Optional Extension #2) as a Type I – Community Activity Street, consistent with the existing designation on Pacific west of Division Street
- Designate the portions of 2nd and 3rd Avenues intersecting with Sherman (within DTU zone Optional Extension #1) as a Type III – City-Regional Connector, consistent with the existing designation on this couplet west of Pine Street
- Designate other block frontages leading to Sherman (1st Avenue and Pacific Avenue east of Sherman) as Type IV – Neighborhood Streets, anticipating that they will continue to carry relatively little through traffic and have less commercial activity than other primary routes.

DESIGNATION OF DESIGN REVIEW THRESHOLD AREA (SMC 17G.040-M1)

Certain project types are always subject to review by the Design Review Board. Within Downtown zones, additional project types are also subject to Design Review, based on the area (Central, Gateway, and Perimeter) in which they are located on the Downtown Design Review Threshold Map (SMC 17G.040-M1). The proposed extension of DTU zoning extends would abut an existing portion of the Perimeter Area (immediately to the north, across the BNSF tracks). Generally, the Central area has been applied in the Downtown core, and Gateway areas have been applied along arterials extending northward from on/off ramps at I-90. Therefore, the subarea plan recommends **including the DTU-zoned portions of the South University District in the Perimeter Area** of the Downtown Design Review Threshold Map.

Within the Perimeter Area, Design Review is additionally applied to new buildings and structures greater than 50,000 square feet, and modification of more than 25 percent (at minimum 300 square feet) of a building façade visible from an adjacent street. This additional review of large-scale projects, and more significant façade modifications near the Sprague and Sherman node is consistent with stakeholder interest in greater design attention at this focal point of the subarea.

IMPLEMENTATION OF COMPREHENSIVE PLAN GOALS AND POLICIES

Using the Comprehensive Plan for overall guidance, the more detailed planning undertaken for subareas like the South University District help ensure implementation of citywide goals and policies

[8] *South University District Subarea Plan,* February 2020 draft, pg. 18.

focused at a smaller scale (see *Goal LU 7 – Implementation* and *Policy LU 7.4 – Sub-Area Planning Framework)*. A review of Comprehensive Plan goals and policies and other supporting documents indicates that the proposal meets the approval criteria for internal consistency set forth in SMC 17G.020.030.G. The analysis below identifies the Comprehensive Plan goals and policies which the proposal most directly implements.

LAND USE GOALS

Land Use Goal LU 2 – Public Realm Enhancement
Goal: Encourage the enhancement of the public realm.

Staff Analysis: The proposal would extend DTU zoning into portions of the subarea in and around the node centered on the intersection of Sprague Avenue and Sherman Street, the Sherman Plaza, and the University District Gateway Bridge. DTU zoning encourages the enhancement of the public realm though implementation of Downtown design guidelines, streetscape standards associated with Complete Streets designations, and application of Design Review to certain projects.

Land Use Goal LU 3 – Efficient Land Use
Goal: Promote the efficient use of land by the use of incentives, density and mixed-use development in proximity to retail businesses, public services, places of work, and transportation systems.

Staff Analysis: The South University District is centrally located within the Spokane metropolitan area, within the designated Downtown Spokane Regional Center, in an area well-served by existing services and transportation systems. The subarea is adjacent to the Downtown core, the WSU-Spokane Health Sciences campus, the Sprague Union district, and the concentration of health care providers on the lower South Hill. The subarea is within an identified Target Investment Area, and revitalization of the area is coordinated by a public development authority and funded by a variety of incentives and a tax increment finance district. The proposal aligns Land Use Plan Map and zoning designations for the South University District with the incentives, economic development strategies, and infrastructure investments already in place for the subarea. The proposed DTU zoning on the south landing and along Sprague Avenue and Sherman Street ensures that future development occurring at this key district node makes efficient use of the multimodal infrastructure and other supportive programs that have been put in place.

ECONOMIC DEVELOPMENT GOALS

Economic Development Goal ED 2 – Land Available for Economic Activities
Goal: Ensure that an adequate supply of useable industrial and commercial property is available for economic development activities.

Economic Development Goal ED 3 – Strong, Diverse, and Sustainable Economy
Goal: Foster a strong, diverse, and sustainable economy that provides a range of employment and business opportunities.

Staff Analysis: The proposed map changes ensure that an adequate supply of usable property is available for a range of economic activities especially suited to the subarea (see *Policy ED 2.1 –*

Land Supply). As described in the "Background" section above, the subarea is located within the larger 770-acre University District, which has been designated as a Target Investment Area, and both public and private stakeholders have placed considerable emphasis on the potential of the South University District as a site for a concentration of private sector employers in health sciences, energy, and other industry clusters benefiting from close proximity to the array of university campuses in the district and health care providers on the lower South Hill (see *Policy ED 3.8 – Technology-Based Industries*).

