

Appendix A

Transportation System Conditions and Deficiencies

DATE: February 16, 2024
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FROM: Emily Welter, PE, Erin David, and Natalie Chavez
SUBJECT: Draft TM2: Transportation System Condition and Deficiencies
CC: David Helton, ODOT
PROJECT NUMBER: 274-2395-123
PROJECT NAME: Harrisburg TSP Update

Introduction

This memorandum reviews existing transportation conditions in the City of Harrisburg to identify existing transportation conditions and needs. The review considers the City's land use, population, and transportation network and facilities for use in the development of the Harrisburg Transportation System Plan (TSP) Update. This memorandum inventories the existing conditions and current standards to understand current transportation system needs and anticipated future conditions and system needs. All modes of transportation are analyzed, including streets and roadways and pedestrian and bicycle facilities. This analysis inventories each of these systems to identify existing and projected deficiencies to inform potential projects, programs, and policy changes for incorporation into the updated Harrisburg TSP.

Needs Summary

A summary of the City's current transportation system and needs is provided below.

Streets/Bridges

- **Multimodal Conflicts.** OR 99E/S 3rd Street serves as the City's only designated freight route and is a Reduction Review Route. This means that any changes to the roadway must be reviewed to determine if there will be a reduction in vehicle-carrying capacity and may require additional approval. It is the main north-south connection through the city and is the primary connection out of the city. While OR 99E/S 3rd Street is an important thoroughfare in Harrisburg, it can act as a dividing line within the community due to the high number of vehicles, limited enhanced crossing opportunities, and prevalence of freight movement. Community members have identified OR 99E/S 3rd Street as the most significant barrier to travel in and through Harrisburg.
- **Road Connectivity.** Few routes in Harrisburg provide continuous connections across the city. A complete grid network in and around Harrisburg's downtown enhances connectivity for all modes of travel and provides system redundancy; however, developments to the north, east, and south in the city more typically feature cul-de-sac or dead-end roadways, with limited connecting into and out of neighborhoods. Further, roadway connectivity is reduced in locations adjacent to the railroad; roads such as Schooling Rd, Fountain St, Kesling St, and Moore St dead end at track locations, which limits the number of connections east-west in the city.



- **Pavement Condition.** The City recently completed a comprehensive pavement inventory, resulting in an average score of “Fair” for pavement condition. Staff have identified the need to improve pavement preservation efforts to enhance the transportation system and reduce future costs associated with failing pavement.
- **Freight.** Currently, most freight travels on OR 99E/S 3rd Street, a designated freight route and Reduction Review Route. However, freight traffic also requires connections to industrial sites in Harrisburg, including businesses along S 2nd Street south of OR 99E, LaSalle Street east of OR 99E/S 3rd Street, and areas north of Territorial Street along OR 99E and Peoria Road. Freight traffic movement, especially along LaSalle Street, results in potential conflict for all modes. Intersection improvements may be needed on OR 99 at S 2nd Street to accommodate existing industrial users and expected development in the area south of OR 99. Intersection improvements on OR 99E at Tandy Lane may also be needed to accommodate future industrial development in that area.
- **Congestion.** Community members have identified congestion along OR 99E/S 3rd Street as a challenge to the transportation system in Harrisburg, particularly at the intersection with LaSalle Street. Community comments specifically note the impact of freight movement on congestion.
- **Additional Connections.** New and extended public streets will be needed to serve area of new development and to improve connectivity of the local street system. Some new and extended streets will create new intersections on the arterial and collector street system.

Traffic Operations

- **Mobility Targets.** Roadway mobility targets are based on volume-to-capacity (V/C) ratios and level of service (LOS). The intersection of OR 99E/S 3rd Street and LaSalle Street currently exceeds the mobility target and is expected to exceed the mobility target in the future. This intersection is expected to operate at a v/c ratio of 1.24 in existing conditions and a v/c ratio of 1.55 in future conditions and may require additional measures to ensure it meets mobility targets in the future.
- **Traffic Congestion.** City staff and community members have noted congestion and potential conflicts along OR 99E/S 3rd Street, particularly at LaSalle Street. This is consistent with the results of the intersection analysis completed as part of this report. Community members have expressed specific concern with the movement of freight vehicles in this area and the impact to safe travel.

Walking and Bicycling

- **Pedestrian Level of Traffic Stress.** Generally, streets in Harrisburg provide relatively low-stress routes for walking. Connections among neighborhoods along major roadways are rated PLTS 2, meaning that the route is suitable for adults. High stress routes, however, include OR 99E/S 3rd Street, which is the primary route through the city and where many businesses and services are located. In addition to being a high stress route for pedestrian travel along, S 3rd Street is also a barrier for pedestrian travel across the roadway, effectively limiting connections between the eastern and western areas of Harrisburg.
- **Bicycle Level of Traffic Stress.** Harrisburg’s shared street and dedicated bike lane facilities contribute to low stress routes in several key areas of the city. For example, low stress connections near the schools on S 6th Street, S 9th Street, Smith Street, and LaSalle Street facilitate student connections to educational opportunity. However, high stress routes, including OR 99E/S 3rd Street and Territorial Drive, limit the connectivity of the bicycle



network and create barriers for people traveling from residential areas in both the northern and southern areas of the city.

- **Bicycle and Pedestrian Gaps.** The pedestrian network is relatively complete along major roadways (arterials and collectors) in Harrisburg, with sidewalks generally present on at least one side of the roadway. However, many areas of the city lack dedicated walking facilities to support travel within neighborhoods. The bicycle network is limited in Harrisburg, with dedicated bike lanes on only a few key roads, such as Diamond Hill Drive, portions of LaSalle Street, and S 6th Street.

Pedestrian Crossings

- **Crossings on OR 99E/S 3rd Street.** There is one signalized crossing at Territorial Street and an additional unsignalized marked crossing at Smith Street. Smith Street is also a designated school crossing. While Smith Street does not currently include any stop control, City staff have requested that an RRFB is installed at the intersection of Smith Street and OR 99E/S 3rd Street. Stakeholders identified challenges for people walking and biking trying to cross OR 99E/S 3rd Street.
- **Enhanced Crosswalk Treatment.** Marked crosswalk facilitate connections in many areas of the city. Most crosswalks are striped with transverse markings and are fading in many areas; however, several locations includes high visibility crosswalk striping, and the intersection of Diamond Hill Drive and N 9th Street features an pedestrian-activated beacon to further support crossing. Further, while curb ramps are present in many locations, most lack detectable warning surfaces. Recent improvements, including the addition of curb extensions at S 2nd Street and Smith Street and the enhanced crossing at Diamond Hill Drive and N 9th Street, have updated the existing curb ramps to include detectable surfaces.

Public Transportation

- **Public Transit.** The city does not currently have transit service but there is interest in providing access to service through partnerships with neighboring jurisdictions and the county.
- **Populations that may Benefit from Public Transportation.** According to the US Census, over 30% of Harrisburg residents are under the age of 18, and 16% of Harrisburg residents identify as having a disability. Public transportation can expand mobility opportunities for these groups. Additionally, public transportation that connects to nearby cities could support commute travel patterns and help manage demand on the roadway system.

Safety Concerns and Deficiencies

- **Crash Summary.** Crash data from 2017 through 2021 show that crashes occurred most frequently OR 99E/S 3rd Street. During this 5-year period, 57 crashes occurred, with crash severities ranging from property damage only to serious injury.
- **Crash Severity.** Of the 57 total car crashes, 30 involved property damage only (no injury), 17 resulted in a possible injury, 6 resulted in a suspected minor injury, and 4 resulted in a suspected serious injury.
- **Crashes Involving People Walking or Biking.** Analysis focused on crashes involving people walking or cycling shows a total of two crashes involving a person walking; no crashes involved people bicycling. Both pedestrian-involved crashes were identified as possible injury crashes. One occurred on Smith Street at OR 99E/S 3rd Street; the crash reported indicated that a failure to yield contributed to this crash. The second occurred on S 9th Street south of



Heather Turn. Limited information is available about this crash, but it did occur in the evening during winter months. Other Improper Driving was identified as a contributing factor.

- **Crash Locations.** Over 40% of crashes occurred at an intersection, with rear-end and turning movements as the most common crash type. Crashes most frequently occurred on OR 99E/S 3rd Street, with nearly 50% of all crashes occurring on this corridor.
- **Locations for Further Safety Review.** The safety analysis did not identify any intersections as having a crash rate over the 90th percentile crash rate. However, based on review of both frequency and severity of crashes, further review should be considered along the OR 99E/S3rd Street corridor. This corridor represents not only close to half of all crashes in Harrisburg, it also represents a significant proportion of intersection-related crashes and suspected minor injury crashes in the city.

Study Area

The City of Harrisburg is in Linn County along OR 99E and approximately 6 miles west of the I-5 corridor. It is approximately 5 miles northeast of Junction City, 21 miles northwest of the Eugene-Springfield Metropolitan area, and 25 miles south of Albany. As shown in Figure 1, the city is bordered on the west by the Willamette River and is surrounded by farmland. The city is bisected north-south by two existing railways: the Union Pacific (UP) and Burlington Northern Santa Fe/Portland & Western (BNSF/PNWR).

The Harrisburg TSP considers all the land within the city limits and the Harrisburg urban growth boundary (UGB), which covers approximately 928 acres. West of OR 99E to the north of the city, the UGB includes an industrial site that extends beyond the city limits and farmland extending east to Tandy Lane. The UGB extends along Diamond Hill Drive northeast of the city limits and includes residential and industrial land uses. To the southeast of the city, the UGB extends east of Sommerville Loop between Priceboro Drive past LaSalle Street. Finally, the southern boundary extends west of the BNSF/PNWR Railway by the Willamette River and includes land zoned for exclusive farm use.

Community Destinations

Community destinations in Harrisburg are the places where people want or need to go to access employment, education, recreation, or services. Many destinations are located along 3rd Street/OR 99E and 2nd Street, which offer a mix of commercial destinations that include stores, restaurants, bars, and other local businesses. Leading from the 3rd Street corridor, Smith Street connects residents and visitors to a number of community-focused destinations. The Harrisburg Municipal Center and Library are located adjacent to the Senior Center and the HART Center, which connects families, students, and seniors to programs and resources. Two blocks east of the library, Harrisburg Skate Park and the adjacent schools not only connect area students to educational opportunities but are also frequently used for sporting events and community events. Industrial areas are major employment hubs that are located near the commercial core and Willamette River, in particular along 3rd Street and LaSalle Street. Many freight trucks pass through these areas.

With significant separation among the city's land uses, including residential and commercial areas, and limited connectivity of the bicycle and pedestrian networks, it is likely that many local trips are completed by motor vehicle. Commute trip data shows that more than 80% of Harrisburg workers travel by car to work. Further, community members have identified motor vehicle congestion during school drop off and pick up times as a concern. Seasonal variations in travel are limited and may be best linked to factors such as the school year.



Key destinations are shown in Figure 2.

Major Active Transportation Generators

Locations throughout Harrisburg have the potential to generate walking and bicycling trips if complete, connected, and comfortable facilities are present. Key destinations within the city that are known to attract or generate active transportation trips are described below.

Harrisburg School District K-12

Harrisburg's elementary, middle, and high school are concentrated in the same area east of downtown in the area between 6th Street and 9th Street and between Smith Street and LaSalle Street. These routes have existing sidewalks and marked crosswalks; bike lanes are located on 6th Street. The schools attract trips from school-age children and adults. Feedback provided by the Project Advisory Committee indicates congestion and safety concerns near schools, especially during pick up and drop off time.

Downtown Harrisburg – S 3rd Street/OR 99E, S 2nd Street

The downtown commercial district is located along S 3rd Street/OR 99E and serves as the city's shopping and food corridor. S 2nd Street, located immediately west of OR 99E, also features several businesses at the north end near Smith Street. These areas have the potential to attract trips from nearby residential areas or support pedestrian travel among different businesses in the area.

Parks and Recreation

The Harrisburg Parks Master Plan (2022) identifies six parks in Harrisburg. Harrisburg Heritage Park contains the Agricultural Museum grounds behind the fire station, while Harrisburg Skatepark is located adjacent to School District property, which contains a recently refurbished tennis/pickleball courts, and a ball field. Riverfront Park is located along the Willamette River and features a gazebo, several picnic tables, and benches, and hosts the Fourth of July celebration. There are smaller park spaces in residential areas, including Arrow Leaf Park in the northern part of the city, Priceboro Park in the southeastern part of the city, and Burlington Northern Park located by the tracks on 4th Street and Smith Street. Although located outside of the city, Eagle Park is a popular destination for people in Harrisburg, especially for people walking. The park is located south of the city between the Willamette River and the railroad. City staff have indicated interest in increasing access to area parks, especially for people walking and bicycling,



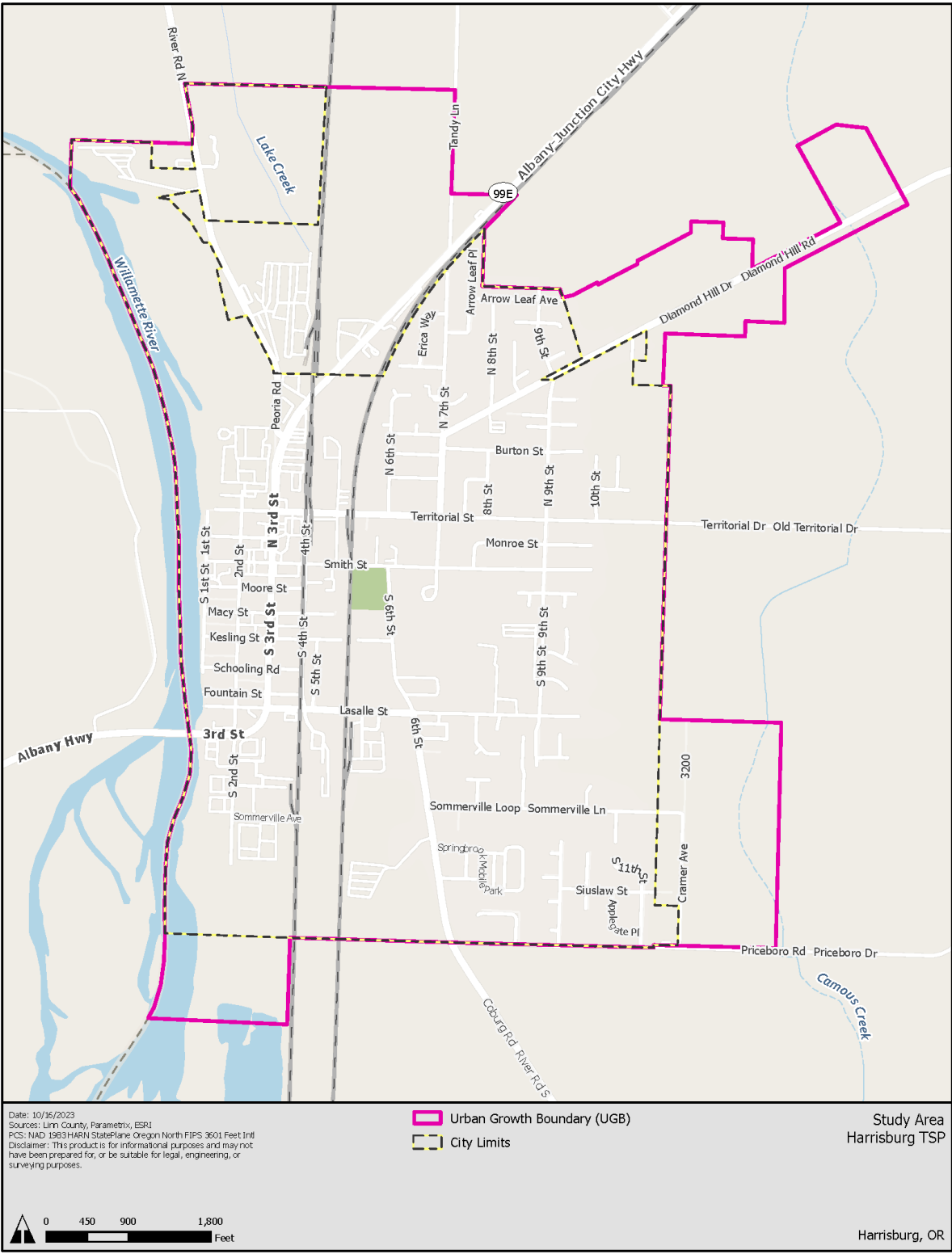


Figure 1. Harrisburg TSP Study Area



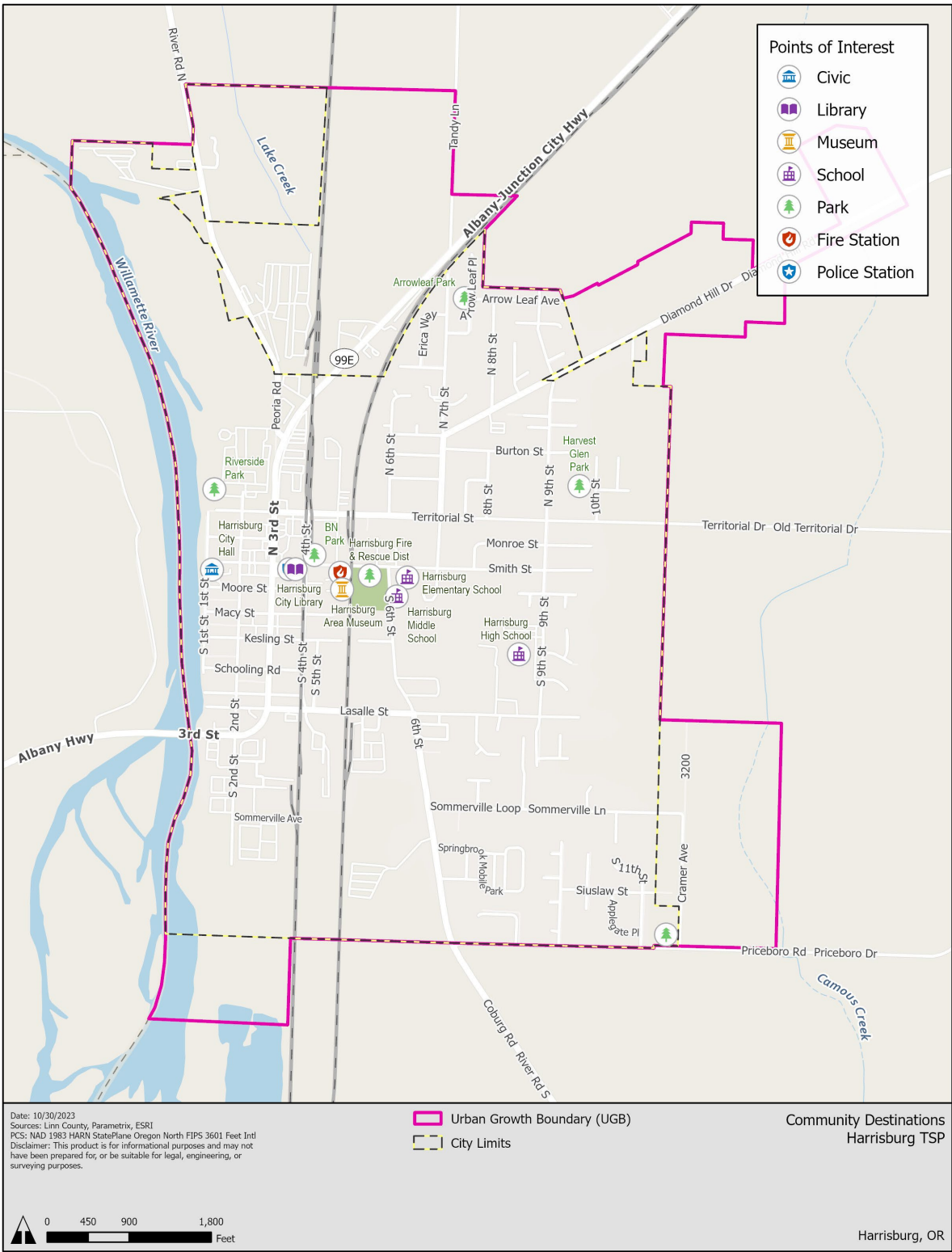


Figure 2. Community Destinations



Zoning and Land Use

A city's zoning heavily influences residents' transportation behavior. How far people must travel from their residences to work, learn, and recreate can be a factor in what transportation method they use. Harrisburg's land use includes a mix of residential, industrial, commercial uses, and open space, as shown in Figure 3.