The existing GC-150 zoning limits the FAR of non-residential uses to 2.5, limiting the intensity of office, laboratory, and institutional development throughout the subarea, including the south landing and Sprague and Sherman frontages, where proximity to the WSU-Spokane Health Sciences campus and multimodal infrastructure increases demand for these uses. Development to support a concentration of employment near the south landing and within the "T" is further complicated by higher off-street parking requirements than other districts adjacent to the Downtown core, which are typically zoned DTG, DTU, or DTS. These minimum requirements for off-street parking force potential developers to aggregate larger sites to accommodate surface parking lots, which presents a particular challenge given the smaller parcels and topographic constraints often found in the South University District. The proposal to change the zoning in these areas from GC-150 to DTU would increase the non-residential FAR from 2.5 to 6, and reduce minimum off-street parking requirements to one space per 1,000 square feet, effectively increasing the supply of land available to meet the needs of emerging innovation-based industry clusters.

In addition, the subarea serves an important role as a retail, wholesale, and light industrial hub in a central location adjacent to the Downtown core. In addition to close proximity to Downtown, university campuses, hospitals, and other activity generators, businesses located in the South University District have efficient transportation links to the regional market through the I-90 freeway, Division Street (US 395), and 2nd/3rd Avenue couplet. The wide range of businesses in the subarea include successful new and multigenerational enterprises, and contribute to one of the region's highest employment densities. Many of the smaller, older existing buildings in the subarea provide flexible, low-cost space conducive to small, emerging, locally-owned firms that contribute to overall job growth in the region. The proposal to retain GC-150 zoning in approximately 136 acres at the southeast and southwest portions of the subarea is meant to maintain space for a range of commercial and light industrial uses, and offer flexibility in building configuration and provisions for freight and operations that may be more difficult to achieve in a densely developed area characteristic of a Downtown zone (see *ED 3.2 – Economic Diversity; ED 3.5 – Locally-Owned Businesses;* and *ED 3.6 – Small Businesses*).

APPROVAL CRITERIA (SMC 17G.020.030)

SMC Section 17G.020.030 establishes the approval criteria for Comprehensive Plan amendments, including Land Use Plan Map amendments. In order to approve a Comprehensive Plan Land Use Plan Map amendment request, the decision-making authority shall make findings of fact based on evidence provided by the applicant that demonstrates satisfaction of all the applicable criteria. The applicable criteria are shown below in ***bold italic*** print. Following each criterion is staff analysis relative to the amendment requested.

A. Regulatory Changes

Amendments to the comprehensive plan must be consistent with any recent state or federal legislative actions, or changes to state or federal regulations, such as changes to the Growth Management Act, or new environmental regulations.

Staff Analysis: Staff reviewed and processed the proposed amendment under the most current regulations contained in the Growth Management Act, the Washington State Environmental Policy Act (SEPA), and the Spokane Municipal Code. Staff is unaware of any recent federal, state, or legislative actions with which the proposal would be in conflict, and no comments were received to this effect from any applicable agencies receiving notice of the proposal. The proposal meets this criterion.

B. GMA

The change must be consistent with the goals and purposes of the state Growth Management Act.

Staff Analysis: The Growth Management Act (GMA) details 13 goals to guide the development and adoption of the comprehensive plans and development regulations (RCW 36.70A.020, "Planning Goals"), and these goals guided the City's development of its comprehensive plan and development regulations. This proposal has been reviewed for GMA compliance by staff from the Washington Department of Commerce. No comments received or other evidence in the record indicates inconsistency between the proposed plan map amendment and the goals and purposes of the GMA. The proposal meets this criterion.

C. Financing

In keeping with the GMA's requirement for plans to be supported by financing commitments, infrastructure implications of approved comprehensive plan amendments must be reflected in the relevant six-year capital improvement plan(s) approved in the same budget cycle.

Staff Analysis: The area of the proposed land use and zoning map changes is a previously-developed, central location within the city served by existing urban facilities and services. City departments and partner agencies responsible for providing public services and facilities have reviewed the proposal and have not indicated any concerns regarding financing commitments or other infrastructure implications that would result from the proposal. The proposal meets this criterion.

D. Funding Shortfall.

If funding shortfalls suggest the need to scale back on land use objectives and/or service level standards, those decisions must be made with public input as part of this process for amending the comprehensive plan and capital facilities program.

Staff Analysis: As described in response to criterion (C) above, the proposal would change land use, zoning, and overlay map designations in a centrally-located area already served by urban facilities and services, particularly after streetscape and utility upgrades to Sprague Avenue are completed later in 2020. The proposal itself does not involve a specific development project. Implementation of the concurrency requirement, as well as applicable development regulations and transportation impact fees, will ensure that development is consistent with adopted comprehensive plan and capital facilities standards, or that sufficient funding is available to mitigate any impacts to existing infrastructure networks. The proposal meets this criterion.

E. Internal Consistency

1. *The requirement for internal consistency pertains to the comprehensive plan as it relates to all of its supporting documents, such as the development regulations, capital facilities program, shoreline master program, downtown plan, critical area regulations, and any neighborhood planning documents adopted after 2001. In addition, amendments should strive to be consistent with the parks plan, and vice versa. For example, changes to the development regulations must be reflected in consistent adjustments to the goals or policies in the comprehensive plan. As appropriate, changes to the map or text of the comprehensive plan must also result in corresponding adjustments to the zoning map and implementation regulations in the Spokane Municipal Code.*

Staff Analysis: The proposal is internally consistent with applicable supporting documents of the Comprehensive Plan as follows:

Development Regulations. The proposal to amend the Land Use Plan Map is accompanied by several amendments to zoning and overlay maps to implement a regulatory framework consistent with the proposed "Downtown" land use designation. The proposal includes a concurrent Zoning Map amendment for the affected area to DTU (Downtown University), a zone implementing the "Downtown" designation. In addition, overlays implementing certain aspects of Downtown development and design standards (Complete Streets designations and Downtown Design Review Thresholds) would be extended to match the amended boundary of the "Downtown" land use designation, to ensure consistent application of implementing regulations.[9] Other overlays (the Downtown Parking Area providing for no minimum off-street parking requirement and the Surface Parking Limited Overlay) are generally associated with Downtown zones but do not need to be extended to ensure consistency

Capital Facilities Program. As described in the staff analysis of Criterion C above, no additional infrastructure or capital expenditures by the City are anticipated for this non-

[9] Two other overlays, the Downtown Parking Area providing for no minimum off-street parking requirement and the Surface Parking Limited Overlay, are generally associated with Downtown zones but are not required to implement development standards adopted for the base zone.

AGENDA

project action, and it is not anticipated that the City's integrated Capital Facilities Program would be affected by the proposal.

Fast Forward Spokane Downtown Plan. The City of Spokane adopted the *Fast Forward Spokane Downtown Plan Update,* which updated the 1999 Downtown Plan. In 2019, the City and Downtown Spokane Partnership began a second update of the Downtown Plan, with plan adoption expected in 2020. *Fast Forward Spokane* included a "South University District Analysis" as an appendix to the plan, including an analysis of opportunities and constraints, circulation and land use frameworks, and inventory of opportunity sites. This analysis section was presented as a supplemental study to *Fast Forward Spokane,* and the area was not included in zoning or development code changes adopted to implement the plan in 2009. The subject proposal for the South University District has been developed in coordination with the current Downtown Plan update process to ensure consistency between the subarea plans and any ensuing map and development code regulations.

Neighborhood Planning Documents Adopted after 2001. The South University District is within the East Central Neighborhood Council boundary. In 2006, City Council recognized the *East Central Neighborhood Plan* "as a declaration of the neighborhood's desired future condition, providing direction for neighborhood-based improvement activities and reflecting the neighborhood's priorities for its future."[10] The plan does not identify any specific changes to the land use designations for the South University District, and indicates that strategic planning processes specific to the University District may address more detailed land use issues in the subarea. In 2009, the East Central Neighborhood Council used neighborhood planning funds for design work on improvements to the Ben Burr Trail, and did not address land use or zoning issues in their planning process.

The subject proposal to change the land use designation and zoning for the affected area is internally consistent with applicable neighborhood planning documents.

Comprehensive Plan Goals and Policies. As described in further detail in Section V, subsection "Implementation of Comprehensive Plan Goals and Policies" within this report, the proposal is consistent with adopted Comprehensive Plan goals and policies.

2. ***If a proposed amendment is significantly inconsistent with current policy within the comprehensive plan, an amendment proposal must also include wording that would realign the relevant parts of the comprehensive plan and its other supporting documents with the full range of changes implied by the proposal.***

Staff Analysis: The proposal is generally consistent with current Comprehensive Plan policies, as described in further detail in the staff analysis of Criterion K.2 below and other criteria in

[10] City Council Resolution 2006-0032. As prescribed in SMC 04.12.010, the City Council resolution recognizing this plan is not an action to amend the City's Comprehensive Plan or development regulations by recommendation of the Plan Commission.

this report. Therefore, no amendment to policy wording is necessary and this criterion does not apply to the subject proposal.

F. Regional Consistency.

All changes to the comprehensive plan must be consistent with the countywide planning policies (CWPP), the comprehensive plans of neighboring jurisdictions, applicable capital facilities or special district plans, the regional transportation improvement plan, and official population growth forecasts.

Staff Analysis: The proposed change in land use designation from "General Commercial" to "Downtown" applies to land near the center of the urbanized area in the Spokane region, would result in a relatively small (approximately 8 percent) increase in the overall area designated "Downtown" on the Land Use Plan Map, and is immediately adjacent to other areas designated "Downtown" to the north and west. Due to the scale and location of the proposal, there are no foreseeable implications to regional or interjurisdictional policy issues. No comments have been received from any agency, City department, or neighboring jurisdiction which would indicate that this proposal is not regionally consistent. The proposal meets this criterion.

G. Cumulative Effect.

All amendments must be considered concurrently in order to evaluate their cumulative effect on the comprehensive plan text and map, development regulations, capital facilities program, neighborhood planning documents, adopted environmental policies and other relevant implementation measures.

1. Land Use Impacts.

In addition, applications should be reviewed for their cumulative land use impacts. Where adverse environmental impacts are identified, mitigation requirements may be imposed as a part of the approval action.