- **Residential** uses are primarily located east of the Union Pacific rail line. Smaller pockets of residential uses are located near Harrisburg's downtown, primarily located west of S 3rd Street (OR 99E). Multifamily and single-family residential areas comprise approximately 45% of the city.
- **Commercial** uses are concentrated along 3rd Street (OR 99E), which is the primary route for traveling through Harrisburg and a state highway. The combination of this corridor's role as a state route and commercial center creates challenges for accessing commercial services. Specifically, the needs of pedestrians, shoppers, employees, and businesses owners accessing the corridor must be balanced with the needs of people to travel safely through the corridor. Traffic volumes and travel speeds associated with 3rd Street/OR 99E are key concerns of residents and stakeholders.
- **Industrial** uses are located north and south of Harrisburg's downtown. Industrial zoning includes two types of industrial uses: limited industrial and general industrial. Limited industrial accommodates a mix of less intensive uses that aims to avoid negative impacts on neighboring parcels, provide transportation options for people, and facilitate compatibility between dissimilar uses.¹ General industrial accommodates more intensive uses associated with industrial, manufacturing, and processing. The intent of this district is to provide for efficient use of land and public services while also advancing employment opportunities in the city.¹
- **Parks and open space** include Harrisburg Skate Park, located along Smith Street; Riverfront Park, located along the Willamette River; and smaller park spaces in residential areas. The zoning code associated with these areas also applies to schools, government offices, libraries, and similar uses.
- Finally, the **Greenway Special Purpose Overlay Zone**, as shown in Figure 3, represents areas impacted by special requirements established by the Greenway Special Purpose District. This District provides "development controls to protect, conserve, enhance, and maintaining the natural, scenic, historical, agricultural, economic and recreational qualities of land along the Willamette River."²

¹ <https://www.codepublishing.com/OR/Harrisburg/#!/Harrisburg18/Harrisburg1840.html#18.40.020>

² <https://www.codepublishing.com/OR/Harrisburg/#!/Harrisburg18/Harrisburg1855.html#18.55.040>



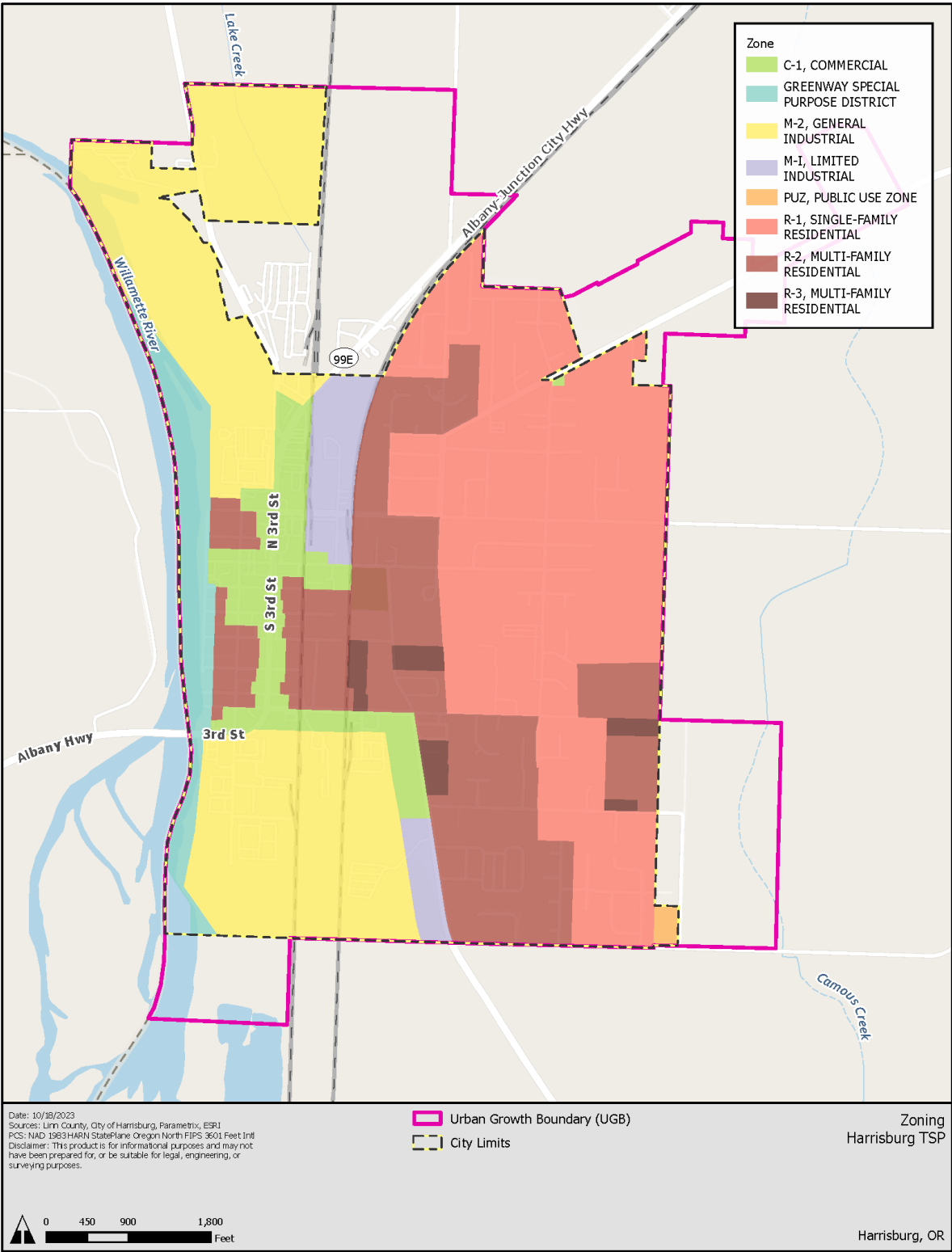


Figure 3. Zoning



At the time of the 2013 Comprehensive Plan, there were 193 buildable acres within Harrisburg city limits; 30% of this land was zoned for industrial uses, while 46% was zoned for residential uses (Figure 4). Since the Comprehensive Plan, Harrisburg has seen an increase in new developments, particularly housing. This development is primarily occurring in the eastern extent of the city, especially in the southeastern areas near Sommerville Loop and northeastern areas near Diamond Hill Drive. Anticipated industrial growth is expected to occur south of OR 99E and south of LaSalle.

City Limits	Tax Lots	Total Acres	Acres Unavailable for Development	Vacant, Buildable Acres	Percent of Buildable Acres
R-1	62	122.0	48.3	73.6	24.6%
R-2	52	41.2	14.7	26.5	8.9%
M-1	8	22.6	4.5	18.1	6.0%
M-2	14	133.7	63.1	70.6	23.6%
GW	3	1.3	0.3	1.1	0.4%
C-1	18	3.4	0.0	3.4	1.1%
Subtotal	157	324.2	130.9	193.3	64.6%
County					
UGA - EFU	3	72.1	2.4	69.6	23.3%
UGA-RR-5	14	43.7	13.9	29.8	10.0%
R-1/UGA-RR-5	1	6.8	0.5	6.3	2.1%
Subtotal	18	122.5	16.8	105.7	35.4%
Total	175	446.7	147.7	299.0	100.0%

Source: City of Harrisburg GIS data; analysis by ECONorthwest

Figure 4. Vacant and Partially Vacant Land by Zoning, Harrisburg UGB, 2012

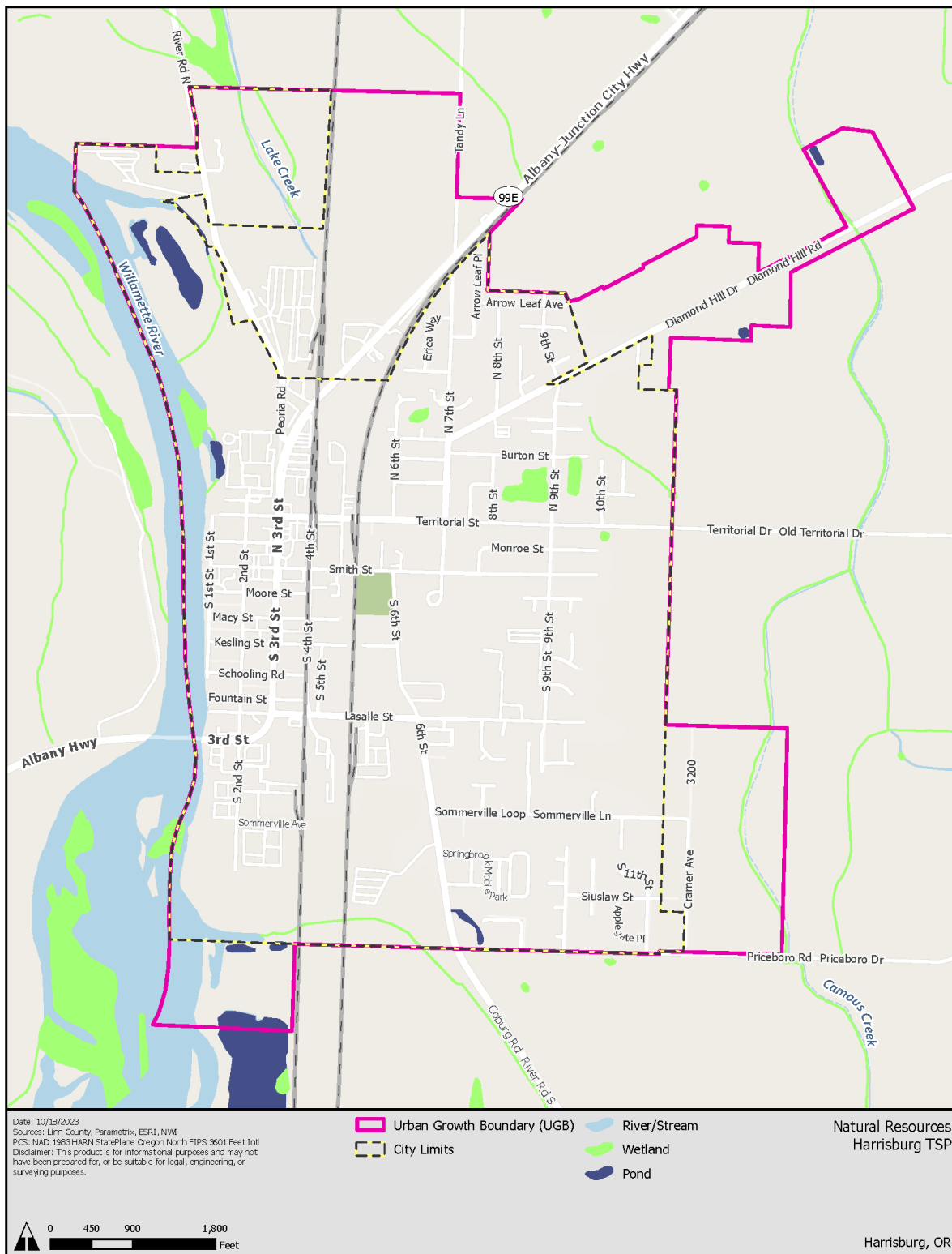
Natural Resources and Environmental Barriers

Natural resources in Harrisburg are an important asset to the city. Located adjacent to the Willamette River, the river not only forms the western boundary of the city but provides an important recreational resource. The area immediately adjacent to the river is designated as the Willamette Greenway overlay zone, as discussed in the zoning section above.

Harrisburg is also relatively flat and has poorly draining soil types across many areas of the city. This results in poor drainage, ponding, and ultimately development restrictions for structures and roadways. This impact is compounded by the city's high ground water, particularly in winter months. Related, several areas throughout the city are designated wetlands.

Figure 5 depicts the natural resources and barriers.





Population

As of 2021, Harrisburg has the population of 3,645 people. Since 2000, the population has grown by approximately 33%, steadily increasing throughout this time. Table 1 compares community characteristics in Harrisburg to Linn County and Oregon. The table is based on 2021 American Community Survey (ACS) data published by the US Census Bureau. Notable demographics information includes the following:

- Ninety percent of the population identified as White alone in Harrisburg, which is higher than both county and state populations.
- A higher proportion of the city's population is low income (54%), which is almost double that of the state at 29%.
- Harrisburg is relatively younger as compared to the state, with 31% of the population under 18 years of age.
- Harrisburg also has a slightly higher percentage of the population who live with a disability (16%) compared to state level.

Table 1. Harrisburg Community Characteristics

	Harrisburg	Linn County	Oregon
Population	3,645	127,200	4,207,177
Race and Ethnicity			
American Indian and Alaska Native alone	<1%	1%	1%
Asian alone	<1%	1%	4%
Black or African American alone	<1%	<1%	2%
Hispanic or Latino alone	1%	10%	14%
Native Hawaiian and Other Pacific Islander alone	0%	<1%	<1%
White alone	90%	84%	74%
Some other race alone	0%	<1%	<1%
Two or more races	9%	4%	5%
Limited English-Proficiency Households	0%	1%	2%
Income Characteristics			
Low Income Population (200% or less of the Federal Poverty Level)	54%	33%	29%
Families Below Federal Poverty Level	6%	7%	8%
Age			
Youth (under 18)	31%	23%	21%
Older adults (65 years+)	9%	18%	18%
Persons with Disabilities	16%	17%	14%
No Vehicle Households	2%	4%	7%

Source: American Community Survey: 5-Year Estimates 2021



Future Population

Harrisburg is a relatively small city; however, the population is forecast to increase significantly by 2050. Table 2 below summarizes the most recent population forecast for City of Harrisburg, Linn County, and the State of Oregon. This data is based on Portland State University’s Population Research Center, who publishes current and forecast population data for all communities in Oregon.

By 2050, the City of Harrisburg is forecast to gain more than 2,000 people, representing a 54.8% increase over the 2020 population. The City is expected to grow quicker than Linn County and the state as a whole. By both 2040 and 2050, Harrisburg is expected to grow three times faster than Linn County and two times faster than the State. The population forecast will increase the number of households on Harrisburg and increase need on the transportation system to accommodate the expected growth.

Table 2. Population Trends and Forecast – 2020 to 2050

	City of Harrisburg	Linn County	Oregon
2020	3,804	254,640	5,955,265
2030	4,339 +14.1%	278,180 +9.2%	6,539,772 +9.8%
2040	5,096 +17.4%	292,260 +5.1%	7,032,504 +7.5%
2050	5,887 +15.5%	305,000 +4.4%	7,484,556 +6.4%

Population Forecasts prepared by: Population Research Center, Portland State University, June 30, 2022.
Note: The percentage increases listed in green indicate the increase from the previous row/time period. For example, in 2030 it is projected there will be 14.1% more residents in Harrisburg than in 2020. Forecasts were unavailable for City of Harrisburg and Linn County for 2010.

Title VI and Environmental Justice Communities

State and federal law through Title VI requires the TSP to consider disadvantaged communities in the planning process, ensuring that benefits are not disproportionately distributed on the basis of race, color, or national origin.³ The TSP must also address Environmental Justice populations, defined by Executive Order 12828 to include low-income and minority populations.⁴

Additionally, other vulnerable populations including people who have disabilities, youth populations, and low-income populations may be disproportionately affected by transportation deficiencies in Harrisburg. Harrisburg’s youth population makes up approximately 31% of the population in Harrisburg, compared to 21% in Oregon. Harrisburg has 16% of people who live with a disability,

³ Title VI of the Civil Rights Act of 1964 states, “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”
⁴ Refers to Presidential Executive Order 12828: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1994) and related applicable laws and regulations. <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>



compared to 14% of people in Oregon. Harrisburg’s low-income population is higher than the state, at 54% compared to 29%. These groups may lack the ability or desire to travel by car. People with disabilities can be negatively affected by incomplete or nonexistent sidewalks, as well as a lack of curb cuts and no transit service. The specific needs of these communities must be considered in the development of future projects and programs.

Employment

Harrisburg’s close proximity to cities like Eugene, Corvallis, and Albany means that many workers live in Harrisburg but travel to nearby communities for employment opportunities. Data available from the US Census Bureau indicates that over 95% of workers living in Harrisburg leave the city for work.⁵ OR 99E provides direct connections to these nearby cities, while Diamond Hill Road provides the most direct connection to I-5 east of the city.

Table 3 summarizes occupations of workers living in Harrisburg in 2021 and 2019. The most common occupations included manufacturing, involving wholesale trade, retail trade, transportation, and warehousing; educational services, health care, and social assistance; and public administration. Notably, employment in manufacturing and trade industries decreased between 2019 and 2021, while several industries have grown. These include transportation and warehousing; construction; information; and educational services, health care, and social assistance. In fact, educational services, health care, and social assistance more than doubled between 2019 and 2021.

Table 3. Occupations in Harrisburg, Oregon (2021)

Occupation	Estimate (2021)	Percentage (2021)	Estimate (2019)	Percentage (2019)
Agriculture, forestry, fishing and hunting, and mining	21	1.4%	38	2.3%
Construction	126	8.6%	103	6.3%
Manufacturing	201	13.7%	310	18.9%
Wholesale trade	82	5.6%	148	9.0%
Retail trade	198	13.5%	334	20.4%
Transportation and warehousing, and utilities	124	8.5%	106	6.5%
Information	74	5.1%	0	0.0%
Finance and insurance, and real estate and rental and leasing	48	3.3%	70	4.3%
Professional, scientific, and management, and administrative and waste management services	107	7.3%	103	6.3%
Educational services, and health care and social assistance	231	15.8%	108	6.6%
Arts, entertainment, and recreation, and accommodation and food services	73	5.0%	78	4.8%
Other services, except public administration	30	2.0%	72	4.4%
Public administration	149	10.2%	166	10.1%

⁵ U.S. Census Bureau. (2023). LEHD Origin-Destination Employment Statistics Data (2002-2020) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on October 13, 2023 at <https://lehd.ces.census.gov/data/#lodes>. LODES 8.0



Occupation	Estimate (2021)	Percentage (2021)	Estimate (2019)	Percentage (2019)
Total	1,464	100%	1,636	100%

Source: American Community Survey 5-Year Estimates, 2021 and 2019
Note: Table is for civilian employed population 16 years of age and older

Transportation System Inventory

The following section describes a comprehensive inventory of Harrisburg’s existing transportation system. This analysis is organized by the major infrastructure components that make up the city’s transportation system: streets, freight, rail, bridges, bicycle, pedestrian, public transportation, and pipeline infrastructure.

Road System

Location, Functional Classification, and Jurisdiction

Harrisburg’s roadway system provides mobility and connections for most transportation modes operating in the city. Harrisburg’s downtown is laid out in a grid pattern, which enhances connectivity and provides alternate routes for travel. However, the rest of Harrisburg’s roadway system does not follow a connected grid pattern and is comprised of shorter street segments that terminate at farms, schools, or residential cul-de-sacs. These terminations limit system-wide connectivity for all modes, resulting in limited paths of travel as well as significant out of direction travel for people walking or bicycling. Despite the connectivity of Harrisburg’s downtown, only two roadways traverse the city unbroken. OR 99E/A 3rd Street travels north-south near the city’s western border, while Territorial Drive traverses the city east-west just north of downtown.

Roadways are organized by functional classifications, which help describe the purpose and scale of each segment (Figure 6).

- **Arterial Roadways** carry the majority of car traffic and connect major destinations, emphasizing motor vehicle throughput. Within Harrisburg, arterials range from 34-45 feet in width and are constructed to handle heavy traffic volumes and loads. The majority of arterials in Harrisburg are under the jurisdiction of ODOT or Linn County.
- **Collector Roadways** provide less vehicle throughput than arterials but provide more access to residences and businesses. Within Harrisburg, collector roadways are similar to arterials in terms of width (ranging from 34-45 feet wide) and construction to accommodate heavier traffic volumes and loads.
- **Local Roadways** connect residences to collectors and typically have lower speeds of travel and lower traffic counts. Local roadways are narrower, ranging from 20 to 42 feet wide. Most local roads in Harrisburg are owned by the City.

The BNSF/PNWR Railroad runs down the centerline of 4th Street between Territorial Street and LaSalle Street. The railroad uses this segment of the street under an agreement with the City of Harrisburg who owns the right-of-way.



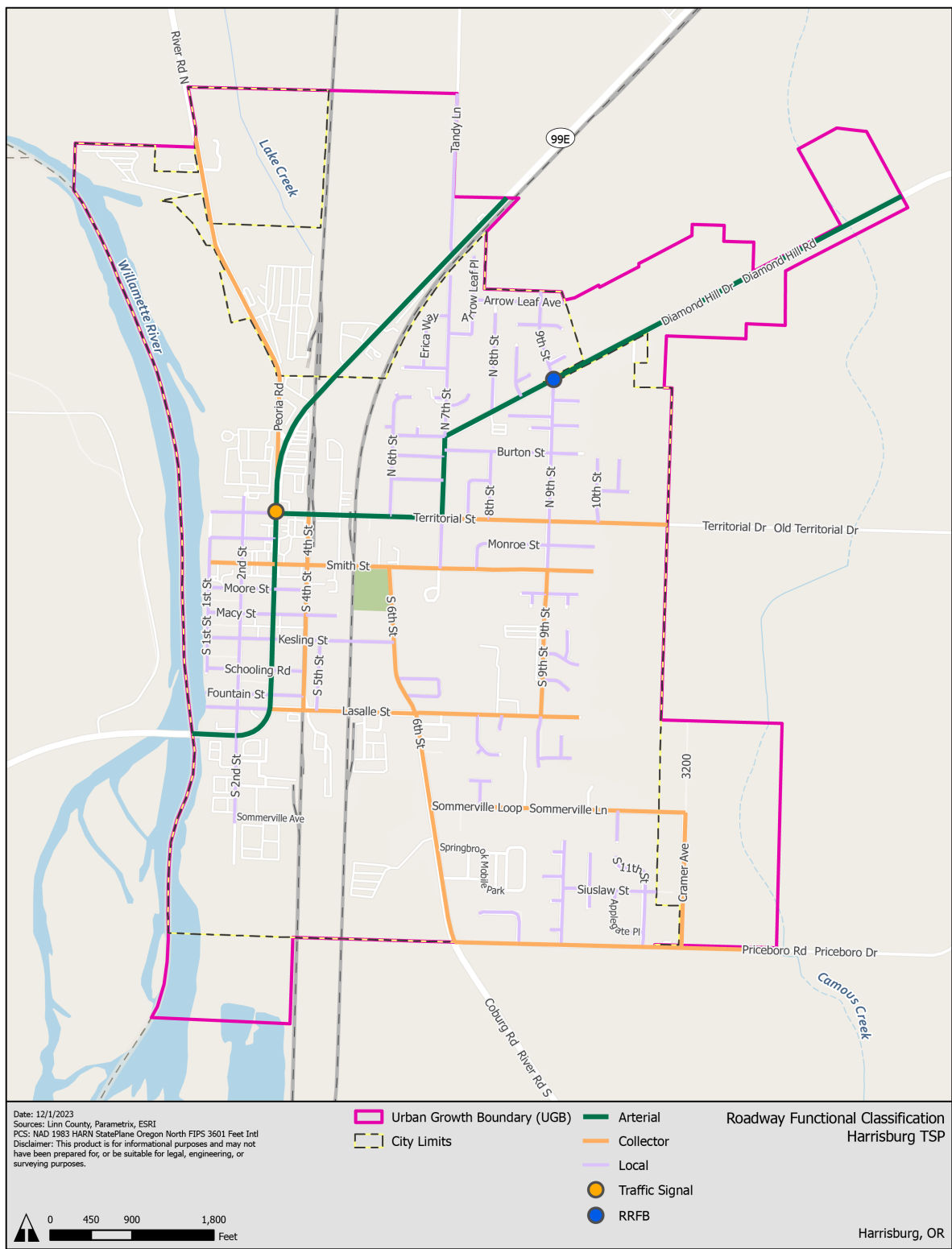


Figure 6. Functional Classification



Within the city, speed limits range between 20 mph and 35 mph, depending on street type and location. OR 99E/S 3rd Street has a speed limit of 30 mph through Harrisburg; however, at the northern and southern extents of the city, this increases to 45 mph or more. Other roadways, including Peoria Road, S 6th Street, and Priceboro Road have increased speed limits as they exit city boundaries. Stakeholders indicated concerns regarding speeding in these locations, noting the potential conflicts this can cause with vehicles turning from connecting roadways and people walking or biking.