2. Grouping.

Proposals for area-wide rezones and/or site-specific land use plan map amendments may be evaluated by geographic sector and/or land use type in order to facilitate the assessment of their cumulative impacts.

Staff Analysis: The proposed Land Use Plan Map amendment would change the zoning of a 63-acre area from GC-150 to DTU. Subarea planning for the North Bank, just to the north of the Downtown core, has taken place on a similar timeline as the South University District. An update of the *Fast Forward Downtown Plan*, which encompasses a planning area that includes both the South University District and North Bank, started in late 2019 and will

continue through 2020. The overlapping schedule of subarea planning processes has allowed staff to monitor proposed land use changes emerging from each subarea and take cumulative impacts into consideration throughout the process.

Subarea planning for the North Bank is expected to result in a proposal change the Land Use Plan Map designation of approximately 82 acres from "General Commercial" and "Office," to "Downtown" and rezone the same area from CB-150 (Community Business with 150 foot height limit) and OR-150 (Office Retail with 150 foot height limit) to DTG (Downtown General). There is almost no difference in the development standards that apply in the DTG and DTU zones, meaning that the two subarea plans would result in a cumulative increase of approximately 145 acres in these two nearly identical zones. Under the two proposals, total acreage within any Downtown zoning designation (DTC, DTG, DTU, or DTS) would increase from 788 acres to 933 acres, or 18.4 percent.

The close coordination between the subarea planning processes has allowed both subarea plans to take the potential cumulative impacts of their proposed changes into consideration during the planning process. While the change from GC-150, CB-150, or OR-150 to DTG or DTU zoning involves some differences in allowed uses and application of development and design standards, an increase in the floor area ratio (FAR) for non-commercial uses is the most prominent cumulative difference that would result from the zone changes proposed under the two subarea plans. In the North Bank, approximately 82 acres would see an increase in non-residential FAR from 4.5 to 6, and in the South University District, FAR would increase from 2.5 to 6 for approximately 63 acres. Because there is no maximum FAR for residential uses in the existing or proposed zoning involved in either subarea plan, the proposal does not result in any cumulative change in development capacity for housing.

Proposed changes to the in Land Use Plan map designation and zoning in the South University District apply to just under 30 percent of the subarea. The proposed change to a "Downtown" designation and DTU zoning is focused on areas where projected demand for larger office and other concentrated employment uses is highest, specifically preserving the remainder of the subarea for the existing range of residential, commercial, and light industrial uses and minimizing the cumulative impact of a district-wide zone change.

The proposal meets this criterion.

H. SEPA.

SEPA review must be completed on all amendment proposals and is described in chapter 17E.050.

1. Grouping.

When possible, the SEPA review process should be combined for related land use types or affected geographic sectors in order to better evaluate the proposals' cumulative

impacts. This combined review process results in a single threshold determination for those related proposals.

2. *DS.*

If a determination of significance (DS) is made regarding any proposal, that application will be deferred for further consideration until the next applicable review cycle in order to allow adequate time for generating and processing the required environmental impact statement (EIS).

Staff Analysis: The application is under review in accordance with the State Environmental Policy Act (SEPA), which requires that the potential for adverse environmental impacts resulting from a proposal be evaluated during the decision-making process. On the basis of the information contained in the environmental checklist, written comments from local and State departments and agencies concerned with land development within the City, and a review of other information available to the Director of Planning Services, a Determination of Non-Significance was issued on February 21, 2020. The proposal meets this criterion.

I. *Adequate Public Facilities.*

The amendment must not adversely affect the City's ability to provide the full range of urban public facilities and services (as described in CFU 2.1 and CFU 2.2) citywide at the planned level of service, or consume public resources otherwise needed to support comprehensive plan implementation strategies.

Staff Analysis: The proposed map changes affect an area approximately 63 acres in size, in a built-up area adjacent to the downtown core and served by the public facilities and services described in CFU 2.1. Significant infrastructure upgrades in recent years have included capacity upgrades to City utilities serving the area. The proposed map changes affect a relatively small area, do not include a development proposal, and do not measurably alter demand for public facilities and services in the vicinity of the proposal or on a citywide basis. All affected departments and outside agencies providing services to the subject properties have had an opportunity to comment on the proposal and no agency or department offered comments suggesting the proposal would affect the City's ability to provide adequate public facilities to the property or surrounding area or consume public resources otherwise needed to support comprehensive plan implementation strategies. Any subsequent development of the site will be subject to a concurrency determination pursuant to SMC 17D.010.020, thereby implementing the policy set forth in CFU 2.2. The proposal meets this criterion.

J. *UGA.*

Amendments to the urban growth area boundary may only be proposed by the city council or the mayor of Spokane and shall follow the procedures of the countywide planning policies for Spokane County.

Staff Analysis: The application does not propose an amendment to the urban growth area boundary. This criterion does not apply.

K. Demonstration of Need.

1. Policy Adjustments.

Proposed policy adjustments that are intended to be consistent with the comprehensive plan should be designed to provide correction or additional guidance so the community's original visions and values can better be achieved. [...]

Staff Analysis: The proposal is for a map change only and does not include any proposed policy adjustments. Therefore, this subsection does not apply.