Most roadways in the city are owned and maintained by the City. However, OR 99E/S 3rd Street is owned and maintained by ODOT, while roadways in the UGB at the eastern extern of the city are owned by Linn County. Table 4 summarizes the characteristics and owners of roadways that traverse large portions of Harrisburg.

Table 4. Roadway Functional Classification and Ownership

Roadway	Functional Classification	Roadway Owner
OR 99E	Minor Arterial	ODOT
Peoria Road	Major Collector	Linn County
Territorial Street	Minor Arterial	City of Harrisburg
N 7th Street	Minor Arterial/Local Road	City of Harrisburg
Diamond Hill Drive	Minor Arterial	City of Harrisburg
LaSalle Street	Major Collector/Local Road	City of Harrisburg
6th Street	Major Collector/Local Road	City of Harrisburg
Priceboro Road	Minor Collector	City of Harrisburg
9th Street	Local Road	City of Harrisburg
Smith Street	Local Road	City of Harrisburg
4th Street	Transit/Rail Corridor	City of Harrisburg

OR 99E/S 3rd Street is owned by ODOT and is the primary route traveling north-south through Harrisburg. This road connects Harrisburg to nearby cities, including Eugene, Junction City, Albany, and Corvallis. Both city staff and stakeholders have identified concerns regarding this route traveling through the city and needed improvements to facilitate travel through and in Harrisburg, such as improved crossing opportunities and traffic control to help manage congestion and flow through the city.

Surface Type and Pavement Condition

Roadways in Harrisburg are typically paved and include a variety of pavement materials, such as asphalt concrete, bituminous pavement, and thin membrane pavement. The City recently completed a comprehensive inventory of pavement conditions in Harrisburg to not only document current conditions but also identify funding requirements to advance pavement preservation efforts in the city. The Street Assessment Report, revised in July 2023, assigned a Pavement Condition Index (PCI) score to all roadways in the city, resulting in an average condition of C- (or PCI 69). Arterial and neighborhood streets were, on average, in better condition, receiving an average score of about 71. Collector streets, however, have an average PCI of 66. The City’s inventory aims to identify strategies for preserving existing pavement and reducing the need for future reconstruction.



ODOT classifies pavement conditions in five categories: Very Good, Good, Fair, Poor, and Very Poor. Pavement conditions on OR 99E are rates as Good north of Peoria Road and as Fair from Peoria Road south through Harrisburg.

City Standards for Roadway Configuration

Harrisburg Municipal Code identifies the standard width for various street elements based on functional class or street type. Table 5 below outlines these requirements.

Table 5. Harrisburg Roadway Standards

	Arterial	Collector	Neighborhood/ Local	Transit/Rail Corridor	Recreational Street	Alley
Travel or Turn Lanes	12 ft	11 ft	10 ft	14 ft	11 ft	12 ft
Parking	8 ft	8 ft	8 ft	8 ft	8 ft	–
Bike Lanes	6 ft	6 ft	–	–	6 ft	–
Sidewalks	6 ft	6 ft	5 ft, one side of road	5 ft	6 ft	–
Shoulder/Additional Right-of-Way	1 ft	1 ft	1 ft	1 ft	1 ft	2 ft
Minimum Street Width	48 ft	36 ft	29 ft	48 ft	36 ft	12 ft
Right-of-Way	60–72 ft	60 ft	45–50 ft	60–72 ft	60 ft	14 ft

Source: City of Harrisburg Municipal Code, Table 18.85.020.3.
ft = feet

Traffic Control

Most intersections with traffic controls have stop signs. All-way stops are located in a limited number of locations, most often at the intersection of busier roads, such as LaSalle Street and 6th Street. Stop signs that limit traffic in only two directions are more common. Harrisburg has one traffic signal at OR 99E/Territorial Street.

Bridge Locations

There is one bridge within the Harrisburg UGB on Diamond Hill Road over Camous Creek just west of the Forest River factory. This bridge is maintained by Linn County. ODOT owns and maintains the Willamette River Bridge on OR 99E immediately west of the Harrisburg UGB. The Willamette River is critical to travel through Harrisburg and supports both regional travel and freight access. The Willamette River Bridge is a thru-truss structure built in 1925 that is currently rated with a condition of “Fair” and a scour vulnerability rating of “Unstable.”

Bridge Restrictions

No height limits or weight restrictions on bridges constrain freight operations in Harrisburg. However, the Willamette River Bridge on OR 99E provides an ingress and egress point at the west end of Harrisburg, just outside city limits. The Willamette River Bridge does not have any restrictions for freight within legal limit of 8’6” wide and 14’ tall but it does limit the width and height of overside loads that can be accommodated. The Willamette River Bridge is currently restricted to the following weights: 36 tons SU7 (7 axle single-unit trucks); 20,000 lbs. single axle, 34,000 lbs. tandem axle, 105,500 GVW.



As a thru-truss structure, the Willamette River Bridge is supported by a steel structure above and over the roadway. There have been several incidents in the past where trucks have struck the overhead structure of the bridge, leading to bridge closures to assess and repair the damage. The Willamette River Bridge has been identified as a Scour Critical structure, with a Scour Vulnerability rating of Unstable. The Willamette River's unstable bank material around the bridge's foundations could compromise the ability of the bridge to support freight operations if further weakened.

Intermodal Connections and Facilities

There are no intermodal connections present in Harrisburg.

Freight Routes

ODOT has designated OR 99E as an Oregon Highway Plan (OHP) freight route from the northeast edge of the UGB just north of Tandy Lane to just south of Peoria Road. The National Network, a network where Federal width and length limits apply, designates OR 99E as a freight route throughout the entirety of Harrisburg. There are no official local freight routes.

OR 99E is also designated as a Reduction Review Route, which means that any changes to the roadway such as medians, traffic signals, or trees must be reviewed to determine if there will be a reduction in vehicle-carrying capacity. If a reduction in capacity due to these changes is forecast, the proposed changes must obtain additional approvals before being implemented.

Active Transportation Inventory

Pedestrian Network

The existing pedestrian facilities in Harrisburg include sidewalks, curb ramps, and crosswalks. The City owns and maintains 18.3 miles of sidewalks in the city; ODOT owns and maintains sidewalks along both sides of 3rd Street/OR 99E. Where present, sidewalks are commonly located on both sides of the roadway, although some streets include sidewalks only on one side. Sidewalks are more prevalent in more recently developed areas of the city; older areas of the city, including those adjacent to 3rd Street/OR 99E typically do not have sidewalks. More than 14 miles of roadway (approximately 58%) in the city do not have separated walking facilities on either side of the road. Figure 7 displays the existing pedestrian network for arterial and collector roadways.

Streets that provide key connections for pedestrians and cyclists should provide appropriate dedicated facilities for those uses. The key corridors that do not have any dedicated walking facilities include:

- S 2nd Street, from Fountain Street to Macy Street and Hwy 99 to LaSalle Street – S 2nd Street is the primary north-south route west of OR 99E and links residential areas and commercial uses.
- S 4th Street, from LaSalle Street to Kesling Street – This route provides a continuous north-south corridor east of OR 99E. In addition to missing sidewalks, this route also includes a railway.
- N 9th Street, from Territorial Street to Diamond Hill Road – N 9th Street is a critical route connecting residential areas in northern areas of the city to Harrisburg High School.



- Sommerville Loop, from 1050 Sommerville Loop to S 6th Street – Sommerville Loop is a critical connection for residential developments located in the southeastern area of the city. Sommerville Loop is a narrow corridor with limited shoulders.



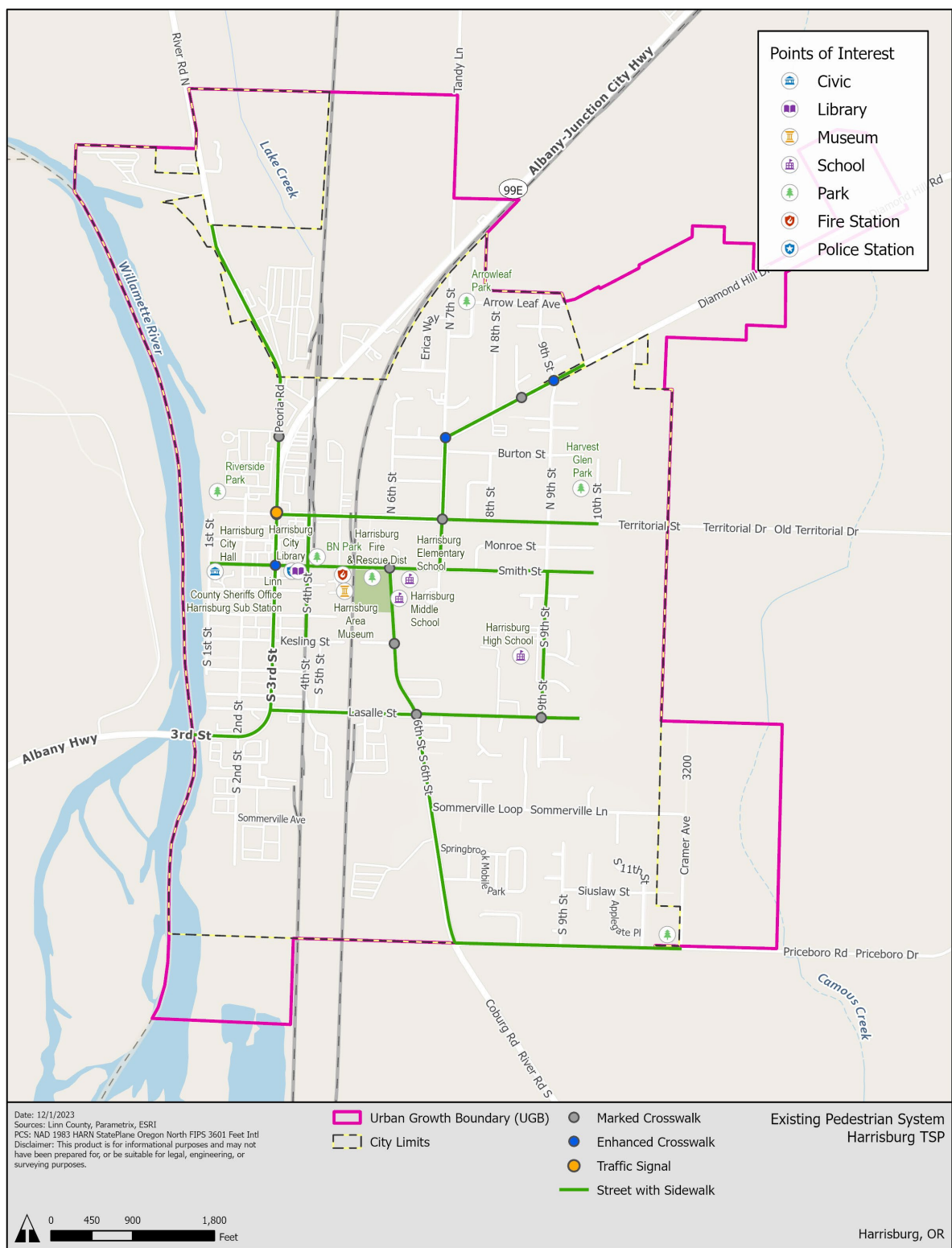


Figure 7. Existing Pedestrian System along Arterial and Collector Roadways



Locations and Characteristics of Enhanced Crosswalks

Marked crosswalks are located throughout Harrisburg. Typically, crosswalk markings are traditional transverse crossings and are worn in many locations. However, several locations have enhanced crosswalks that feature high-visibility ladder pavement markings. These markings are associated with increased visibility and improved safety benefits. Some enhanced crossings can also have a pedestrian activated Rectangular Rapid Flashing Beacon (RRFB) to alert drivers that a pedestrian is trying to cross the street. RRFBs results in higher rates of drivers yielding to pedestrians. Locations for these crosswalks include:

- S 3rd Street/OR 99E at Smith Street, across the southern leg of the intersection. The City has requested that an RRFB is installed at this location to further support pedestrian crossings.
- Diamond Hill Road at 7th Street, across the eastern leg of the intersection.
- Diamond Hill Road at 9th Street, across both the eastern and western legs of the intersection; this intersection includes an RRFB to support crossing of Diamond Hill Road along the western leg of the intersection.

Additionally, the intersection of 2nd Street and Smith Street includes curb extensions to shorten pedestrian crossing distances; however, crosswalks are not marked in this location. The City should consider upgrading all crosswalk markings to high-visibility markings, especially for crossings near schools, to improve visibility and safety in the city.

New crossing opportunities along OR 99E/S 3rd Street should be explored. No marked or enhanced crosswalks are present south of Smith Street, limiting safe crossing opportunities between Smith Street and 2nd Street.

Pedestrian Facility Consistency

Sidewalks standards identify required width between 5 and 6 feet, based on the type of street (see Table 5). While comprehensive data about sidewalk width and condition is not available, review of aerial imagery shows that where present, sidewalks typically measure at least 5 feet wide in most locations. Further, while curb ramps are present in many locations, most lack detectable warning surfaces. Recent improvements, including the addition of curb extensions at S 2nd Street and Smith Street and the enhanced crossing at Diamond Hill Drive and N 9th Street, have updated the existing curb ramps to include detectable surfaces.

Bicycle Network

Bicycle facilities in Harrisburg include bicycle lanes, shared roadways, and wide shoulders OR 99E features short segments of wide shoulder south of LaSalle Street and north of Peoria Road. Wide shoulders vary between 5 and 8 feet in width. 3rd Street does not have a bike lane through Harrisburg.

The City owns and maintains bike lanes along approximately 9.5 miles of roadways in the city (Figure 8). This includes:

- S 6th Street between Smith Street and Priceboro Drive,
- Priceboro Drive between S 5th Street and city limits,
- Diamond Hill Road between N 7th Street and city limits and
- LaSalle Street between S 6th Street and S 5th Street.



Bike lanes along S 6th Street connect Harrisburg Skate Park and the Elementary and Middle Schools to residential areas south of Smith Street. The facilities along S 6th Street also connect to bike lanes along Priceboro. While these routes provide dedicated space for travel, they typically are not connected, requiring people bicycling to maneuver between dedicated bike lanes and shared traffic conditions.



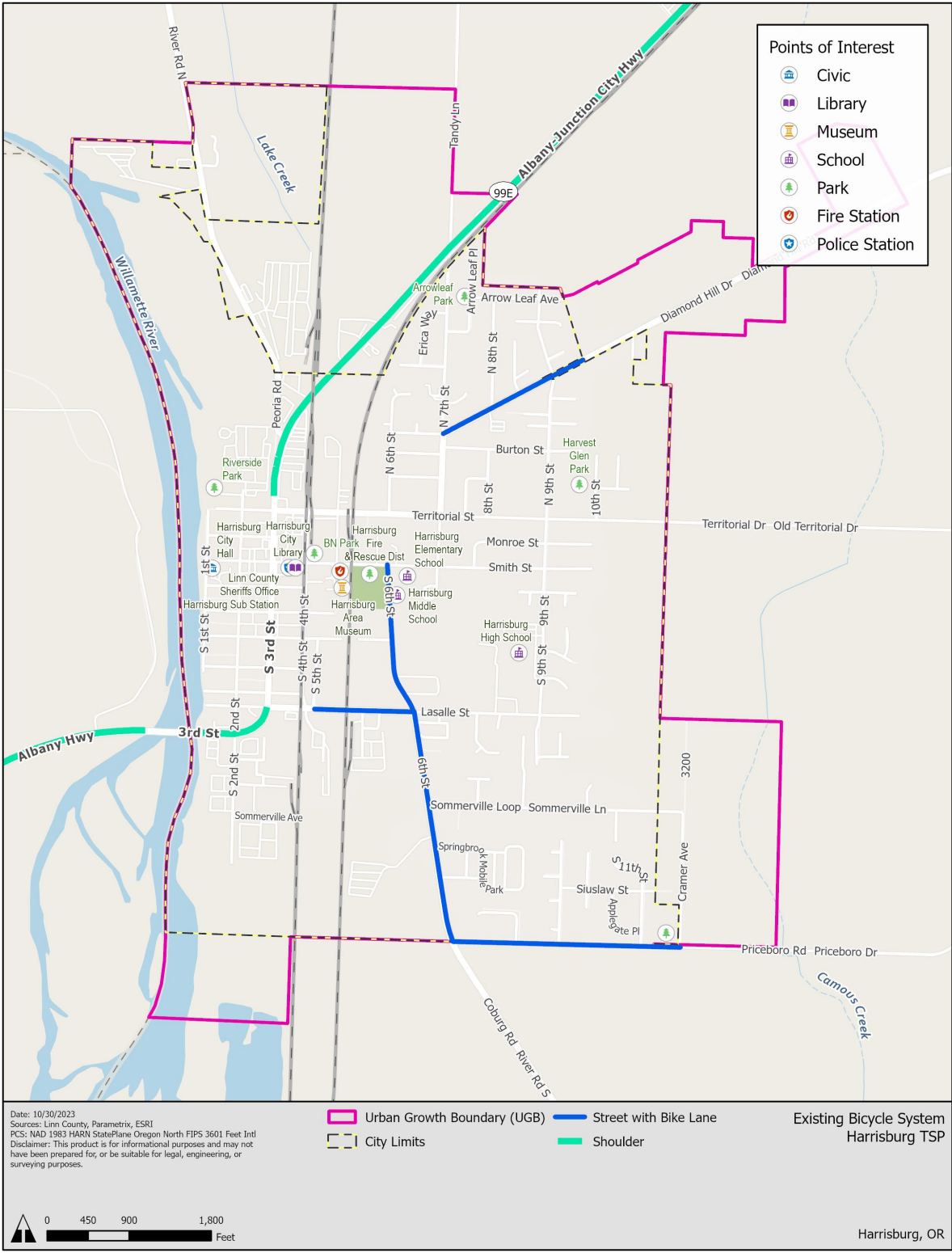


Figure 8. Existing Bicycle System



Bicycle Facility Consistency

City standards identify 6 feet as the required width for bike lanes. While comprehensive data regarding bike lanes is not available, review of aerial imagery shows that where present, bike lanes generally meet this standard.

Based on the Oregon statutory requirements, bicycle facilities need to be provided wherever a highway, road, or street is being constructed, reconstructed, or relocated. Based on the ODOT *Highway Design Manual*, space must be provided along S 3rd Street/OR 99E, or a parallel route must be selected as an alternative when reconstruction of S 3rd Street is required.

Blueprint for Urban Design

This section follows the guidance of the Highway Design Manual (ODOT 2023; and the Blueprint for Urban Design, which has been incorporated into the Highway Design Manual) to identify the appropriate urban context for OR 99E/S 3rd Street, the only state-owned highway in Harrisburg. The evaluation, which builds on the ODOT Urban Context Matrix (Table 200-4 in the HDM), considers existing land use characteristics, zoning, and expected future development. The urban context is important because it helps define where various land use elements should be present, and at what scale. Table 6 describes the preliminary urban context for segments of OR 99E/S 3rd Street through Harrisburg; it should be noted that these contexts are subject to change based on consultation with the community and ODOT:

Table 6. Urban Context of OR 99E/S 3rd Street in Harrisburg

Street Boundaries	Urban Context	Land Use Elements
<ul style="list-style-type: none">Kesling Street to south City Limits	Residential Corridor	<ul style="list-style-type: none">Residential land useVaried parking locationSmall to medium block size, well-definedShallow setbacksMedium building coverage
<ul style="list-style-type: none">North City Limits to Kesling Street	Commercial Corridor	<ul style="list-style-type: none">Medium-to-large setbacks.Low building coverage.Off-street/in front parking.Large blocks.Commercial, industrial, institutional land uses.

Bicycle facilities, sidewalk facilities, and pedestrian crossing frequencies on most sections of OR 99E/S 3rd Street do not meet Blueprint for Urban Design guidelines. Some intersections along this route present difficult connections for travelers due to a lack of crosswalks, including between Smith Street and 2nd Street, which covers more than one-third mile of OR 99E through the city. While sidewalks are present along most of the corridor, they are typically curb-tight and limited in width. Further, bike facilities are not present along OR 99E/S 3rd Street through Harrisburg; wide shoulders located along the northernmost extent do not match the target for a separated bikeway. These findings are highlighted in Table 7. As OR 99E/S 3rd Street is a Reduction Review Route, additional evaluation may be required depending on proposed solutions.



Table 7. Blueprint for Urban Design Standards – OR 99E/S 3rd Street

Street Boundaries	Urban Context	BUD Crossing Spacing Target	BUD Pedestrian Facility Target	BUD Bicycle Facility Target
Kesling Street to south City Limits	Residential Corridor	<ul style="list-style-type: none"> 500–1,000 feet Does not meet target 	<ul style="list-style-type: none"> Continuous and buffered sidewalks Does not meet target 	<ul style="list-style-type: none"> Start with separated bicycle facility, consider roadway characteristics. Does not meeting target.
North City Limit to Kesling Street	Commercial Corridor	<ul style="list-style-type: none"> 500–1,000 feet Crossing spacing between Territorial and Smith meets target; remaining corridor does not meet target. 	<ul style="list-style-type: none"> Continuous and buffered sidewalks, with space for transit stations Does not meet target 	<ul style="list-style-type: none"> Start with separated bicycle facility, consider roadway characteristics. Does not meet target.

Public Transportation

The city currently does not have transit service, but there is interest in providing access to public transportation. The closest transit stop is in Junction City, which is 4.7 miles southwest of Harrisburg. The transit service provider is Lane Transit District (LTD) that serves route 95 from Eugene to Junction City. A transit connection between Harrisburg and Junction City could provide access to the LTD system that serves the Eugene and Springfield metropolitan areas and neighboring cities. Link Lane is the public transit agency that provides public transportation for Lane County outside of the LTD service area. Link Lane does not provide transit service between Harrisburg and Junction City.

The Linn-Benton Loop provides fixed-route service between Albany and Corvallis. The closest stop to Harrisburg for this service is 19.8 miles north in Tangent. A connection to the Linn-Benton Loop would provide access to the transit systems in Albany and Corvallis.

The city is part of the Oregon Cascades West Council of Governments. There are paratransit services offered to residents meeting eligibility requirements. The services include Cascades West Ride Line, Cascades West Rideshare, Valley VanPool, and Drive Less Connect.

Railroads

Two existing mainline railways are located in Harrisburg: the Union Pacific (UP) and Burlington Northern Santa Fe/Portland & Western (BNSF/PNWR). PNWR operates both railways. The UP owns the right-of-way for its railway while the BNSF Railway owns the right-of-way of the BNSF/PNWR railway. A portion of the BNSF/PNWR railway operates in the center of 4th Street between Territorial Street and LaSalle Street under an agreement with the City of Harrisburg which owns the right-of-way.

The primary purpose of both railways is freight. The UP railway is also used by Amtrak for its Cascades and Coast Starlight service. There is no Amtrak stop in Harrisburg. Approximately 20 trains travel through Harrisburg each day.⁶

⁶ Federal Railroad Administration. Crossing Inventory & Accidents.

<https://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx>. Accessed December 28, 2023.



Railways in Harrisburg follow a parallel north-south route, with the BNSF/PNWR aligned with 4th Street and the UP located between 5th and 6th Street. There are 12 pedestrian at-grade rail crossings in Harrisburg. These crossings are signed, but most are ungated and lack a crossing warning signal. In addition, a portion of the BNSF/PNWR operates in the middle of 4th Street with no separation from the roadway pavement. The railways passing through residential streets and the rail crossings are a barrier for safe and comfortable travel.

Pipelines

There is a regional natural gas pipeline running through Harrisburg. From north to south this pipeline generally runs along OR 99E, the Burlington Northern Santa Fe/Portland & Western Railroad, and the Union Pacific Railroad. Natural gas service in Harrisburg is available through NW Natural.



Safety Conditions

Citywide Safety Summary

Roadway safety trends were evaluated using ODOT crash data for the most recent 5-year period (2017 to 2021). During this time, 57 crashes occurred involving people driving, walking, and cycling within Harrisburg. Of these crashes, none resulted in a fatality; however, four resulted in serious injury. Over half of all crashes (53%) resulted in property damage only. Two crashes (4%) involved pedestrians; no crashes involved people bicycling. Figure 9 displays a map of crash locations.

Crashes most frequently occurred on OR 99E, with nearly 50% of all crashes occurring on this corridor. Table 8 below summarizes crash characteristics.

Table 8. Crash Summary

Category	Factor	Number	Percentage of Total Crashes
Crash Severity	Property Damage Only	30	53%
	Possible Injury	17	30%
	Suspected Minor Injury	6	10%
	Suspected Serious Injury	4	7%
	Fatality	0	0%
Modes Involved	Driver Only	55	96%
	Pedestrian Involved	2	4%
	Cyclist Involved	0	0%
Crash Location	Intersection	23	40%
	Straight Roadway	24	42%
	Driveway or Alley	7	12%
	Curve (Horizontal Curve)	2	4%
	Grade (Vertical Curve)	0	0%
	Unknown	1	2%
Contributing Factor	Failure to Yield	11	19%
	Other	9	16%
	Inattention	9	16%
	Failed to Avoid Vehicle Ahead	6	10%
	Improper Overtaking	5	8%
	Ill/Asleep/Drowsy	4	7%
	Reckless Driving	3	5%
	Improper Turn	2	3%
	Speed-related	2	3%
	Followed too Closely	2	3%
	View Obscured	2	3%
	Speed-related	2	3%



Category	Factor	Number	Percentage of Total Crashes
	Aggressive Driving	1	2%
	Careless Driving	1	2%



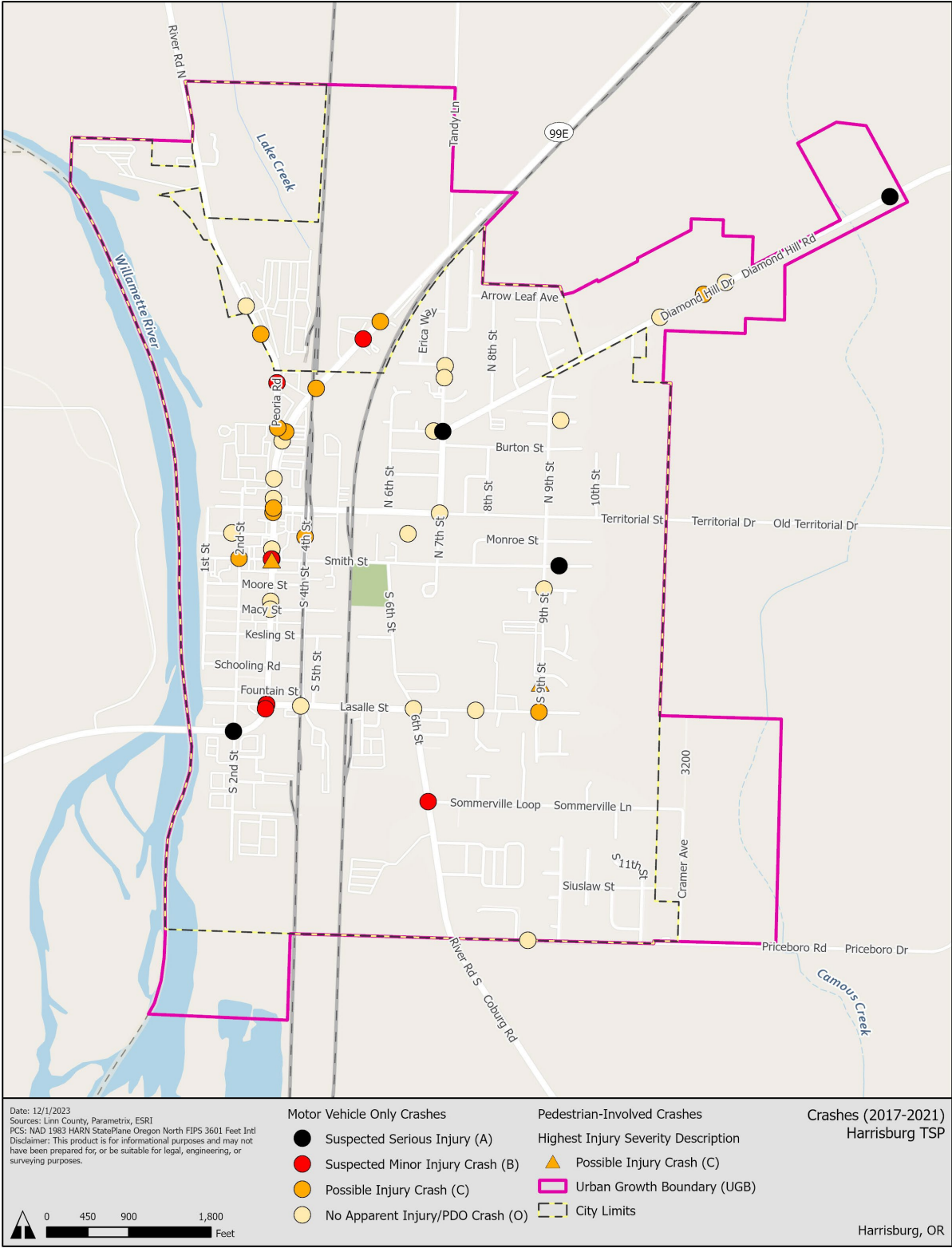


Figure 9. Harrisburg Crashes (2017–2021)



Two crashes involved a pedestrian. Both crashes were identified as Possible Injury Crashes. One of the crashes was located on Smith Street at OR 99E. This intersection features a stop sign for vehicles traveling along Smith Street; the crash report identifies a failure to yield as the crash cause. The second pedestrian-involved crash occurred on 9th Street south of Heather Turn in evening during winter months. Limited information is available about this crash; however, the crash report identifies “Other Improper Driving” as the crash cause.

Crashes occurred at both intersections and along roadway segments with similar frequency. For intersection crashes, rear-end was the most common crash type (34% of intersection crashes). Turning movement was the second most common (26%). For straight roadway locations, rear-end was again the most common type (45% of straight roadway crashes). Common contributing factors for all crashes included failure to yield (19%), inattention (16%), and failed to avoid vehicle ahead (11%).

Intersection Crash Analysis

A total of 11 intersections from the City of Harrisburg were analyzed. Sixteen-hour turning movement volume data was collected for 6 of the intersections, and 8-hour data was collected for other 5 intersections. ADT was estimated based on the collected turning movement volumes by using peak season factor and adjustment factors derived from the ratio of AADT to 16-hour counts and ratio of AADT to 8-hour counts from the Oregon DOT MS2 portal for the nearby roadways. The peak season factor of 1.1 was used for this study. 16-hour and 8-hour counts represent approximately 90% and 60% of the AADT, respectively.

Crash history data from 2017 through 2021 was used to determine intersection crash rates. A total of 36 crashes occurred at the 11 intersections analyzed, 3 intersections did not have any crashes. The remaining 8 intersections were analyzed for crash rate, critical rate, and excess proportion of specific crash types. Out of the 36 intersection crashes, 17 of the crashes resulted in injuries, and 19 were property-damage-only crashes.

The reference populations 4SG and 3ST do not have a sample size of at least five samples, so critical crash rates could not be calculated. Instead, the 90th percentile crash rate for the reference population was used for comparison. For reference population 4ST, the critical crash rate was calculated as it has more than 5 samples.

Table 9 shows the summary of the intersection crash rate calculation. None of the intersections have crash rates over the critical rate (or 90th percentile crash rate). Excess proportion by specific crash type for these eight intersections were also analyzed, Table 10 shows the number crashes as well as the observed proportion in parenthesis by types for the eight intersections. It shows that none of the intersections have an excess proportion with probability greater than 0.90. Therefore, none of the intersections were flagged either by the critical rate or the excess proportion.



Table 9. Crash Rate Calculation for Intersections

Intersection	AADT Entering Intersection	5-year MEV	Crash Total	Intersection Population Type	Intersection Crash Rate	Reference Population Crash Rate	Critical Rate	90th Percentile Crash Rate	Over Critical or over 90th Percentile
9th Street & LaSalle Street	1,150	2.1	2	Rural 4ST	0.95	0.33	1.22		Under
9th Street & Smith Street	1,190	2.2	2	Rural 4ST	0.92	0.33	1.20		Under
OR 99E & LaSalle Street	14,476	26.4	10	Rural 4ST	0.38	0.33	0.53		Under
OR 99E & Territorial Street	12,077	22.0	7	Rural 4SG	0.32	APM Exhibit 4-1		0.58	Under
OR 99E & Peoria Road	8,174	14.9	5	Rural 3ST	0.34	APM Exhibit 4-1		0.48	Under
OR 99E & Smith Street	12,656	23.1	5	Rural 4ST	0.22	0.33	0.55		Under
Territorial Street & 7th Street	4,371	8.0	4	Rural 4ST	0.50	0.33	0.72		Under
LaSalle Street & 6th Street	6,216	11.3	1	Rural 4ST	0.09	0.33	0.65		Under

Reference Population Crash Rate - APM Exhibit 4-1

Red bold text indicates intersections that have a crash rate over the critical crash rate or the 90th percentile crash rate. These intersections are identified as safety focus locations.

Traffic control types: 3SG = three-leg signalized; 3ST = three-leg minor stop-control; 4SG = four-leg signalized; 4ST = four-leg minor stop control

AADT = annual average daily traffic; MEV = millions of entering vehicles

Table 10. Excess Proportion Calculation for Intersections

Intersection	Angle	Back into	Fixed Object	Non-Collision	Other	Pedestrian	Sideswipe	Turning	Rear-end
9th Street & LaSalle Street						1 (0)			1
9th Street & Smith Street							1 (0)		1
OR 99E & LaSalle Street	2 (0.20)		1 (0)		1 (0)			5 (0.50)	1
OR 99E & Territorial Street			1 (0)				2 (0.29)		4 (0.57)
OR 99E & Peoria Road			2 (0.40)				1 (0)		2 (0.40)
OR 99E & Smith Street	1 (0)			1 (0)		1 (0)		1 (0)	1
Territorial Street & 7th Street		1 (0)					2 (0.50)	1 (0)	
LaSalle Street & 6th Street									1



While none of the intersections exceed the critical crash rate, it is important to consider both where crash frequency and crash severity are greatest. Nearly 50% of all crashes in Harrisburg occurred in the OR 99E/S 3rd Street corridor, including 15 intersection crashes and 3 crashes associated with an alley or driveway. Of these 18 crashes, two-thirds resulted in an injury, including one suspected serious injury crash and three suspected minor injury crashes. Table 11 describes the crash types associated with these locations.

Table 10. OR 99 E Intersection Crashes

Crash Type	Number
Turning Movement	9
Rear-End	4
Pedestrian	1
Angle	2
Fixed Object	1
Non Collision (Overturned)	1

The intersection of both LaSalle Street and Peoria Road had the highest frequency of crashes along OR 99E/S 3rd Street. Six crashes occurred at LaSalle Street, including one suspected minor injury crash. Four crashes occurred at Peoria Road, including two possible injury crashes. The suspected serious injury crash occurred at the intersection with 2nd Street, where a vehicle overturned. The only pedestrian-involved crash along this corridor occurred at Smith Street, which features an enhanced crosswalk and is a designated school crossing.

Beyond the OR 99E/S 3rd Street corridor, a suspected serious injury crash occurred at the intersection of Diamond Hill Rd and 7th Street. A total of 7 suspected minor or suspected serious injury crashes occurred on roadways other than OR 99E/S 3rd Street.

Segment Crash Analysis

Crashes that did not occur at an intersection were analyzed as segment crashes. The same crash history data from 2017 through 2021 was used to analyze segment crashes. There is only one state highway in the city of Harrisburg: OR 99E. Therefore, only this state highway was considered for segment crash analysis. A total of four crashes occurred on this segment.

As the sample size for reference population (i.e., Minor Arterial) was less than five, the critical rate could not be calculated. Instead, the crash rate was compared with the statewide crash rate for that specific highway classification.

Table 11 shows the comparison of crash rates for this segment with the statewide crash rate. This comparison shows the crash rate for OR 99E does not exceed the statewide crash rate.

Table 11. Crash Rate Calculation for Segments

Segment	No. of Crashes	AADT	Length (miles)	Crash Rate	Highway Classification	Statewide Crash Rate	Exceeding Statewide Crash Rate
OR 99E	4	9,656	0.90	0.252	Minor Arterial	1.23	No



However, it should be noted that if all crashes that occurred along OR 99E, including those at or near intersection, were considered in this analysis, the 28 total crashes would result in a rate of 1.76, which is higher than the statewide crash rate. With nearly 50% of all crashes occurring along this corridor, it should be further reviewed for systemic safety treatments. In addition to the intersection crash types described above, solutions along this corridor should consider opportunities to integrate proven countermeasures to reduce crash frequency and severity along both segments and at intersections.

Existing and Future Transportation System Conditions and Deficiencies

Traffic Analysis

Study Intersections

Study intersections provide a targeted look at traffic and safety performance throughout Harrisburg. Eleven intersections were studied across Harrisburg. Table 11 summarizes characteristics of all study intersections.

Table 12. Travel Lanes and Lane Widths at Study Intersections

Study Intersection	Intersection	Travel Lanes	Lane Widths	Turn Lanes
1	9th Street & LaSalle Street	9th: 2 LaSalle: 2	9th: 16 feet LaSalle: 16.5 feet	None
2	9th Street & Smith Street	9th: 2 Smith: 2	9th: 17.5 feet Smith: 16.5 feet	None
3	9th Street & Territorial Street	9th: 2 Territorial: 2	9th: 17 feet Territorial: 17 feet	None
4	9th Street & Diamond Hill Road	9th: 2 Diamond Hill: 2	9th: 16 feet Diamond Hill: 10 feet	Diamond Hill: 1 center turn lane
5	6th Street & Priceboro Drive	6th: 2 Priceboro: 2	6th: 11 feet Priceboro: 11 feet	6th: 1 EB Priceboro: 1 NB, 1 SB

Continued Table 11. Travel Lanes and Lane Widths at Study Intersections

Study Intersection	Intersection	Travel Lanes	Lane Widths	Turn Lanes
6	OR 99E & LaSalle Street	OR 99E: 3 LaSalle: 2	OR 99E: 11 feet LaSalle: 10 feet	OR 99E: 1 center turn lane LaSalle: 1 NB, 1 SB
7	OR 99E & Territorial Street	OR 99E: 2 Territorial: 2	OR 99E: 11 feet Territorial: 11 feet	OR 99E: 1 WB Territorial: 1 NB, 1 SB
8	OR 99E & Peoria Road	OR 99E: 2 Peoria: 3	OR 99E: 10 feet Peoria: 12 feet	OR 99E: 1 NB Peoria: 1 EB, 1 SB



Study Intersection	Intersection	Travel Lanes	Lane Widths	Turn Lanes
6	OR 99E & LaSalle Street	OR 99E: 3 LaSalle: 2	OR 99E: 11 feet LaSalle: 10 feet	OR 99E: 1 center turn lane LaSalle: 1 NB, 1 SB
9	OR 99E & Smith Street	OR 99E: 2 Smith: 2	OR 99E: 12 feet Smith: 12 feet	OR 99E: 1 center turn lane
10	Territorial Street & 7th Street	Territorial: 2 7th: 2	Territorial: 21 feet 7th: 17 feet	None
11	LaSalle Street & 6th Street	LaSalle: 2 6th: 2	LaSalle: 10.5–14 feet 6th: 10.5 feet	LaSalle: 1 NB, 1 SB 6th: 1 WB, 1 EB

EB = eastbound; NB = northbound; SB = southbound; WB = westbound

Traffic Volumes

Average annual daily traffic (AADT) for 2021 and 2022 was available at seven locations within the study area. The largest AADT of 10,390 was recorded along OR 99E at the south City limits.

Existing conditions traffic operations were analyzed for the study intersections using 2022 30th highest annual hour of traffic (30 HV) conditions. 16-hour traffic counts were collected at six study intersections, mostly along OR 99E, and 4-hour traffic counts were collected during the AM and PM peak periods at the remaining five study intersections. These counts were collected on a weekday in mid-October and included both vehicle and pedestrian volumes. The full traffic counts are provided in *Appendix A: Traffic Counts*.

Because the traffic counts may have been collected during a period where traffic volumes are lower than the 30 HV conditions, a seasonal adjustment factor was calculated as outlined in the ODOT Analysis Procedures Manual (APM).⁷ Since there are no Automatic Traffic Recorders (ATRs) within or near the study area, the on-site ATR method for seasonal adjustment is not possible for this analysis. Instead, the ATR characteristic table was used to find ATRs similar to OR 99E: ATR #02-007 in Monroe and ATR #22-012 in Halsey. The percentages of weekday ADT for the count months and peak months between 2017 and 2021 were used to calculate a seasonal adjustment factor of 1.10 that was applied to the October 2022 counts when developing the 2022 30 HV intersection volumes.

An overall system peak hour of 4:30pm to 5:30pm was determined from the maximum hourly total intersection volumes. Additional information regarding analysis procedures is documented in the Transportation Analysis Methodology and Assumptions Memorandum. The Year 2022 Existing Conditions peak hour intersection volumes for the 11 study intersections are shown in Figure 10.

Future traffic forecasts for the horizon year 2045 were developed using a linear growth factor for all movements. This growth factor was calculated using 2021 and 2041 volumes provided in the ODOT Future Highway Volume Table. Based on the volumes along OR 99E at the Halsey ATR #22-012 at MP 21.64, the average annual growth rate for the study area is +0.70%. An overall growth rate of +16.1%, or +0.70% over 23 years, were applied to all 2022 30 HV intersection volumes to develop the 2045 intersection volumes. The Year 2045 Future No Build peak hour intersection volumes for the 11 study intersections are shown in Figure 11.

⁷ Analysis Procedures Manual Version 2, Oregon Department of Transportation, March 2016.



Roadway Traffic Operations

Cities and agencies establish minimum performance standards for the transportation system to help guide planning efforts, project development, and review of development. These standards are often a reflection of the amount of delay or congestion experienced by a motorist at intersections. This performance measure is used to define whether or not a location is performing adequately or will require improvements.

State highway mobility targets were developed for the 1999 Oregon Highway Plan (OHP)⁸ as a method to gauge reasonable and consistent targets for traffic flow along state highways. The ODOT v/c targets are based on highway classification and posted speeds and were used for intersections under ODOT's jurisdiction. For unsignalized intersections, non-state highway approaches are expected to meet the v/c ratios for district/local interest roads. For signalized intersections where the v/c ratios differ by legs of the intersection, the more restrictive v/c ratio applies. OR 99E is a regional highway with a posted speed limit of 30mph between LaSalle Street and just south of Peoria Road and 45mph at and north of Peoria Road. For both legs of the Smith Street intersection and the south leg of the Territorial Street intersection, OR 99E is classified as a Special Transportation Area (STA). OR 99E is a reduction review route and is a freight route north of Territorial Street.