2. Map Changes.

Changes to the land use plan map (and by extension, the zoning map) may only be approved if the proponent has demonstrated that all of the following are true:

a. The designation is in conformance with the appropriate location criteria identified in the comprehensive plan (e.g., compatibility with neighboring land uses, proximity to arterials, etc.);

Staff Analysis: Comprehensive Plan policies related to Downtown generally emphasize its role as a Regional Center featuring diverse uses, without providing specific locational criteria or guidance on what type of areas are most or least suitable for expansion of the Downtown designation. The location of the proposed Land Use Plan Map amendment is within the "Downtown Boundary" designated in the 2009 *Fast Forward Spokane Downtown Plan Update* and is contiguous with existing areas designated "Downtown" on the Land Use Plan Map and zoned either DTG or DTU. The proposal meets subsection (a).

b. The map amendment or site is suitable for the proposed designation;

Staff Analysis: The proposal includes a concurrent Zoning Map change for the affected area to DTU (Downtown University) to implement the proposed "Downtown" Land Use Plan Map designation. SMC 17C.124.030.C describes the DTU zone as follows:

> *"Downtown University (DTU).*
> *The downtown university zone encourages a wide range of uses that support the ongoing development of an urban inner city university. A pedestrian friendly and safe urban environment is encouraged along with a wide range of residential, office, retail, and other supporting commercial uses."*

In the proposed location, the "Downtown" land use designation and accompanying DTU zoning align closely with this description by allowing dense development of office, laboratory, and other uses that complement the research and education functions of the adjacent WSU-Spokane Health Sciences campus and other universities in the district, and provide space for continued employment growth in the district. The proposed location of the DTU zone extension along Sprague Avenue and Sherman Streets, and the pedestrian friendly urban environment encouraged in the DTU zone aligns with stakeholder emphasis on these streets as a focal point for the subarea.

The proposal meets subsection (b).

c. The map amendment implements applicable comprehensive plan policies and subarea plans better than the current map designations.

Staff Analysis: As described in further detail in Section V, subsection "Implementation of Comprehensive Plan Goals and Policies" within this report, the proposal is intended to create a pattern of land use designation and zoning in the subarea that better implements adopted Land Use and Economic Development Goals adopted in the Comprehensive Plan. In particular, the proposal allows for concentration of high density employment growth in close proximity to investments and multimodal transportation and other public infrastructure (see Land Use policies LU 3.1 and 4.6) and ensures that land is available for employment growth in targeted industry clusters (Economic Development policies ED 2.1 and ED 3.8) and for the retention and expansion of existing businesses in the subarea (Economic Development policies ED 3.2, ED 3.5, and ED 3.6).

Comprehensive Plan Policy LU 1.9 – Downtown, provides in part that "major land use changes within the city should be evaluated to identify potential impacts on Downtown." As described in the staff analysis of Criterion G above, the proposal has been evaluated for the cumulative increase in commercial development capacity caused by extending the Downtown designation in the South University District and North Bank subareas. The proposed extension of the Downtown designation in the South University District is applied to a focused area, rather than spread district-wide, in part to avoid impacts to the existing Downtown core from overextension of Downtown zoning.

The proposal meets subsection (c).

3. Rezones, Land Use Plan Map Amendment.

Corresponding rezones will be adopted concurrently with land use plan map amendments as a legislative action of the city council. If policy language changes have map implications, changes to the land use plan map and zoning map will be made accordingly for all affected sites upon adoption of the new policy language. This is done to ensure that the comprehensive plan remains internally consistent and to preserve consistency between the comprehensive plan and supporting development regulations.

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Staff Analysis: If the Land Use Plan Map amendment is approved as proposed, the zoning designation of the affected area will change from GC-150 (General Commercial with 150-foot height limit) to DTU (Downtown University). The DTU zone implements the Downtown land use designation proposed for the affected area. No policy language changes have been identified as necessary to support the proposed Land Use Plan Map amendment, which is consistent with adopted Comprehensive Plan Land Use and Economic Development goals and policies as described elsewhere in this report. The proposal meets this criterion.

RECOMMENDED FINDING

Staff recommends that the Plan Commission find that the proposal meets the approval criteria set forth in SMC Section 17G.020.030.

VI. CONCLUSION

Staff finds that the proposed *South University District Subarea Plan* reflects a more detailed look at land use issues within a focused area, consistent with the approach set forth in Comprehensive Plan Land Use Policy LU 7.4 – Sub-Area Planning Framework. The proposed Comprehensive Plan Amendment to amend the Land Use Plan Map, and concurrent changes to zoning and overlay maps are consistent with Comprehensive Plan Land Use Goal LU 3 and Economic Development Goals ED 2 and ED 3. The proposal is also consistent with each of the approval criteria for a Comprehensive Plan Amendment set forth in SMC Section 17G.020.030.

Staff recommends that the Plan Commission adopt the facts and findings of the staff report and make a recommendation that City Council approve a resolution recognizing the *South University District Subarea Plan* and an ordinance adopting the proposed Comprehensive Plan Amendment and concurrent zoning and overlay map changes.