Level of service (LOS) is another metric that describes how well an intersection operates. Intersections receive a LOS grade from "A" to "F", where LOS "A" represents the best conditions with minimal delay at the intersection and LOS "F" represents the worst conditions. As part of the 1999 City of Harrisburg TSP, the City identified standards for level of service, which were used for study intersections under the City's jurisdiction. Adopted mobility targets (V/C or LOS) for the study intersections are shown in Table 12.

Traffic operations for the 14 study intersections were analyzed using Synchro. V/C ratios, delay, and LOS were reported using Highway Capacity Manual, 6th Edition, reports for all intersection types: all-way stop control (AWSC), two-way stop control (TWSC), and signalized. For the unsignalized intersections, V/C ratios and delay were reported for the worst movement along the major and minor street approaches. V/C ratios for the mainlines at two-way stop-controlled intersections were calculated based on ODOT APM guidelines.⁹ For signalized intersections, the reported V/C ratios and delays represent the overall intersection operations and are not distinguished for the major and minor streets. The critical intersection v/c ratios were calculated based on ODOT APM guidelines for signalized intersections.

V/C ratios, delay, and LOS for the Year 2022 Existing Conditions and Year 2045 Future No Build are summarized in Table 12. Only one intersection is expected to operate with a V/C ratio that exceeds mobility target: OR 99E & LaSalle Street (Intersection #6) with a V/C ratio of 1.24 in Year 2022 Existing Conditions and a V/C ratio of 1.55 in Year 2045 Future No Build. Traffic reports are available in *Appendix B: Synchro and SimTraffic Reports*.

⁸ 1999 Oregon Highway Plan including amendments November 1999 through January 2023, Oregon Department of Transportation, January 2023.

⁹ Analysis Procedures Manual Version 2, Oregon Department of Transportation, March 2016.







Table 13. Peak Hour Traffic Operations - V/C Ratio, Delay, and LOS

#	Intersection	Control*	Existing and No Build Mobility Target	Year 2022 Existing Conditions							Year 2045 Future No Build Conditions						
				Major Street			Minor Street				Major Street			Minor Street			
				V/C ratio	Delay (s)	LOS	V/C ratio	Delay (s)	LOS	Exceeds Mobility Target?	V/C ratio	Delay (s)	LOS	V/C ratio	Delay (s)	LOS	Exceeds Mobility Target?
1	9th Street & LaSalle Street	AWSC	LOS D or better	0.05	7.1	A	0.07	7.5	A	No	0.06	7.1	A	0.08	7.5	A	No
2	9th Street & Smith Street	TWSC	LOS D or better	0.03	7.3	A	0.03	9.4	A	No	0.03	7.4	A	0.03	9.5	A	No
3	9th Street & Territorial Street	AWSC	LOS D or better	0.05	7.4	A	0.09	7.5	A	No	0.05	7.5	A	0.11	7.7	A	No
4	9th Street & Diamond Hill Road	TWSC	LOS D or better	0.02	7.5	A	0.05	10.3	B	No	0.02	7.5	A	0.05	10.9	B	No
5	6th Street & Priceboro Drive	TWSC	LOS D or better	0.08	7.8	A	0.12	15.8	C	No	0.09	8.0	A	0.14	17.3	C	No
6	OR 99E & LaSalle Street	TWSC	Major street: V/C < 0.90 Minor Street: V/C < 0.95	0.06	9.4	A	1.24	>200	F	Yes	0.07	9.7	A	1.55	>300	F	Yes
7	OR 99E & Territorial Street	Signal	V/C < 0.90	0.65	14.2	B	-	-	-	No	0.85	18.2	B	-	-	-	No
8	OR 99E & Peoria Road	TWSC	Major street: V/C < 0.85 Minor Street: V/C < 0.90	0.11	8.3	A	0.24	17.4	C	No	0.13	8.5	A	0.29	20.3	C	No
9	OR 99E & Smith Street	TWSC	Major street: V/C < 1.0 Minor Street: V/C < 1.0	0.03	8.7	A	0.33	30.6	D	No	0.03	9.0	A	0.54	52.3	F	No
10	Territorial Street & 7th Street	AWSC	LOS D or better	0.17	8.0	A	0.25	9.1	A	No	0.19	8.3	A	0.29	9.5	A	No
11	LaSalle Street & 6th Street	AWSC	LOS D or better	0.33	11.6	B	0.28	9.6	A	No	0.39	13.0	B	0.34	10.6	B	No

*AWSC = all-way stop control; s = seconds; TWSC = two-way stop control



Multi-Modal System Analysis

An assessment of level of traffic stress (LTS) was conducted for bicyclists (BLTS) and pedestrians (PLTS) within the city of Harrisburg based on the ODOT APM, Chapter 14. The methodology considers the quality and comfort of routes between origins and destinations to determine a generalized four-tier LTS rating including excellent, good, fair, or poor. These ratings provide a general measure of actual and perceived safety and comfort for pedestrians and bicyclists travelling along a particular street segment within the city, based on factors such as the presence and quality of bicycle/pedestrian facilities, speed limits, traffic volumes, barriers, and other measures.

Levels of traffic stress are only evaluated for arterials and collector streets within Harrisburg. These analysis factors were adapted to meet the local context of Harrisburg’s existing street system and are based on available data for the city. Data sources for this analysis include: ODOT, Linn County roadway data, and local roadway inventory completed by Harrisburg staff. The project team also used Google aerial imagery and Google Street View to confirm speed limits and the presence of sidewalk and bike facilities at several locations. Sidewalks and bike lanes were not individually inventoried. Due to the less-than-comprehensive data available, the project team used the information available to make assumptions about the conditions of the modal factors. These assumptions are highlighted in the sections below.

Pedestrian Level of Traffic Stress

The PLTS segment analysis was based on the following factors:

Basic Factors

- Speed limit.
- Number and direction of travel lanes.
- Street Functional Classification. In some cases, this was used as a general proxy for speed limit and traffic volume information (data limited).

Modal Factors

- Presence or absence of sidewalk on each side of the street.

Comprehensive data describing sidewalk condition, width, and buffer type was not available. Further, limited information is available for roadway crossings. There is only one traffic signal in Harrisburg, and an RRFB is located at Diamond Hill Road and 9th Street; there are no pedestrian medians. With consideration for posted speed limit and number of through travel lanes, intersections typically score consistent with the segment score shown.

Findings

Figure 12 below displays the results of the PLTS assessment. In general, streets that provide connectivity through Harrisburg scored as PLTS 2 (Good), while routes located along OR 99E or at the edge of the city are higher stress.





PLTS 4 (Poor)

PLTS 4 represents high stress for all users. Traffic speeds are moderate-to-high and sidewalks may be missing or lack buffers. High speeds, limited sidewalks, and limited crossing infrastructure often results in these corridors serving as a barrier for pedestrian travel both along and across roadways. As shown in the figure, the roadways with the highest stress rating of PLTS 4 (poor) include OR 99E north of Territorial, Diamond Hill Drive east of city limits, Territorial Drive as it approaches city limits to the east, S 4th Street between Schooling Street and LaSalle Street, Sommerville Loop, and Priceboro Drive east of city limits. These scores are typically due to either higher speeds (OR 99E, Priceboro Dr) or lack of sidewalk (Sommerville Loop). S 4th Street features a railway along the roadway centerline; planned improvements will expand pedestrian infrastructure in this corridor.

PLTS 3 (Fair)

PLTS 3 corridors represent moderate stress for most users and are typically suitable for adults who do not depend on mobility devices. Traffic speeds are moderate (30 to 35 mph) but fast enough to make some crossings dangerous. Substantial sidewalk gaps may exist. OR 99E/S 3rd Street is rated a PLTS 3 throughout downtown Harrisburg, from just north of Territorial Drive to LaSalle Street. While sidewalks are present along this corridor, sidewalks are typically curb-tight and the posted speed limit of 30 results in a PLTS 3 rating.

PLTS 2 (Good)

PLTS 2 routes are relatively low stress but may require more attention and may not be suitable for all ages and abilities. Traffic speeds are slightly higher (25 to 30 mph); sidewalk gaps are limited. PLTS 2 routes are typically located in areas with land uses that are conducive to walking and frequently are located along low-speed residential roadways. Corridors such as Smith Street, Territorial Street, S 6th Street, and S 9th Street are example of PLTS 2 routes through Harrisburg. Lower travel speeds and complete sidewalks improve comfort along these roadways.

PLTS 1 (Excellent)

PLTS 1 routes represent low traffic stress and generally considered all ages and abilities routes. With low traffic speeds, buffers between the roadway and walkway, wide sidewalks, and accessible crossing infrastructure. None of the routes evaluated in Harrisburg are rated a PLTS 1.

Future Pedestrian System

Pedestrian facilities, where complete, typically provide a complete and relatively comfortable network for travel today. However, there are still gaps in the network in many locations and some area of Harrisburg do not have any sidewalks. Further, people, especially people with disabilities, may have difficulty traveling in certain parts of the city due to lack of sidewalks and sidewalks that are curb-tight and on higher speed streets.

Local streets that do not currently have sidewalks may be suitable for shared roadways where traffic volumes are typically low. Some local streets, however, may be narrow with limited shoulders, such as Sommerville Loop. These locations are less suitable for shared travel opportunities.

There is one current pedestrian project planned to add pedestrian paths along 4th Street by the railroad tracks that will improve the pedestrian network. Although this is expected to improve walking conditions along this route, the presence of the railroad may still be uncomfortable for many travelers.



Opportunities to further improve walking conditions in the city include:

- Improve existing sidewalks to ADA standards.
- Improve pedestrian network by adding sidewalks to local streets with high foot traffic.
- Increase the number of enhanced crossings with marked crosswalks, pedestrian-activated flashers, and medians.

Improvements to pedestrian paths through Harrisburg should aim all streets to meet a PLTS 2 standard or better to support safer and comfortable travel for all people, especially students and people with disabilities.

Bicycle Level of Traffic Stress

A BLTS assessment was conducted for the city of Harrisburg based on ODOT guidance. As with PLTS, BLTS provides an assessment of perceived and actual safety comfort for bicycle travel along a given arterial or collector street segment within Harrisburg. The BLTS assessment considers the same basic factors as PLTS, including speed limit, number of travel lanes, and street functional classification; however, modal factors include consideration of dedicated bicycle infrastructure.

Basic Factors

- Speed limit.
- Number and direction of travel lanes.
- Street Functional Classification. In some cases, this was used as a general proxy for speed limit and traffic volume information (data limited).

Modal Factors

- Presence of dedicated bicycle facility.
- Width of bicycle facility was assumed to be 5.5 feet, based on aerial measurements at several locations along the network.

Findings

Figure 13 below displays the results of the BLTS assessment. This analysis showed that generally, less stressful bikeways are located along roadways with lower speeds, regardless of the presence of designated bicycle facilities. Many routes in Harrisburg are relatively low stress, scoring either as BLTS 1 or 2. However, connections among low stress segments are limited, and few low stress routes do not provide connectivity to downtown Harrisburg or areas beyond the city. Higher stress corridors, including S 3rd St/OR 99E, are barriers to travel across, limiting access to community destinations.

BLTS 4 (Poor)

BLTS 4 roadways are high stress environments suitable only for experienced and skilled riders. Traffic speeds are moderate to high (greater than 35 mph), and roadways have multiple lanes in both directions. BLTS 4 roadways within Harrisburg include OR 99-E north of Territorial Street and west of S 2nd Street, Diamond Hill Drive east of city limits, and Priceboro Drive east of city limits. High posted speed limits and lack of dedicated bicycle facilities contribute to these scores.

BLTS 3 (Fair)

BLTS 3 represents moderate traffic stress, making bicycle travel along these segments suitable for more experienced riders. Traffic speeds are moderate (30 to 35 mph) but fast enough to make some



crossings potentially dangerous. Typical locations include low-speed arterials with bicycle lanes or moderate-speed single-lane roadways. BLTS 3 corridors in Harrisburg include OR 99E between Territorial Street and S 2nd St, Territorial Street between OR 99E and N 7th Street, Priceboro Road within city limits, S 6th Street south of LaSalle St, and Smith Street between OR 99E and N 7th St. Posted speed limits and a lack of dedicated bicycle infrastructure contribute to these scores.

BLTS 2 (Good)

BLTS 2 routes represent low traffic stress but require more attention to oncoming or passing traffic due to slightly higher traffic volumes, narrower roadways, or lack of adequate shoulder space for bicycle travel. Traffic speeds are the same (20 to 25 mph), and there is also no more than one lane in each direction. These segments may be adequate for most riders with some riding experience. BLTS 2 roadways include Smith Street, 9th Street, and portions of LaSalle Street and Territorial Street. Installation of bicycle lanes on roadways with higher motor vehicle use or implementation of traffic calming measures could improve these routes.

BLTS 1 (Excellent)

BLTS 1 routes represent low traffic stress and is generally considered to be an all ages and ability facility. It is suitable for most people bicycling. Traffic speeds are low (20 to 25 mph), and there is no more than one lane in each direction. Typical locations would include low-traffic residential streets. Examples of BLTS 1 routes in Harrisburg include S 6th Street between Smith Street and LaSalle Street and Diamond Hill Road between 7th Street and city limits.

Future Bicycle System

Available cycling facilities are primarily limited to painted bicycle lanes that do not provide a complete or connected bicycle network. While these delineate a space for people riding bicycles, the lack of protection limits who may feel most comfortable using these routes on busier roadways, and the frequent transition between designate bike lanes and shared roadways further impacts route comfort. Sidewalks may also be utilized by bicyclists to navigate roadways where they do not feel comfortable cycling on the roadway due to unseparated space or high traffic.

Future improvements to the bicycle system include exploration of opportunities to stripe bike lanes in coordination with regular repaving activities as well as interest in providing a shared use pathway along between S 6th Street to Eagle Park. The City has an easement along this route that creates an opportunity to provide a separated bicycle and pedestrian pathway. Opportunities to further improve bicycle conditions in the city include:

- Increase separation between motor vehicles and bicycles on busier roadways, including areas with higher posted speed limits and freight activity.
- Increase the number of enhanced crossings in coordination with identified bicycle routes to support crossing of high stress routes.
- Explore implementation of neighborhood greenways – roadways with low volumes of vehicle traffic designated for shared use by motorists and cyclists. Neighborhood greenways use traffic calming and intersection improvements to support low-stress travel through neighborhoods.
- Prioritize improvements that facilitate connections to key destinations, including parks and schools.

Improvements to bicycle routes through Harrisburg should aim to meet a BLTS 2 standard or better to support low stress travel for residents.



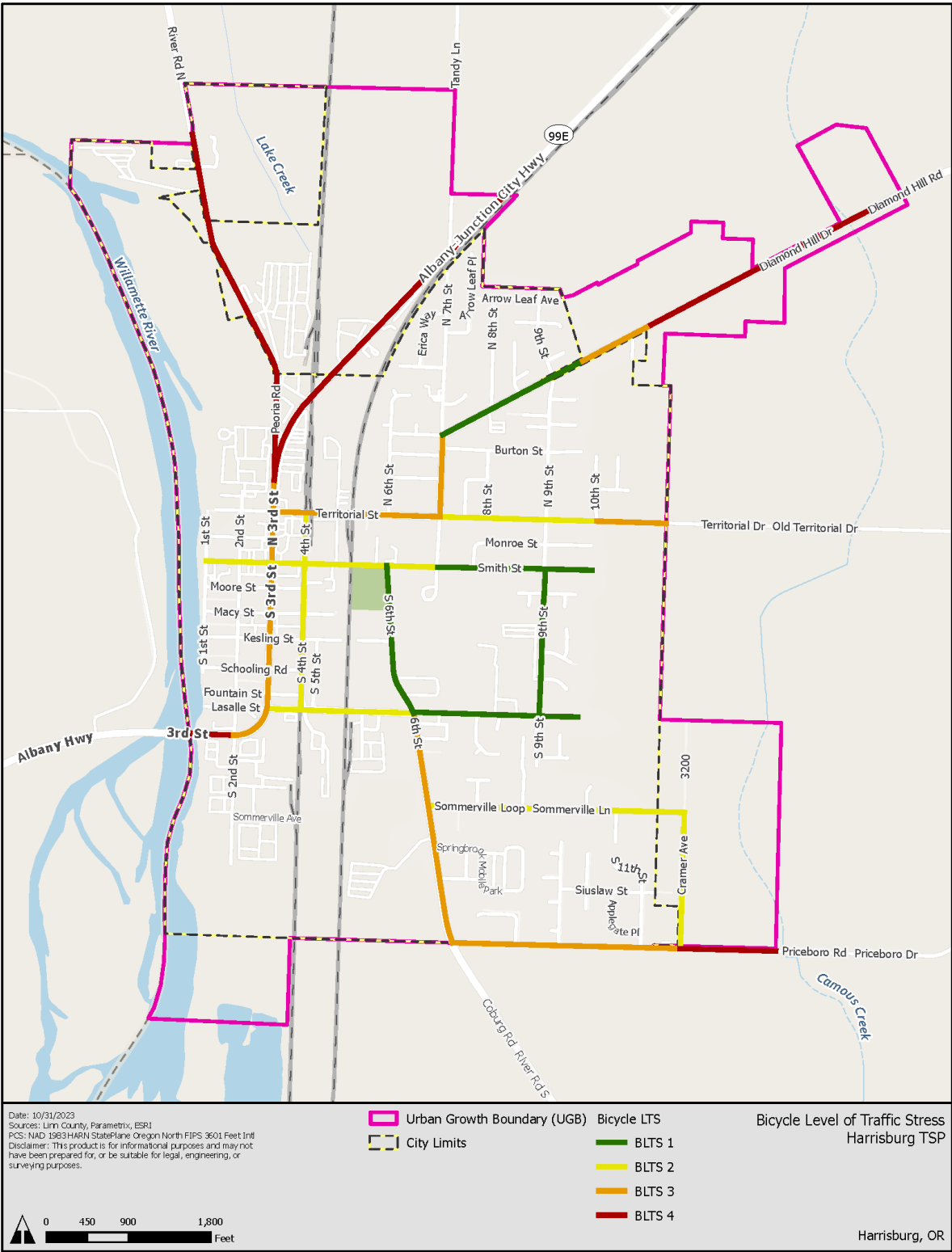


Figure 13. Bicycle Level of Traffic Stress



Freight

Freight operations are concentrated in industrial areas of Harrisburg and are primarily served by OR 99E. Territorial Street and Peoria Road also provide access to industrial parcels in the north. Clusters of businesses in Harrisburg rely on heavier volumes of freight shipments. These businesses are gathered around OR 99E/S 2nd Street and LaSalle Street, OR 99E/Peoria Road, and OR 99E/Tandy Lane. Businesses include Eagle Plywood Specialists, Precision Prefinishing, CHS Nutrition Inc., Valley Agronomics, Gheen Irrigation Works, Knife River Prestress, and ATEZ, Inc.

Access to industrial areas is a growing concern in Harrisburg, especially as industrial businesses are expanding or considering moving to the city. Access from OR 99E to industrial parcels in the southern areas of the city, such as along S 2nd Street south of OR 99E, is constrained, and turning movements both at this location and at OR 99E and LaSalle Street create challenges for freight and people traveling by all modes.

Freight Volume

Heavy vehicles play a pivotal role in influencing traffic flow and road safety. Table 13 shows the peak hour heavy vehicle volumes at the study intersections during the Year 2022 Existing Conditions and forecasted Year 2045 Future No Build Conditions. It is assumed that the percentage of heavy vehicles at each study intersection will remain the same by Year 2045. As shown in Table 13, the intersections along OR 99E have the highest rate of truck volumes.

Table 14. Peak Hour Intersection Volumes – Heavy Vehicles

No.	Intersection	Year 2022 Existing Conditions			Year 2045 Future No Build Conditions		
		Total Entering Volume	Percentage Heavy Vehicles	Heavy Vehicle Volume	Total Entering Volume	Percentage Heavy Vehicles	Heavy Vehicle Volume
1	LaSalle Street & 9th Street	110	0%	0	125	0%	0
2	Smith Street & 9th Street	120	0%	0	135	0%	0
3	Territorial Street & 9th Street	190	3%	5	225	3%	5
4	Diamond Hill Road & 9th Street	275	2%	5	320	2%	5
5	6th Street & Priceboro Drive	475	5%	25	545	5%	30
6	OR 99E & LaSalle Street	1,365	5%	65	1,585	5%	75
7	OR 99E & Territorial Street	1,100	4%	45	1,270	4%	50
8	OR 99E & Peoria Road	705	6%	40	820	6%	45
9	OR 99E & Smith Street	1,140	4%	45	1,330	4%	55
10	Territorial Street & 7th Street	415	4%	15	480	4%	15
11	LaSalle Street & 6th Street	660	4%	25	770	4%	30



Transit

There are currently no planned transit improvements in the City of Harrisburg. The City and other agencies should continue to coordinate with nearby jurisdictions to advance studies and explore opportunities to improve transit connections in Harrisburg.

Railroad

With two rail lines traversing Harrisburg, there are more than a dozen at-grade railroad crossings, as well as resident areas with homes that front the rail line traveling down 4th Street. The railroad crossings at OR 99E, Territorial Street, LaSalle Street, and Smith Street include crossing gates.

At-grade crossings pose safety challenges for all roadway users, especially where limited warning devices are present. Further, the presence of a railroad may also impede crossing quality for people traveling on foot and limit route accessibility for people traveling with a mobility device.

Pipeline

No concerns about pipelines or pipeline access have been raised during stakeholder outreach or public input to date.