VII. EXHIBITS

A. Proposed Comprehensive Plan Land Use Plan Map Amendment
B. Proposed Amendments to Zoning Map
C. Proposed Designations of Complete Streets within the South University District subarea (Downtown Map 5.1 “Complete Streets”)
D. Proposed Amendments to Surface Parking Limited Overlay Map (SMC 17C.124-M1)
E. Proposed Amendments to Downtown Design Review Threshold Map (SMC 17G.040-M1)

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EXHIBIT A: PROPOSED COMPREHENSIVE PLAN LAND USE MAP AMENDMENTS

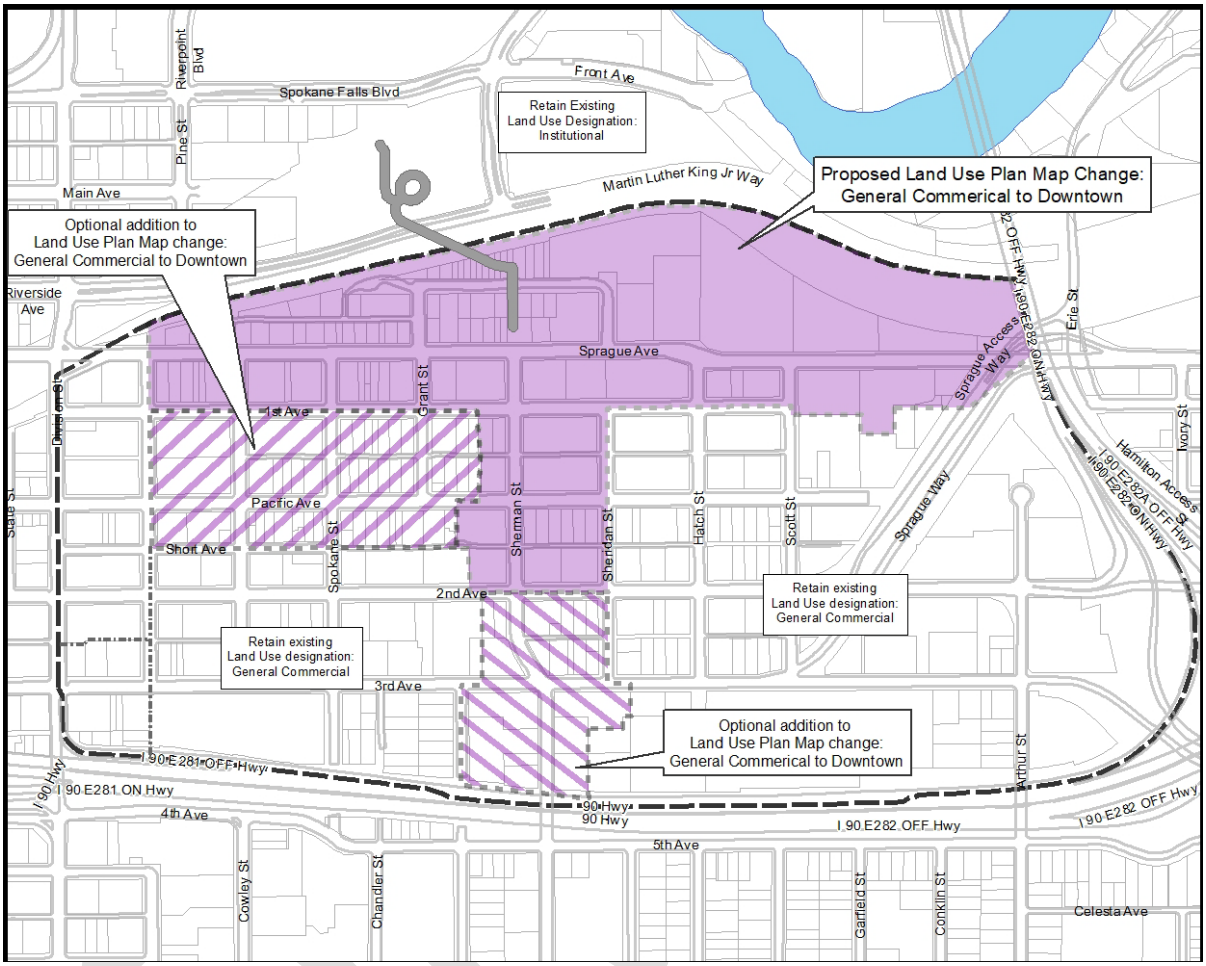

EXHIBIT B: PROPOSED ZONING MAP AMENDMENTS

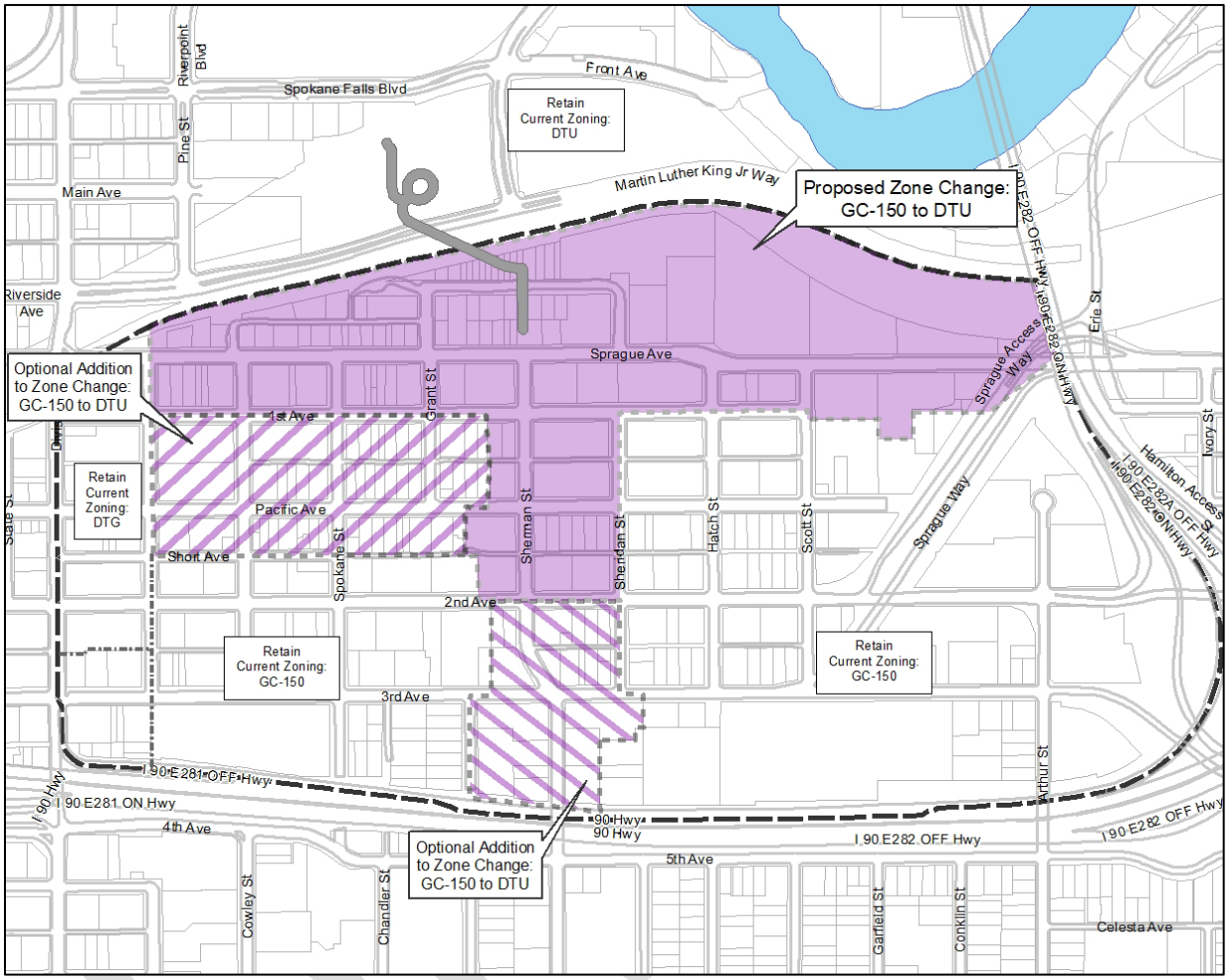

EXHIBIT C: PROPOSED COMPLETE STREETS DESIGNATIONS IN DTU-ZONED AREAS

Amending Downtown Plan Map 5.1 "Complete Streets"