Appendix A

Intersection Volume Counts

Oregon Traffic Monitoring System

Volume by Approach

10/1/2022 Through 10/31/2022

Intersection ID 999110249

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community Harrisburg

Roads LaSalle Street, Ninth Street

LRS ID

LRS Milepoint

Start Time	Ninth Street Northbound						LaSalle Street Eastbound						Ninth Street Southbound						LaSalle Street Westbound						Total
	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	EB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	
6:00AM	1	0	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
6:15AM	1	1	0	0	0	2	3	0	0	0	0	3	0	0	2	0	0	2	0	1	0	0	0	1	8
6:30AM	3	1	0	0	0	4	1	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45AM	2	0	0	0	0	2	6	0	1	0	0	7	0	0	4	0	0	4	0	0	0	0	0	0	13
Hour Total	7	2	0	0	0	9	12	1	1	0	1	14	0	0	6	0	0	6	0	1	0	0	0	1	1
7:00AM	0	0	0	0	0	0	6	0	0	0	0	6	0	0	10	0	0	10	0	2	0	0	0	2	18
7:15AM	3	1	0	0	0	4	8	0	0	0	0	8	0	0	6	0	0	6	0	1	0	0	0	1	19
7:30AM	1	1	0	0	0	2	14	1	0	0	1	15	0	0	10	0	0	10	1	1	1	0	0	3	1
7:45AM	2	1	0	0	0	3	30	0	1	0	4	31	0	0	30	0	0	30	0	0	0	0	0	0	64
Hour Total	6	3	0	0	0	9	58	1	1	0	5	60	0	0	56	0	0	56	1	4	1	0	0	6	131
8:00AM	3	1	0	0	0	4	19	1	0	0	1	20	0	1	24	0	0	25	0	0	0	0	0	0	49
8:15AM	1	0	0	0	0	1	6	0	0	0	0	6	0	0	9	0	0	9	0	2	0	0	0	2	18
8:30AM	2	0	0	0	0	2	4	0	0	0	1	4	0	0	6	0	0	6	0	1	0	0	0	1	13
8:45AM	0	0	0	0	0	0	0	0	1	0	1	1	0	1	4	0	0	5	0	0	0	0	0	0	6
Hour Total	6	1	0	0	0	7	29	1	1	0	3	31	0	2	43	0	0	45	0	3	0	0	0	3	86
9:00AM	0	0	0	0	0	0	4	0	0	0	0	4	0	0	6	0	0	6	0	0	0	0	0	0	10
9:15AM	1	0	0	0	0	1	4	0	0	0	0	4	0	1	3	0	0	4	0	0	0	0	0	0	9
9:30AM	3	0	0	0	0	3	2	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	6
9:45AM	2	0	0	0	0	2	5	1	2	0	3	8	0	1	4	0	0	5	0	1	0	0	0	1	16
Hour Total	6	0	0	0	0	6	15	1	2	0	3	18	0	2	14	0	0	16	0	1	0	0	0	1	41
2:00PM	1	0	0	0	0	1	1	0	0	0	0	1	2	0	3	0	0	5	1	1	0	0	0	2	9
2:15PM	1	0	0	0	0	1	2	0	1	0	0	3	0	0	4	0	0	4	0	0	1	0	0	1	9
2:30PM	1	1	0	0	0	2	7	0	1	0	0	8	0	0	10	0	0	10	1	0	1	0	0	2	22
2:45PM	0	0	0	0	0	0	3	1	0	0	0	4	0	2	9	0	0	11	0	0	0	0	0	0	0
Hour Total	3	1	0	0	0	4	13	1	2	0	0	16	2	2	26	0	0	30	2	1	2	0	0	5	55
3:00PM	0	3	0	0	1	3	4	0	1	0	0	5	1	2	4	0	0	7	0	0	0	0	0	0	1
3:15PM	0	1	0	0	0	1	11	1	1	0	0	13	0	0	5	0	0	5	0	1	0	0	0	1	20
3:30PM	1	1	0	0	0	2	19	0	0	0	1	19	0	1	20	0	0	21	0	1	0	0	0	1	43
3:45PM	1	0	0	0	2	1	9	0	0	0	2	9	5	0	19	0	0	24	0	1	0	0	0	1	35
Hour Total	2	5	0	0	3	7	43	1	2	0	3	46	6	3	48	0	0	57	0	3	0	0	0	3	113
4:00PM	0	0	0	0	0	0	7	1	2	0	0	10	0	0	13	0	0	13	0	0	0	0	0	0	23
4:15PM	2	0	0	0	0	2	7	4	3	0	0	14	0	1	3	0	0	4	0	1	0	0	0	1	21
4:30PM	2	0	0	0	3	2	3	3	1	0	3	7	0	1	6	0	0	7	0	1	0	0	0	1	17
4:45PM	0	0	0	0	0	0	7	0	1	0	0	8	1	2	8	0	0	11	0	1	1	0	0	2	21
Hour Total	4	0	0	0	3	4	24	8	7	0	3	39	1	4	30	0	0	35	0	3	1	0	0	4	82
5:00PM	0	1	0	0	0	1	11	1	1	0	0	13	2	0	6	0	0	8	0	0	0	0	1	0	22
5:15PM	0	0	0	0	0	0	15	1	3	0	1	19	0	0	6	0	0	6	0	1	0	0	0	1	26
5:30PM	2	0	0	0	0	2	13	0	3	0	0	16	0	0	6	0	0	6	0	0	0	0	0	0	24
5:45PM	2	0	0	0	0	2	9	0	2	0	0	11	0	0	2	0	1	2	0	1	1	0	0	2	17
Hour Total	4	1	0	0	0	5	48	2	9	0	1	59	2	0	20	0	1	22	0	2	1	0	1	3	89
Pedestrian	0	0	0	0	6	0	0	0	0	0	19	0	0	0	0	0	1	0	0	0	0	0	1	0	0
Pedestrian %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Bus	0	0	0	0	0	0	6	0	0	0	0	6	0	0	7	0	0	7	0	0	0	0	0	0	13
Bus %	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.9	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Single trailer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single trailer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single unit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single unit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single trailer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
Single trailer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Bike	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Bike %	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Multi trailer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi trailer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single unit	2	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	2	1	0	0	0	0	1	5
Single unit	5.3	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.4	0.0	0.0	0.7	33.3	0.0	0.0	0.0	0.0	3.8	0.8
Single trailer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Oregon Traffic Monitoring System Volume by Approach 10/1/2022 Through 10/31/2022

Single trailer truck (6 ax.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Light truck	7	3	0	0	0	10	52	3	4	0	0	59	3	3	39	0	0	45	0	3	2	0	0	5	119
Light truck %	18.4	23.1	0.0	0.0	0.0	19.6	21.5	18.8	16.0	0.0	0.0	20.8	27.3	23.1	16.0	0.0	0.0	16.9	0.0	16.7	40.0	0.0	0.0	19.2	19.0
Motorcycles	0	0	0	0	0	0	4	0	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	0	5
Motorcycles %	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Single unit truck (4 ax.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single unit truck (4 ax.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Car	29	10	0	0	0	39	179	13	21	0	0	213	7	10	194	0	0	211	2	15	3	0	0	20	483
Car %	76.3	76.9	0.0	0.0	0.0	76.5	74.0	81.3	84.0	0.0	0.0	75.3	63.6	76.9	79.8	0.0	0.0	79.0	66.7	83.3	60.0	0.0	0.0	76.9	77.0
Multi trailer truck (7 ax.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck (7 ax.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

Intersection ID 999110250

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community Harrisburg

Roads Ninth Street, Smith Street

LRS ID

LRS Milepoint

	Ninth Street Northbound						Smith Street Eastbound						Ninth Street Southbound						Smith Street Westbound						Total
Start Time	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	EB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	Total
6:00AM	1	3	0	0	0	4	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	7
6:15AM	0	4	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	6
6:30AM	1	4	0	0	0	5	2	0	0	0	0	2	0	1	0	0	0	1	0	0	1	0	0	1	0
6:45AM	0	3	0	0	0	3	1	0	1	0	0	2	0	2	3	0	0	5	0	1	1	1	0	0	12
Hour Total	2	14	0	0	0	16	3	0	1	0	0	4	0	4	6	0	0	10	0	2	2	0	0	4	0
7:00AM	1	8	0	0	0	9	0	0	0	0	0	0	0	7	0	0	0	7	0	0	1	0	0	1	17
7:15AM	3	6	1	0	0	10	2	0	2	0	0	4	0	3	0	0	0	3	0	0	1	0	0	1	18
7:30AM	1	12	0	0	0	13	2	0	0	0	0	2	0	11	3	0	0	14	0	0	1	0	0	1	0
7:45AM	8	8	0	0	0	16	4	0	9	0	0	13	0	28	5	0	0	33	1	0	1	0	2	2	64
Hour Total	13	34	1	0	0	48	8	0	11	0	0	19	0	49	8	0	0	57	1	0	4	0	2	5	129
8:00AM	8	4	0	0	0	12	4	1	9	0	0	14	0	10	4	0	0	14	0	0	1	0	0	1	41
8:15AM	2	4	0	0	0	6	3	1	5	0	0	9	0	5	0	0	0	5	0	2	0	0	2	2	22
8:30AM	0	3	0	0	0	3	0	0	3	0	0	3	0	5	1	0	0	6	0	0	2	0	0	2	14
8:45AM	0	0	1	0	0	1	0	0	6	0	0	6	0	1	2	0	0	3	0	0	0	0	0	0	10
Hour Total	10	11	1	0	0	22	7	2	23	0	0	32	0	21	7	0	0	28	0	2	3	0	2	5	87
9:00AM	0	4	0	0	0	4	1	0	4	0	0	5	0	3	0	0	0	3	0	0	0	0	0	0	12
9:15AM	5	1	0	0	0	6	0	0	2	0	0	2	0	3	0	0	0	3	0	0	0	0	0	0	11
9:30AM	1	2	0	0	0	3	2	0	2	0	0	4	0	1	2	0	0	3	0	0	0	0	0	0	10
9:45AM	0	0	0	0	0	0	1	1	1	0	0	3	0	2	0	0	0	2	0	0	0	0	0	0	5
Hour Total	6	7	0	0	0	13	4	1	9	0	0	14	0	9	2	0	0	11	0	0	0	0	0	0	38
2:00PM	0	1	0	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	0	0	1	4
2:15PM	2	3	0	0	0	5	0	0	0	0	0	0	0	3	1	0	0	4	0	1	0	0	5	1	10
2:30PM	2	4	0	0	0	6	0	1	6	0	0	7	0	5	0	0	0	5	0	0	0	0	0	0	18
2:45PM	6	6	0	0	0	12	0	0	3	0	0	3	1	5	0	0	0	6	0	0	0	0	0	0	0
Hour Total	10	14	0	0	0	24	0	1	11	0	0	12	1	13	1	0	0	15	1	1	0	0	5	2	53
3:00PM	1	6	0	0	0	7	2	1	0	0	0	3	0	6	2	0	0	8	0	0	0	0	0	0	0
3:15PM	5	5	0	0	3	10	0	0	0	0	0	0	1	8	7	0	0	16	0	0	1	0	0	1	27
3:30PM	6	8	0	0	0	14	7	1	14	0	0	22	1	6	0	0	0	7	0	0	2	0	0	2	45
3:45PM	4	23	0	0	0	27	3	0	5	0	0	8	0	6	1	0	0	7	1	0	0	0	0	1	43
Hour Total	16	42	0	0	3	58	12	2	19	0	0	33	2	26	10	0	0	38	1	0	3	0	0	4	133
4:00PM	0	2	1	0	0	3	0	0	2	0	0	2	0	5	1	0	0	6	0	0	0	0	0	0	11
4:15PM	2	7	0	0	2	9	1	0	1	0	0	2	1	7	0	0	0	8	0	0	0	0	2	0	19
4:30PM	0	4	0	0	1	4	1	1	1	0	0	3	0	9	0	0	0	9	0	0	0	0	0	0	16
4:45PM	2	7	0	0	0	9	1	1	4	0	0	6	0	9	7	0	0	16	0	1	0	0	0	1	32
Hour Total	4	20	1	0	3	25	3	2	8	0	0	13	1	30	8	0	0	39	0	1	0	0	2	1	78
5:00PM	2	8	0	0	0	10	2	0	2	0	0	4	0	14	3	0	0	17	0	0	0	0	0	0	31
5:15PM	3	9	0	0	0	12	1	0	2	0	0	3	0	6	2	0	0	8	0	0	0	0	0	0	23
5:30PM	2	5	0	0	0	7	0	2	4	0	0	6	2	3	2	0	0	7	0	1	0	0	0	1	21
5:45PM	1	7	0	0	0	8	2	1	2	0	0	5	0	6	0	0	0	6	1	1	1	0	0	3	22
Hour Total	8	29	0	0	0	37	5	3	10	0	0	18	2	29	7	0	0	38	1	2	1	0	0	4	97
Pedestrian	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0
Pedestrian %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Bus	4	6	0	0	0	10	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	13
Bus %	5.8	3.5	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Single trailer truck (5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single trailer truck (6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single unit truck (2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single unit truck (3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single trailer truck (A or	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Single trailer truck (A or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Bike	7	0	1	0	0	8	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	12
Bike %	10.1	0.0	33.3	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	4.1	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Multi trailer truck (6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck (6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi trailer truck (6 or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck (6 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Oregon Traffic Monitoring System Volume by Approach 10/1/2022 Through 10/31/2022

Single unit truck (2	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	4
Single unit truck (2	0.0	1.8	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	4.0	0.6	
Single trailer truck (6 or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single trailer truck (6 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light truck	5	21	1	0	0	27	0	0	0	0	0	0	0	8	12	0	0	20	0	1	2	0	0	3	50
Light truck %	7.2	12.3	33.3	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	24.5	0.0	0.0	8.5	0.0	12.5	15.4	0.0	0.0	12.0	7.7
Motorcycles	0	4	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	5
Motorcycles or	0.0	2.3	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Single unit truck (4 or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single unit truck (4 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Car	53	137	1	0	0	191	42	11	92	0	0	145	6	166	35	0	0	207	4	6	11	0	0	21	564
Car %	76.8	80.1	33.3	0.0	0.0	78.6	100.0	100.0	100.0	0.0	0.0	100.0	100.0	91.7	71.4	0.0	0.0	87.7	100.0	75.0	84.6	0.0	0.0	84.0	86.9
Multi trailer truck (7 or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck (7 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

Intersection ID 999110251

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community Harrisburg

Roads Ninth Street, Territorial Street, Territorial Street

LRS ID

LRS Milepoint

	Ninth Street Northbound						Territorial Street Eastbound						Ninth Street Southbound						Territorial Street Westbound						Total
Start Time	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	EB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	Total
6:00AM	1	3	0	0	0	4	0	2	0	0	0	2	1	1	0	0	0	2	1	2	0	0	0	3	11
6:15AM	3	2	0	0	3	5	1	6	0	0	1	7	2	0	1	0	0	3	0	3	0	0	0	3	18
6:30AM	4	3	3	0	0	10	0	2	0	0	0	2	1	1	0	0	0	2	0	1	0	0	0	1	0
6:45AM	3	1	3	0	0	7	1	2	1	0	1	4	0	2	1	0	0	3	3	7	0	0	0	10	24
Hour Total	11	9	6	0	3	26	2	12	1	0	2	15	4	4	2	0	0	10	4	13	0	0	0	17	5
7:00AM	3	4	2	0	0	9	1	2	0	0	0	3	5	3	0	0	0	8	2	0	0	0	0	2	22
7:15AM	0	4	6	0	0	10	0	6	2	0	0	8	0	2	2	0	0	4	0	2	0	0	0	2	24
7:30AM	1	9	6	0	0	16	0	4	3	0	2	7	1	8	0	0	0	9	1	4	1	0	0	6	2
7:45AM	6	3	3	0	0	12	1	4	11	0	2	16	1	13	2	0	0	16	9	5	0	0	0	14	58
Hour Total	10	20	17	0	0	47	2	16	16	0	4	34	7	26	4	0	0	37	12	11	1	0	0	24	142
8:00AM	4	3	4	0	0	11	4	3	3	0	0	10	1	7	2	0	0	10	3	10	1	0	0	14	45
8:15AM	0	5	3	0	2	8	2	6	2	0	0	10	0	2	1	0	0	3	2	5	0	0	2	7	28
8:30AM	2	3	2	0	0	7	2	3	2	0	1	7	1	3	2	0	0	6	1	0	0	0	0	1	21
8:45AM	0	1	0	0	0	1	0	0	1	0	3	1	0	2	2	0	0	4	0	2	0	0	0	2	8
Hour Total	6	12	9	0	2	27	8	12	8	0	4	28	2	14	7	0	0	23	6	17	1	0	2	24	102
9:00AM	0	4	1	0	0	5	1	2	1	0	1	4	1	0	0	0	0	1	1	1	1	0	1	3	13
9:15AM	0	0	0	0	0	0	0	3	2	0	0	5	0	2	2	0	0	4	0	2	1	0	0	3	12
9:30AM	0	2	0	0	0	2	0	2	0	0	0	2	0	3	0	0	0	3	0	1	0	0	0	1	8
9:45AM	0	0	1	0	0	1	1	5	0	0	1	6	1	1	0	0	0	2	0	2	0	0	0	2	11
Hour Total	0	6	2	0	0	8	2	12	3	0	2	17	2	6	2	0	0	10	1	6	2	0	1	9	44
2:00PM	1	1	0	0	0	2	0	4	0	0	0	4	0	0	2	0	0	2	0	8	1	0	0	9	17
2:15PM	0	3	0	0	3	3	1	9	2	0	0	12	0	1	1	0	0	2	1	7	0	0	0	8	25
2:30PM	3	2	0	0	0	5	4	6	5	0	0	15	0	3	4	0	0	7	1	3	1	0	0	5	32
2:45PM	2	4	0	0	0	6	4	3	2	0	0	9	0	2	0	0	0	2	2	4	1	0	0	7	0
Hour Total	6	10	0	0	3	16	9	22	9	0	0	40	0	6	7	0	0	13	4	22	3	0	0	29	98
3:00PM	3	1	2	0	0	6	0	4	1	0	0	5	0	4	2	0	0	6	2	8	3	0	0	13	0
3:15PM	4	1	0	0	0	5	2	2	0	0	0	4	1	11	2	0	0	14	4	4	0	0	0	8	31
3:30PM	5	6	6	0	0	17	3	8	5	0	1	16	1	6	1	0	0	8	0	3	1	0	0	4	45
3:45PM	11	12	7	0	0	30	3	6	3	0	7	12	0	2	1	0	0	3	2	3	1	0	0	6	51
Hour Total	23	20	15	0	0	58	8	20	9	0	8	37	2	23	6	0	0	31	8	18	5	0	0	31	157
4:00PM	0	2	0	0	2	2	3	9	2	0	2	14	0	2	1	0	0	3	2	6	1	0	0	9	28
4:15PM	4	5	0	0	0	9	1	6	3	0	0	10	1	3	1	0	0	5	3	2	1	0	0	6	30
4:30PM	1	2	1	0	0	4	2	7	3	0	0	12	1	8	2	0	0	11	0	7	3	0	0	10	37
4:45PM	1	6	0	0	0	7	1	7	3	0	0	11	0	7	1	0	0	8	7	7	0	0	0	14	40
Hour Total	6	15	1	0	2	22	7	29	11	0	2	47	2	20	5	0	0	27	12	22	5	0	0	39	135
5:00PM	2	5	3	0	0	10	0	10	5	0	1	15	1	5	2	0	0	8	8	6	2	0	0	16	49
5:15PM	4	3	2	0	0	9	3	2	3	0	1	8	0	5	0	0	0	5	5	14	4	0	0	23	45
5:30PM	2	5	2	0	0	9	0	2	0	0	0	2	0	6	3	0	0	9	3	15	1	0	0	19	39
5:45PM	5	6	1	0	0	12	1	2	3	0	0	6	0	5	0	0	1	5	1	8	1	0	0	10	33
Hour Total	13	19	8	0	0	40	4	16	11	0	2	31	1	21	5	0	1	27	17	43	8	0	0	68	166
Pedestrian	0	0	0	0	10	0	0	0	0	0	24	0	0	0	0	0	1	0	0	0	0	0	3	0	0
Pedestrian %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Bus	2	4	0	0	0	6	0	1	0	0	0	1	0	3	0	0	0	3	1	1	0	0	0	2	12
Bus %	2.7	3.6	0.0	0.0	0.0	2.5	0.0	0.7	0.0	0.0	0.0	0.4	0.0	2.5	0.0	0.0	0.0	1.7	1.6	0.7	0.0	0.0	0.0	0.8	1.3
Single trailer truck 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Single trailer truck 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.4	0.1
Single unit truck 12	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Single unit truck 12	1.3	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.4	0.2
Single trailer truck 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single trailer truck 14 or more	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bike	0	0	0	0	0	0	0	2	2	0	0	4	0	2	0	0	0	2	0	0	0	0	0	0	6
Bike %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9	0.0	0.0	1.6	0.0	1.7	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Multi trailer truck 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi trailer truck 16 or more	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck 16 or more	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

Single unit truck (2 axle)	0	1	0	0	0	1	0	3	1	0	0	4	0	1	2	0	0	3	0	1	0	0	0	1	9
Single unit truck (2 axle)	0.0	0.9	0.0	0.0	0.0	0.4	0.0	2.2	1.5	0.0	0.0	1.6	0.0	0.8	5.3	0.0	0.0	1.7	0.0	0.7	0.0	0.0	0.0	0.4	1.0
Single trailer truck (6 or truck (6 or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single trailer truck (6 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light truck	7	13	7	0	0	27	17	28	12	0	0	57	4	29	11	0	0	44	10	31	6	0	0	47	175
Light truck %	9.3	11.7	12.1	0.0	0.0	11.1	40.5	20.1	17.6	0.0	0.0	22.9	20.0	24.2	28.9	0.0	0.0	24.7	15.6	20.4	24.0	0.0	0.0	19.5	19.2
Motorcycles	1	2	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	0	2	6
Motorcycles	1.3	1.8	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.6	0.0	1.3	0.0	0.0	0.0	0.8	0.7
Single unit truck (1 or Single unit truck (1 or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single unit truck (1 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Car	64	91	51	0	0	206	25	102	53	0	0	180	16	84	25	0	0	125	53	112	19	0	0	184	695
Car %	85.3	82.0	87.9	0.0	0.0	84.4	59.5	73.4	77.9	0.0	0.0	72.3	80.0	70.0	65.8	0.0	0.0	70.2	82.8	73.7	76.0	0.0	0.0	76.3	76.2
Multi trailer truck (2 or	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	3	6
Multi trailer truck (2 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	1.2	0.7

Owner ID conleybergh

Roads Diamond Hill Road, Ninth Street

LRS Milepoint

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Oregon Traffic Monitoring System

Volume by Approach
10/1/2022 Through 10/31/2022

Intersection ID 999110253

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community -

Roads Colburg Road, Priceboro Drive, S. 6th Street

LRS ID

LRS Milepoint

	Colburg Road Northbound						S. 6th Street Southbound						Priceboro Drive Westbound						
Start Time	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	Total
6:00AM	0	4	0	0	0	4	1	15	0	0	0	16	2	0	12	0	0	14	34
6:15AM	0	9	0	0	0	9	0	26	0	0	0	26	4	0	8	0	0	12	47
6:30AM	0	6	0	0	1	6	5	24	0	0	0	29	4	0	5	0	0	9	1
6:45AM	0	7	0	0	0	7	2	24	0	0	0	26	0	0	7	0	0	7	40
Hour Total	0	26	0	0	1	26	8	89	0	0	0	97	10	0	32	0	0	42	1
7:00AM	0	8	0	0	0	8	2	28	0	0	0	30	2	0	8	0	0	10	48
7:15AM	0	16	0	0	0	16	4	31	0	0	0	35	4	0	9	0	0	13	64
7:30AM	0	19	2	0	1	21	7	36	0	0	0	43	4	0	16	0	0	20	1
7:45AM	0	26	1	0	4	27	8	37	0	0	0	45	1	0	26	0	0	27	99
Hour Total	0	69	3	0	5	72	21	132	0	0	0	153	11	0	59	0	0	70	295
8:00AM	0	21	2	0	1	23	9	30	0	0	0	39	5	0	12	0	0	17	79
8:15AM	0	20	0	0	0	20	9	40	0	0	0	49	3	0	8	0	0	11	80
8:30AM	0	12	2	0	1	14	5	23	0	0	0	28	0	0	9	0	0	9	51
8:45AM	0	20	0	0	1	20	7	12	0	0	0	19	1	0	6	0	0	7	46
Hour Total	0	73	4	0	3	77	30	105	0	0	0	135	9	0	35	0	0	44	256
9:00AM	0	15	0	0	0	15	5	17	0	0	0	22	4	0	7	0	0	11	48
9:15AM	0	20	0	0	0	20	1	13	0	0	0	14	0	0	7	0	0	7	41
9:30AM	0	16	0	0	0	16	6	18	0	0	0	24	0	0	7	0	0	7	47
9:45AM	0	13	0	0	3	13	3	22	0	0	0	25	1	0	2	0	0	3	41
Hour Total	0	64	0	0	3	64	15	70	0	0	0	85	5	0	23	0	0	28	177
2:00PM	0	21	1	0	0	22	6	21	0	0	0	27	1	0	6	0	0	7	56
2:15PM	0	21	1	0	0	22	5	24	0	0	0	29	1	0	8	0	0	9	60
2:30PM	0	19	2	0	0	21	9	22	0	0	0	31	0	0	9	0	0	9	61
2:45PM	0	29	0	0	0	29	8	22	0	0	0	30	0	0	9	0	0	9	0
Hour Total	0	90	4	0	0	94	28	89	0	0	0	117	2	0	32	0	0	34	245
3:00PM	0	28	1	0	0	29	4	18	0	0	0	22	1	0	11	0	1	12	1
3:15PM	0	27	1	0	0	28	11	20	0	0	0	31	0	0	19	0	0	19	78
3:30PM	0	31	0	0	1	31	16	34	0	0	0	50	0	0	8	0	0	8	89
3:45PM	0	31	2	0	2	33	19	33	0	0	0	52	3	0	9	0	2	12	97
Hour Total	0	117	4	0	3	121	50	105	0	0	0	155	4	0	47	0	3	51	327
4:00PM	0	43	4	0	0	47	18	27	0	0	0	45	0	0	5	0	0	5	97
4:15PM	0	34	3	0	0	37	13	23	0	0	0	36	2	0	14	0	0	16	89
4:30PM	0	31	1	0	3	32	12	22	0	0	0	34	0	0	16	0	3	16	82
4:45PM	0	42	1	0	0	43	21	29	0	0	0	50	1	0	15	0	0	16	109
Hour Total	0	150	9	0	3	159	64	101	0	0	0	165	3	0	50	0	3	53	377
5:00PM	0	34	5	0	0	39	25	33	0	0	1	58	1	0	26	0	0	27	124
5:15PM	0	41	4	0	1	45	22	25	0	0	0	47	0	0	18	0	0	18	110
5:30PM	0	37	0	0	0	37	18	17	0	0	0	35	0	0	15	0	0	15	87
5:45PM	0	32	1	0	0	33	17	12	0	0	0	29	0	0	8	0	0	8	70
Hour Total	0	144	10	0	1	154	82	87	0	0	1	169	1	0	67	0	0	68	391
Pedestrian	0	0	0	0	19	0	0	0	0	0	1	0	0	0	0	0	6	0	0
Pedestrian %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Bus	0	4	1	0	0	5	3	10	0	0	0	13	0	0	4	0	0	4	22
Bus %	0.0	0.5	2.9	0.0	0.0	0.7	1.0	1.3	0.0	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.0	1.0	1.0
Single unit trunk /3	0	4	0	0	0	4	1	8	0	0	0	9	0	0	0	0	0	0	13
Single unit trunk /3	0.0	0.5	0.0	0.0	0.0	0.5	0.3	1.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Single trailer trunk /A or	0	5	1	0	0	6	0	7	0	0	0	7	0	0	2	0	0	2	15
Single trailer trunk /A or	0.0	0.7	2.9	0.0	0.0	0.8	0.0	0.9	0.0	0.0	0.0	0.7	0.0	0.0	0.6	0.0	0.0	0.5	0.7
Bike	0	0	0	0	0	0	0	0	0	0	0	0	1	0	9	0	0	10	10
Bike %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	2.6	0.0	0.0	2.6	0.4
Multi trailer trunk /B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer trunk /B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi trailer trunk /E or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer trunk /E or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single unit trunk /2	0	23	1	0	0	24	3	22	0	0	0	25	2	0	7	0	0	9	58

Oregon Traffic Monitoring System

Volume by Approach

10/1/2022 Through 10/31/2022

Single unit <i>truck / 2</i>	0.0	3.1	2.9	0.0	0.0	3.1	1.0	2.8	0.0	0.0	0.0	2.3	4.4	0.0	2.0	0.0	0.0	2.3	2.6
Single trailer <i>truck / 6 or</i>	0	8	0	0	0	8	0	12	0	0	0	12	0	0	1	0	0	1	21
Single trailer <i>truck / 6 or</i>	0.0	1.1	0.0	0.0	0.0	1.0	0.0	1.5	0.0	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.3	0.9
Motorcycles	0	0	0	0	0	0	1	5	0	0	0	6	0	0	0	0	0	0	6
Motorcycles	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Single trailer <i>truck / 5</i>	0	8	0	0	0	8	0	14	0	0	0	14	0	0	0	0	0	0	22
Single trailer <i>truck / 5</i>	0.0	1.1	0.0	0.0	0.0	1.0	0.0	1.8	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Light truck	0	127	5	0	0	132	36	66	0	0	0	102	11	0	77	0	0	88	322
Light truck %	0.0	17.3	14.7	0.0	0.0	17.2	12.1	8.5	0.0	0.0	0.0	9.5	24.4	0.0	22.3	0.0	0.0	22.6	14.4
Single unit <i>truck / 4 or</i>	0	2	0	0	0	2	0	5	0	0	0	5	0	0	1	0	0	1	8
Single unit <i>truck / 4 or</i>	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.0	0.3	0.4
Car	0	550	26	0	0	576	254	625	0	0	0	879	31	0	244	0	0	275	1,730
Car %	0.0	75.0	76.5	0.0	0.0	75.1	85.2	80.3	0.0	0.0	0.0	81.7	68.9	0.0	70.7	0.0	0.0	70.5	77.5
Multi trailer <i>truck / 7 or</i>	0	2	0	0	0	2	0	4	0	0	0	4	0	0	0	0	0	0	6
Multi trailer <i>truck / 7 or</i>	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Oregon Traffic Monitoring System

Volume by Approach

10/1/2022 Through 10/31/2022

Intersection ID 999110254

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community Harrisburg

Roads ALBANY-JUNCTION CITY HWY #058 (Third Street), LaSalle Street

LRS ID

LRS Milepoint

Start Time	ALBANY-JUNCTION CITY HWY #058 (Third Street) Northbound						LaSalle Street Eastbound						ALBANY-JUNCTION CITY HWY #058 (Third Street) Southbound						LaSalle Street Westbound						Total
	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	EB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	
6:00AM	0	44	11	0	0	55	0	0	0	0	0	0	1	30	0	0	0	31	16	0	3	0	0	19	105
6:15AM	1	63	14	0	0	78	0	1	0	0	0	1	4	38	0	0	0	42	14	0	7	0	0	21	142
6:30AM	0	71	19	0	0	90	0	2	0	0	0	2	6	60	0	0	0	66	17	1	8	0	0	26	0
6:45AM	0	54	14	0	0	68	0	0	1	0	0	1	6	62	2	0	0	70	21	0	14	0	0	35	174
Hour Total	1	232	58	0	0	291	0	3	1	0	0	4	17	190	2	0	0	209	68	1	32	0	0	101	0
7:00AM	0	73	20	0	0	93	0	0	0	0	0	0	6	42	0	0	0	48	14	0	15	0	0	29	170
7:15AM	0	69	30	0	0	99	0	0	0	0	0	0	6	69	0	0	0	75	26	0	10	0	0	36	210
7:30AM	2	62	34	0	0	98	0	1	0	0	0	1	8	66	0	0	0	74	25	0	10	0	0	35	0
7:45AM	0	74	33	0	0	107	0	0	0	0	0	0	11	58	0	0	0	69	35	3	18	0	0	56	232
Hour Total	2	278	117	0	0	397	0	1	0	0	0	1	31	235	0	0	0	266	100	3	53	0	0	156	820
8:00AM	0	63	30	0	0	93	0	1	0	0	0	1	11	58	4	0	1	73	26	1	19	0	0	46	213
8:15AM	1	81	23	0	0	105	0	1	0	0	0	1	12	57	1	0	0	70	21	0	14	0	0	35	211
8:30AM	0	75	18	0	0	93	0	0	0	0	0	0	13	47	0	0	0	60	23	0	10	0	0	33	186
8:45AM	0	54	11	0	0	65	0	0	0	0	0	0	7	42	0	0	0	49	15	2	20	0	0	37	151
Hour Total	1	273	82	0	0	356	0	2	0	0	0	2	43	204	5	0	1	252	85	3	63	0	0	151	761
9:00AM	0	55	17	0	0	72	0	0	0	0	0	0	5	52	0	0	0	57	13	0	17	0	0	30	159
9:15AM	0	61	13	0	0	74	0	0	0	0	0	0	6	55	0	0	0	61	17	0	17	0	0	34	169
9:30AM	0	58	21	0	0	79	0	0	0	0	0	0	11	48	1	0	0	60	18	0	15	0	0	33	172
9:45AM	0	57	21	0	0	78	0	0	0	0	0	0	8	37	0	0	1	45	15	0	7	0	0	22	145
Hour Total	0	231	72	0	0	303	0	0	0	0	0	0	30	192	1	0	1	223	63	0	56	0	0	119	645
10:00AM	1	66	13	0	0	80	0	1	0	0	0	1	5	40	0	0	0	45	16	0	16	0	0	32	158
10:15AM	0	61	15	0	0	76	0	0	0	0	0	0	10	52	2	0	0	64	9	1	11	0	0	21	161
10:30AM	0	73	15	0	0	88	0	0	0	0	0	0	5	58	1	0	0	64	20	1	11	0	0	32	184
10:45AM	1	64	17	0	0	82	0	1	0	0	0	1	6	57	0	0	0	63	20	0	13	0	0	33	179
Hour Total	2	264	60	0	0	326	0	2	0	0	0	2	26	207	3	0	0	236	65	2	51	0	0	118	682
11:00AM	0	56	11	0	0	67	0	0	2	0	0	2	9	39	0	0	1	48	22	1	21	0	0	44	161
11:15AM	0	74	27	0	0	101	0	0	0	0	0	0	3	51	0	0	0	54	12	0	9	0	0	21	176
11:30AM	1	73	18	0	0	92	0	1	0	0	0	1	8	48	0	0	0	56	22	1	6	0	0	29	178
11:45AM	2	63	17	0	0	82	0	0	0	0	1	0	13	61	0	0	0	74	16	1	9	0	0	26	182
Hour Total	3	266	73	0	0	342	0	1	2	0	1	3	33	199	0	0	1	232	72	3	45	0	0	120	697
12:00PM	3	71	21	0	0	95	0	0	1	0	0	1	14	59	0	0	0	73	17	0	15	0	0	32	201
12:15PM	2	59	18	0	0	79	0	0	0	0	0	0	8	63	1	0	1	72	16	0	10	0	0	26	177
12:30PM	4	60	29	0	0	93	0	1	0	0	0	1	12	53	0	0	0	65	21	0	14	0	0	35	194
12:45PM	1	79	19	0	0	99	0	0	0	0	0	0	6	52	0	0	0	58	13	2	12	0	0	27	0
Hour Total	10	269	87	0	0	366	0	1	1	0	0	2	40	227	1	0	1	268	67	2	51	0	0	120	1
1:00PM	1	76	27	0	0	104	0	0	0	0	0	0	14	62	1	0	0	77	13	0	9	0	0	22	203
1:15PM	1	81	22	0	0	104	0	0	1	0	1	1	6	57	0	0	0	63	25	1	12	0	0	38	206
1:30PM	0	41	22	0	0	63	0	0	0	0	0	0	14	76	0	0	0	90	14	2	12	0	0	28	181
1:45PM	4	78	18	0	0	100	0	0	0	0	0	0	16	60	0	0	0	76	20	0	15	0	0	35	211
Hour Total	6	276	89	0	0	371	0	0	1	0	1	1	50	255	1	0	0	306	72	3	48	0	0	123	801
2:00PM	1	76	20	0	0	97	0	0	0	0	0	0	13	54	0	0	0	67	21	0	10	0	0	31	195
2:15PM	1	71	24	0	0	96	0	0	0	0	0	0	6	58	0	0	0	64	19	0	12	0	0	31	191
2:30PM	0	72	22	0	0	94	0	0	0	0	0	0	16	87	1	0	0	104	21	0	16	0	0	37	235
2:45PM	2	92	23	0	0	117	0	2	0	0	0	2	10	81	2	0	0	93	24	0	11	0	0	35	0
Hour Total	4	311	89	0	0	404	0	2	0	0	0	2	45	280	3	0	0	328	85	0	49	0	0	134	868
3:00PM	0	96	23	0	0	119	0	1	0	0	0	1	14	73	0	0	0	87	33	0	13	0	0	46	0
3:15PM	0	95	25	0	0	120	0	0	0	0	0	0	15	52	1	0	0	68	23	1	12	0	0	36	224
3:30PM	0	97	38	0	0	135	0	0	0	0	0	0	15	93	0	0	0	108	24	0	21	0	0	45	288
3:45PM	0	95	35	0	0	130	0	0	0	0	0	0	19	81	1	0	0	101	37	0	12	0	0	49	280
Hour Total	0	383	121	0	0	504	0	1	0	0	0	1	63	299	2	0	0	364	117	1	58	0	0	176	1,045
4:00PM	1	99	32	0	0	132	0	0	0	0	0	0	10	98	1	0	0	109	43	1	13	0	0	57	298
4:15PM	4	117	32	0	0	153	0	0	0	0	0	0	12	62	0	0	0	74	26	0	20	0	0	46	273
4:30PM	1	101	26	0	0	128	0	0	0	0	0	0	15	86	0	0	0	101	43	0	17	0	0	60	289
4:45PM	2	112	32	0	0	146	0	0	0	0	0	0	15	87	0	0	2	102	35	0	12	0	0	47	295
Hour Total	8	429	122	0	0	559	0	0	0	0	0	0	52	333	1	0	2	386	147	1	62	0	0	210	1,155
5:00PM	0	110	52	0	0	162	0	0	0	0	0	0	14	93	0	0	0	107	37	1	16	0	0	54	323

Oregon Traffic Monitoring System

Volume by Approach

10/1/2022 Through 10/31/2022

5:15PM	1	128	51	0	0	180	0	0	0	0	0	0	3	90	0	0	0	93	47	0	14	0	0	61	334
5:30PM	2	120	38	0	0	160	0	1	0	0	0	1	12	94	2	0	0	108	34	3	8	0	0	45	314
5:45PM	1	85	24	0	0	110	0	0	0	0	0	0	11	76	0	0	0	87	30	0	14	0	0	44	241
Hour Total	4	443	165	0	0	612	0	1	0	0	0	1	40	353	2	0	0	395	148	4	52	0	0	204	1,212
6:00PM	2	63	34	0	0	99	0	0	0	0	0	0	7	53	1	0	0	61	23	0	8	0	0	31	191
6:15PM	0	74	18	0	0	92	0	0	0	0	0	0	7	51	0	0	0	58	25	0	8	0	0	33	183
6:30PM	0	68	25	0	0	93	0	0	0	0	0	0	8	57	0	0	0	65	25	1	11	0	0	37	195
6:45PM	0	78	23	0	0	101	1	1	0	0	0	2	13	51	1	0	0	65	20	1	8	0	0	29	197
Hour Total	2	283	100	0	0	385	1	1	0	0	0	2	35	212	2	0	0	249	93	2	35	0	0	130	766
7:00PM	1	54	18	0	0	73	0	0	0	0	0	0	13	49	0	0	0	62	9	0	8	0	0	17	152
7:15PM	0	50	17	0	0	67	0	1	0	0	0	1	8	38	0	0	0	46	12	1	8	0	0	21	135
7:30PM	2	49	18	0	0	69	0	0	0	0	0	0	9	29	0	0	0	38	9	1	3	0	0	13	0
7:45PM	0	22	20	0	0	42	0	0	0	0	1	0	4	25	2	0	0	31	11	1	3	0	0	15	88
Hour Total	3	175	73	0	0	251	0	1	0	0	1	1	34	141	2	0	0	177	41	3	22	0	0	66	1
8:00PM	0	31	7	0	0	38	0	0	0	0	0	0	4	28	1	0	0	33	7	0	2	0	0	9	80
8:15PM	0	27	9	0	0	36	0	0	0	0	0	0	5	17	0	0	0	22	9	0	5	0	0	14	72
8:30PM	1	34	10	0	0	45	0	1	0	0	0	1	3	29	0	0	0	32	10	0	9	0	0	19	97
8:45PM	0	28	19	0	0	47	0	0	0	0	0	0	5	17	1	0	0	23	6	0	4	0	0	10	80
Hour Total	1	120	45	0	0	166	0	1	0	0	0	1	17	91	2	0	0	110	32	0	20	0	0	52	329
9:00PM	0	16	13	0	0	29	0	0	0	0	0	0	6	28	1	0	0	35	1	1	4	0	0	6	0
9:15PM	0	16	11	0	0	27	1	1	0	0	0	2	5	22	1	0	0	28	3	0	1	0	0	4	61
9:30PM	0	17	9	0	0	26	0	0	0	0	0	0	2	11	1	0	0	14	3	0	2	0	0	5	45
9:45PM	0	10	6	0	0	16	0	0	0	0	0	0	5	8	0	0	0	13	1	1	0	0	0	2	31
Hour Total	0	59	39	0	0	98	1	1	0	0	0	2	18	69	3	0	0	90	8	2	7	0	0	17	207
Pedestrian	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	6	0	0	0	0	0	0	0	0
Pedestrian %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus	0	19	10	0	0	29	0	0	0	0	0	0	3	14	0	0	0	17	8	0	1	0	0	9	55
Bus %	0.0	0.4	0.7	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.0	0.0	0.0	0.4	0.6	0.0	0.1	0.0	0.0	0.5	0.5
Light truck	7	574	136	0	0	717	0	1	0	0	0	1	0	0	0	0	0	0	24	1	16	0	0	41	759
Light truck %	14.9	13.4	9.8	0.0	0.0	12.5	0.0	5.6	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.3	2.3	0.0	0.0	2.1	6.4
Bike	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	1	3
Bike %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	4.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.1	0.0
Single trailer truck (5	0	55	7	0	0	62	0	0	0	0	0	0	11	89	0	0	0	100	13	0	5	0	0	18	180
Single trailer truck (5	0.0	1.3	0.5	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.6	0.0	0.0	0.0	2.4	1.0	0.0	0.7	0.0	0.0	0.9	1.5
Single unit truck (2	0	49	24	0	0	73	0	0	0	0	0	0	6	49	0	0	0	55	10	0	4	0	0	14	142
Single unit truck (2	0.0	1.1	1.7	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.4	0.0	0.0	0.0	1.3	0.8	0.0	0.6	0.0	0.0	0.7	1.2
Single trailer truck (1.5 or	0	48	5	0	0	53	0	0	0	0	0	0	12	37	0	0	0	49	1	0	7	0	0	8	110
Single trailer truck (1.5 or	0.0	1.1	0.4	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.1	0.0	0.0	0.0	1.2	0.1	0.0	1.0	0.0	0.0	0.4	0.9
Motorcycles	0	27	8	0	0	35	0	0	0	0	0	0	6	30	0	0	0	36	4	0	2	0	0	6	77
Motorcycles or	0.0	0.6	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.9	0.0	0.0	0.0	0.9	0.3	0.0	0.3	0.0	0.0	0.3	0.7
Multi trailer truck (6	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3
Multi trailer truck (6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0
Multi trailer truck (6 or	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Multi trailer truck (6 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single unit truck (2	1	180	42	0	0	223	0	2	0	0	0	2	20	158	0	0	0	178	28	1	19	0	0	48	451
Single unit truck (2	2.1	4.2	3.0	0.0	0.0	3.9	0.0	11.1	0.0	0.0	0.0	8.0	3.5	4.5	0.0	0.0	0.0	4.4	2.2	3.3	2.7	0.0	0.0	2.4	3.8
Single trailer truck (6 or	0	108	21	0	0	129	0	0	0	0	0	0	4	65	0	0	0	69	17	0	8	0	0	25	223
Single trailer truck (6 or	0.0	2.5	1.5	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.9	0.0	0.0	0.0	1.7	1.3	0.0	1.1	0.0	0.0	1.3	1.9
Single unit truck (1.5 or	0	13	3	0	0	16	0	0	0	0	0	0	0	5	0	0	0	5	1	0	0	0	0	1	22
Single unit truck (1.5 or	0.0	0.3	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2
Car	39	3,198	1135	0	0	4,372	2	14	5	0	0	21	509	3,008	30	0	0	3,547	1,157	27	640	0	0	1,824	9,764
Car %	83.0	74.5	81.5	0.0	0.0	76.3	100.0	77.8	100.0	0.0	0.0	84.0	88.7	86.3	100.0	0.0	0.0	86.7	91.6	90.0	90.9	0.0	0.0	91.3	82.4
Multi trailer truck (2 or	0	18	1	0	0	19	0	0	0	0	0	0	2	32	0	0	0	34	0	0	0	0	0	0	53
Multi trailer truck (2 or	0.0	0.4	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