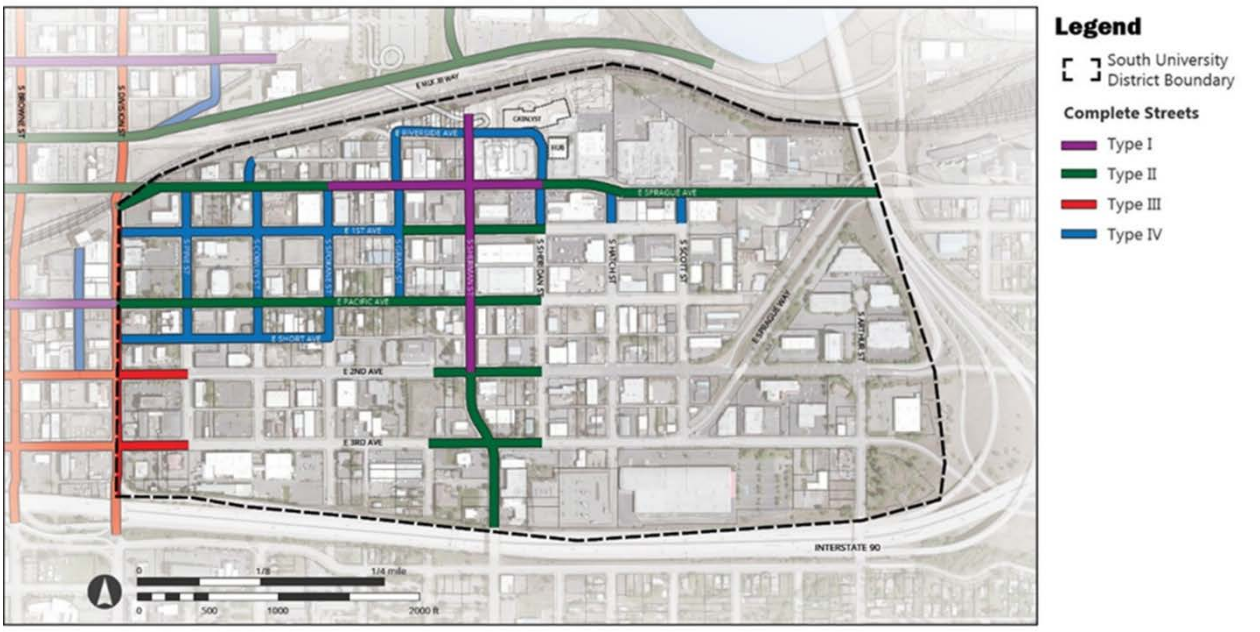

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EXHIBIT D: PROPOSED AMENDMENT TO SURFACE PARKING LIMITED OVERLAY

(SMC 17C.124-M1)

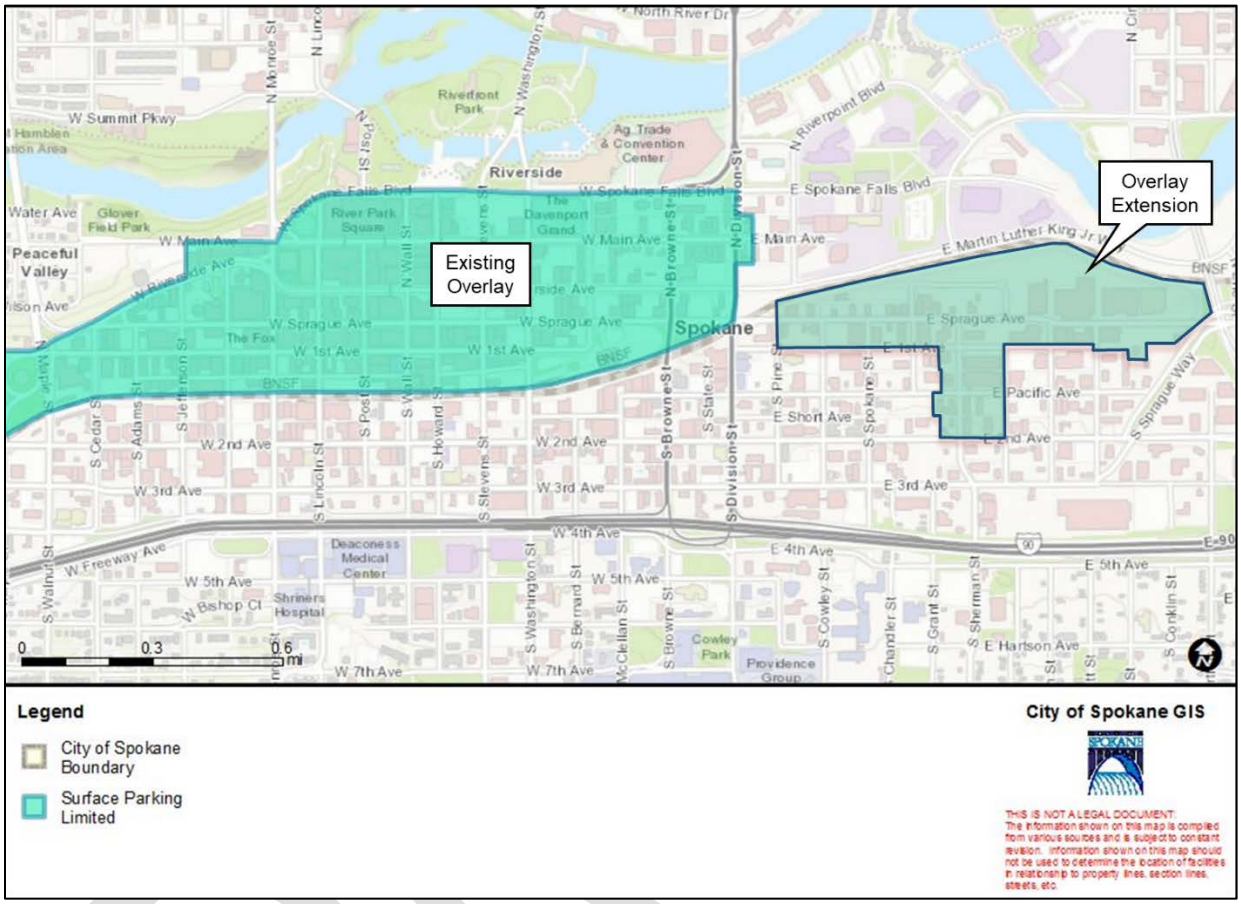

EXHIBIT E: PROPOSED AMENDMENT TO DOWNTOWN DESIGN REVIEW THRESHOLD MAP

(SMC 17G.040-M1)