Intersection ID 999110255

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community Harrisburg

Roads ALBANY-JUNCTION CITY HWY #058 (Third Street), Territorial Street, Territorial Street

LRS ID

LRS Milepoint

Start Time	ALBANY-JUNCTION CITY HWY #058 (Third Street) Northbound						Territorial Street Eastbound						ALBANY-JUNCTION CITY HWY #058 (Third Street) Southbound						Territorial Street Westbound						Total
	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	EB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	
6:00AM	0	42	6	0	0	48	0	0	0	0	0	0	1	24	0	0	1	25	9	0	0	0	0	9	82
6:15AM	0	57	10	0	0	67	0	0	0	0	0	0	0	43	0	0	1	43	15	0	4	0	0	19	129
6:30AM	1	54	18	0	0	73	1	0	2	0	0	3	3	48	1	0	0	52	31	0	6	0	0	37	0
6:45AM	1	45	20	0	0	66	1	2	1	0	0	4	5	55	0	0	0	60	21	1	7	0	0	29	159
Hour Total	2	198	54	0	0	254	2	2	3	0	0	7	9	170	1	0	2	180	76	1	17	0	0	94	2
7:00AM	3	59	17	0	0	79	1	1	0	0	0	2	3	37	0	0	0	40	24	2	6	0	0	32	153
7:15AM	1	68	7	0	0	76	2	0	2	0	0	4	5	67	2	0	0	74	21	4	7	0	0	32	186
7:30AM	2	58	10	0	0	70	0	0	0	0	0	0	4	63	1	0	0	68	27	1	6	0	0	34	0
7:45AM	1	70	13	0	0	84	3	1	1	0	0	5	4	52	0	0	0	56	25	3	6	0	0	34	179
Hour Total	7	255	47	0	0	309	6	2	3	0	0	11	16	219	3	0	0	238	97	10	25	0	0	132	690
8:00AM	0	71	13	0	0	84	2	1	2	0	0	5	2	48	2	0	0	52	31	5	7	0	0	43	184
8:15AM	1	65	17	0	0	83	2	4	2	0	0	8	3	49	1	0	2	53	19	2	4	0	0	25	169
8:30AM	0	50	18	0	0	68	1	1	1	0	0	3	3	52	3	0	0	58	17	0	4	0	0	21	150
8:45AM	2	49	14	0	0	65	1	1	3	0	0	5	4	46	0	0	0	50	18	0	4	0	0	22	142
Hour Total	3	235	62	0	0	300	6	7	8	0	0	21	12	195	6	0	2	213	85	7	19	0	0	111	645
9:00AM	3	49	13	0	0	65	1	1	1	0	0	3	2	54	1	0	0	57	17	0	3	0	0	20	145
9:15AM	1	49	9	0	0	59	1	1	1	0	1	3	3	47	1	0	0	51	16	3	1	0	0	20	133
9:30AM	3	56	10	0	0	69	2	1	1	0	0	4	2	47	0	0	0	49	12	3	3	0	0	18	140
9:45AM	2	43	13	0	0	58	1	1	0	0	0	2	5	36	1	0	1	42	14	4	5	0	0	23	125
Hour Total	9	197	45	0	0	251	5	4	3	0	1	12	12	184	3	0	1	199	59	10	12	0	0	81	543
10:00AM	1	58	14	0	0	73	1	3	0	0	0	4	5	38	1	0	0	44	20	2	3	0	0	25	146
10:15AM	2	43	14	0	0	59	1	1	2	0	0	4	4	42	2	0	0	48	16	4	2	0	1	22	133
10:30AM	3	37	20	0	0	60	0	2	1	0	0	3	3	49	0	0	0	52	20	1	3	0	0	24	139
10:45AM	2	41	13	0	0	56	2	2	0	0	0	4	8	56	0	0	0	64	15	3	6	0	0	24	148
Hour Total	8	179	61	0	0	248	4	8	3	0	0	15	20	185	3	0	0	208	71	10	14	0	1	95	566
11:00AM	1	55	21	0	0	77	2	1	5	0	0	8	6	50	1	0	3	57	15	4	4	0	2	23	165
11:15AM	5	49	19	0	0	73	2	1	1	0	0	4	6	29	0	0	0	35	19	1	9	0	0	29	141
11:30AM	1	51	14	0	0	66	2	5	1	0	0	8	1	55	2	0	0	58	18	2	6	0	0	26	158
11:45AM	1	39	11	0	0	51	1	2	0	0	0	3	5	77	1	0	0	83	17	4	2	0	0	23	160
Hour Total	8	194	65	0	0	267	7	9	7	0	0	23	18	211	4	0	3	233	69	11	21	0	2	101	624
12:00PM	6	38	18	0	0	62	3	2	0	0	0	5	5	61	1	0	1	67	20	3	3	0	0	26	160
12:15PM	1	49	14	0	0	64	2	2	3	0	0	7	9	55	3	0	0	67	33	8	3	0	0	44	182
12:30PM	1	50	13	0	0	64	7	3	0	0	0	10	0	61	3	0	0	64	18	3	5	0	0	26	164
12:45PM	1	60	20	0	0	81	0	0	0	0	0	0	9	42	2	0	0	53	20	2	7	0	1	29	1
Hour Total	9	197	65	0	0	271	12	7	3	0	0	22	23	219	9	0	1	251	91	16	18	0	1	125	2
1:00PM	2	41	18	0	0	61	3	8	0	0	0	11	7	48	2	0	0	57	26	6	3	0	0	35	164
1:15PM	3	62	21	0	0	86	5	2	2	0	0	9	5	48	1	0	0	54	21	6	2	0	0	29	178
1:30PM	6	49	11	0	0	66	6	2	1	0	0	9	3	61	0	0	0	64	33	2	5	0	0	40	179
1:45PM	2	52	24	0	0	78	4	2	0	0	2	6	4	62	3	0	1	69	22	2	5	0	0	29	182
Hour Total	13	204	74	0	0	291	18	14	3	0	2	35	19	219	6	0	1	244	102	16	15	0	0	133	703
2:00PM	4	52	19	0	0	75	1	1	1	0	0	3	3	51	0	0	0	54	20	4	10	0	0	34	166
2:15PM	1	40	20	0	0	61	3	2	0	0	0	5	5	65	1	0	0	71	13	4	5	0	0	22	159
2:30PM	1	52	22	0	0	75	4	1	6	0	0	11	8	82	1	0	0	91	28	1	3	0	0	32	209
2:45PM	0	54	23	0	0	77	4	3	1	0	0	8	3	65	1	0	0	69	25	0	8	0	0	33	0
Hour Total	6	198	84	0	0	288	12	7	8	0	0	27	19	263	3	0	0	285	86	9	26	0	0	121	721
3:00PM	0	57	20	0	0	77	3	3	1	0	0	7	7	67	2	0	0	76	25	4	5	0	0	34	0
3:15PM	3	65	24	0	0	92	4	4	0	0	0	8	17	64	1	0	0	82	29	4	7	0	0	40	222
3:30PM	1	67	27	0	0	95	6	2	1	0	0	9	12	89	1	0	0	102	27	10	7	0	1	44	250
3:45PM	0	64	19	0	0	83	3	4	0	0	1	7	7	81	0	0	0	88	30	9	4	0	0	43	221
Hour Total	4	253	90	0	0	347	16	13	2	0	1	31	43	301	4	0	0	348	111	27	23	0	1	161	887
4:00PM	2	62	24	0	0	88	4	2	3	0	0	9	12	85	3	0	0	100	27	0	3	0	0	30	227
4:15PM	2	69	32	0	0	103	2	4	0	0	0	6	9	68	1	0	1	78	27	8	9	0	0	44	231
4:30PM	0	87	21	0	0	108	2	5	0	0	0	7	23	96	1	0	0	120	33	3	5	0	0	41	276
4:45PM	1	74	34	0	0	109	2	2	1	0	0	5	17	62	0	0	1	79	35	2	7	0	0	44	237
Hour Total	5	292	111	0	0	408	10	13	4	0	0	27	61	311	5	0	2	377	122	13	24	0	0	159	971
5:00PM	0	74	21	0	0	95	2	4	2	0	0	8	10	89	0	0	0	99	27	3	5	0	0	35	237

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

5:15PM	0	82	23	0	0	105	2	1	3	0	1	6	7	83	0	0	0	90	28	3	7	0	0	38	239
5:30PM	0	67	30	0	0	97	3	1	0	0	0	4	5	71	1	0	0	77	47	3	3	0	0	53	231
5:45PM	2	57	29	0	0	88	3	1	1	0	0	5	10	71	1	0	0	82	27	3	6	0	2	36	211
Hour Total	2	280	103	0	0	385	10	7	6	0	1	23	32	314	2	0	0	348	129	12	21	0	2	162	918
6:00PM	3	37	22	0	0	62	2	0	2	0	0	4	9	50	1	0	1	60	17	2	6	0	0	25	151
6:15PM	0	45	22	0	0	67	6	1	0	0	0	7	5	48	0	0	0	53	17	2	3	0	0	22	149
6:30PM	2	42	26	0	0	70	2	1	0	0	0	3	12	35	1	0	0	48	19	1	9	0	1	29	150
6:45PM	2	50	34	0	0	86	1	4	0	0	0	5	4	55	0	0	0	59	16	6	11	0	0	33	183
Hour Total	7	174	104	0	0	285	11	6	2	0	0	19	30	188	2	0	1	220	69	11	29	0	1	109	633
7:00PM	0	33	12	0	0	45	2	1	2	0	0	5	4	39	0	0	2	43	10	0	1	0	0	11	104
7:15PM	1	23	15	0	0	39	2	0	0	0	0	2	4	35	0	0	1	39	13	2	3	0	0	18	98
7:30PM	0	24	17	0	1	41	1	1	1	0	0	3	8	31	1	0	0	40	12	0	2	0	0	14	1
7:45PM	1	22	10	0	0	33	0	0	0	0	0	0	5	22	0	0	0	27	8	2	1	0	0	11	71
Hour Total	2	102	54	0	1	158	5	2	3	0	0	10	21	127	1	0	3	149	43	4	7	0	0	54	4
8:00PM	0	16	9	0	0	25	0	0	0	0	0	0	1	16	0	0	1	17	6	1	2	0	1	9	51
8:15PM	1	22	12	0	0	35	2	1	0	0	0	3	1	13	2	0	0	16	5	0	0	0	0	5	59
8:30PM	0	24	12	0	0	36	0	0	0	0	0	0	1	28	0	0	0	29	4	0	1	0	0	5	70
8:45PM	0	17	11	0	0	28	0	2	0	0	0	2	5	18	0	0	0	23	3	0	3	0	0	6	59
Hour Total	1	79	44	0	0	124	2	3	0	0	0	5	8	75	2	0	1	85	18	1	6	0	1	25	239
9:00PM	0	17	3	0	0	20	0	0	0	0	0	0	3	31	0	0	0	34	4	1	0	0	0	5	0
9:15PM	0	11	8	0	0	19	0	0	0	0	0	0	2	19	1	0	0	22	5	1	1	0	0	7	48
9:30PM	0	14	5	0	1	19	1	0	0	0	0	1	1	9	0	0	0	10	4	0	1	0	0	5	35
9:45PM	1	3	7	0	0	11	0	0	0	0	0	0	2	10	0	0	0	12	1	0	0	0	0	1	24
Hour Total	1	45	23	0	1	69	1	0	0	0	0	1	8	69	1	0	0	78	14	2	2	0	0	18	166
Pedestrian	0	0	0	0	2	0	0	0	0	0	5	0	0	0	0	0	17	0	0	0	0	0	9	0	0
Pedestrian %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Bus	0	22	2	0	0	24	0	0	0	0	0	0	1	12	1	0	0	14	2	1	1	0	0	4	42
Bus %	0.0	0.7	0.2	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	1.8	0.0	0.0	0.4	0.2	0.6	0.4	0.0	0.0	0.2	0.4
Light truck	5	250	212	0	0	467	10	11	7	0	0	28	48	574	9	0	0	631	217	13	39	0	0	269	1,395
Light truck %	5.7	8.1	19.5	0.0	0.0	11.0	7.9	10.6	12.1	0.0	0.0	9.7	13.7	17.7	16.4	0.0	0.0	17.3	17.5	8.1	14.0	0.0	0.0	16.0	14.1
Bike	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	1	0	0	0	1	3
Bike %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.1	0.0
Single trailer trailer (5	0	57	9	0	0	66	1	0	0	0	0	1	5	58	0	0	0	63	4	0	2	0	0	6	136
Single trailer trailer (5	0.0	1.8	0.8	0.0	0.0	1.6	0.8	0.0	0.0	0.0	0.0	0.3	1.4	1.8	0.0	0.0	0.0	1.7	0.3	0.0	0.7	0.0	0.0	0.4	1.4
Single unit truck (2	33	27	2	0	0	62	1	0	0	0	0	1	3	44	2	0	0	49	6	0	4	0	0	10	122
Single unit truck (2	37.9	0.9	0.2	0.0	0.0	1.5	0.8	0.0	0.0	0.0	0.0	0.3	0.9	1.4	3.6	0.0	0.0	1.3	0.5	0.0	1.4	0.0	0.0	0.6	1.2
Single trailer trailer (A or	0	57	5	0	0	62	0	0	0	0	0	0	0	18	0	0	0	18	0	0	0	0	0	0	80
Single trailer trailer (A or	0.0	1.8	0.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Motorcycles	3	9	4	0	0	16	1	0	1	0	0	2	2	16	0	0	0	18	0	1	2	0	0	3	39
Motorcycles of	3.4	0.3	0.4	0.0	0.0	0.4	0.8	0.0	1.7	0.0	0.0	0.7	0.6	0.5	0.0	0.0	0.0	0.5	0.0	0.6	0.7	0.0	0.0	0.2	0.4
Multi trailer trailer (6	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	4
Multi trailer trailer (6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi trailer trailer (6 or	0	17	2	0	0	19	0	0	0	0	0	0	0	2	0	0	0	2	0	0	1	0	0	1	22
Multi trailer trailer (6 or	0.0	0.6	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	0.1	0.2
Single unit truck (2	0	111	17	0	0	128	1	0	0	0	0	1	8	104	0	0	0	112	26	1	7	0	0	34	275
Single unit truck (2	0.0	3.6	1.6	0.0	0.0	3.0	0.8	0.0	0.0	0.0	0.0	0.3	2.3	3.2	0.0	0.0	0.0	3.1	2.1	0.6	2.5	0.0	0.0	2.0	2.8
Single trailer trailer (6 or	0	97	10	0	0	107	0	0	0	0	0	0	4	100	0	0	0	104	2	0	2	0	0	4	215
Single trailer trailer (6 or	0.0	3.1	0.9	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	1.1	3.1	0.0	0.0	0.0	2.8	0.2	0.0	0.7	0.0	0.0	0.2	2.2
Single unit truck (A or	0	12	1	0	0	13	0	0	1	0	0	1	0	9	0	0	0	9	4	0	0	0	0	4	27
Single unit truck (A or	0.0	0.4	0.1	0.0	0.0	0.3	0.0	0.0	1.7	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.2	0.3
Car	46	2,423	822	0	0	3,291	113	93	49	0	0	255	274	2,277	43	0	0	2,594	977	143	217	0	0	1,337	7,477
Car %	52.9	78.6	75.7	0.0	0.0	77.3	89.0	89.4	84.5	0.0	0.0	88.2	78.1	70.1	78.2	0.0	0.0	71.0	78.7	89.4	77.8	0.0	0.0	79.5	75.7
Multi trailer truck (7 or	0	0	0	0	0	0	0	0	0	0	0	0	5	31	0	0	0	36	4	0	4	0	0	8	44
Multi trailer truck (7 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.0	0.0	0.0	0.0	1.0	0.3	0.0	1.4	0.0	0.0	0.5	0.4

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

Intersection ID 999110256

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community Harrisburg

Roads ALBANY-JUNCTION CITY HWY #058 (Third Street), Peoria Road

LRS ID

LRS Milepoint

	ALBANY-JUNCTION CITY HWY #058 (Third Street)							Peoria Road								ALBANY-JUNCTION CITY HWY #058 (Third Street)								
	Northeastbound							Eastbound								Southwestbound								
Start Time	Left	Hard Left	Thru	Right	U-Turn	Ped	NEB Total	Left	Bear Left	Thru	Right	Hard Right	U-Turn	Ped	EB Total	Left	Thru	Right	Bear Right	U-Turn	Ped	SWB Total	Total	
6:00AM	0	2	32	0	0	0	34	0	0	0	0	5	0	0	5	0	19	0	0	0	0	19	58	
6:15AM	0	27	35	0	0	0	62	0	0	0	0	10	0	0	10	0	30	0	0	0	0	30	102	
6:30AM	0	20	38	0	0	0	58	0	1	0	0	8	0	0	9	0	43	0	1	0	0	44	111	
6:45AM	0	17	36	0	0	0	53	0	0	0	0	17	0	0	17	0	46	0	0	0	0	46	116	
Hour Total	0	66	141	0	0	0	207	0	1	0	0	40	0	0	41	0	138	0	1	0	0	139	387	
7:00AM	0	23	39	0	0	0	62	0	0	0	0	7	0	0	7	0	30	0	0	0	0	30	99	
7:15AM	0	32	50	0	0	0	82	0	0	0	0	17	0	0	17	0	54	0	0	0	0	54	153	
7:30AM	0	21	40	0	0	0	61	0	0	0	0	12	0	0	12	0	49	0	0	0	0	49	122	
7:45AM	0	27	49	0	0	0	76	0	0	0	0	18	0	0	18	0	36	0	0	0	0	36	130	
Hour Total	0	103	178	0	0	0	281	0	0	0	0	54	0	0	54	0	169	0	0	0	0	169	504	
8:00AM	0	27	48	0	0	0	75	0	0	0	0	16	0	0	16	0	35	0	1	0	0	36	127	
8:15AM	0	23	46	0	0	0	69	0	0	0	0	15	0	0	15	0	34	0	1	0	0	35	119	
8:30AM	0	18	30	0	0	0	48	0	0	0	0	18	0	0	18	0	33	0	1	0	0	34	100	
8:45AM	0	16	35	0	0	0	51	0	0	0	0	11	0	0	11	0	30	0	1	0	0	31	0	
Hour Total	0	84	159	0	0	0	243	0	0	0	0	60	0	0	60	0	132	0	4	0	0	136	439	
9:00AM	0	14	39	0	0	0	53	0	1	0	0	17	0	0	18	0	36	0	0	0	0	36	107	
9:15AM	0	20	27	0	0	0	47	0	0	0	0	16	0	0	16	0	36	0	0	0	0	36	99	
9:30AM	0	16	38	0	0	0	54	0	1	0	0	12	0	0	13	0	34	0	1	0	0	35	102	
9:45AM	0	17	38	0	0	0	55	0	0	0	0	9	0	0	9	0	33	0	0	0	0	33	97	
Hour Total	0	67	142	0	0	0	209	0	2	0	0	54	0	0	56	0	139	0	1	0	0	140	405	
10:00AM	0	15	42	0	0	0	57	0	0	0	0	12	0	0	12	0	26	0	0	0	0	26	95	
10:15AM	0	14	35	0	0	0	49	0	0	0	0	11	0	0	11	0	37	0	0	0	0	37	97	
10:30AM	0	11	30	0	0	0	41	0	2	0	0	13	0	0	15	0	44	0	1	0	0	45	101	
10:45AM	0	17	31	0	0	0	48	0	0	0	0	9	0	0	9	0	45	0	1	0	0	46	103	
Hour Total	0	57	138	0	0	0	195	0	2	0	0	45	0	0	47	0	152	0	2	0	0	154	396	
11:00AM	0	16	40	0	0	0	56	0	1	0	0	20	0	0	21	0	29	0	0	0	0	29	106	
11:15AM	0	19	40	0	0	0	59	0	0	0	0	10	0	0	10	0	23	0	1	0	0	24	93	
11:30AM	0	20	37	0	0	0	57	0	0	0	0	21	0	0	21	0	34	0	0	0	0	34	112	
11:45AM	0	15	28	0	0	0	43	0	4	0	0	30	1	0	35	0	49	0	1	0	0	50	128	
Hour Total	0	70	145	0	0	0	215	0	5	0	0	81	1	0	87	0	135	0	2	0	0	137	439	
12:00PM	0	16	33	0	0	0	49	0	0	0	0	23	0	0	23	0	31	0	0	0	0	31	103	
12:15PM	0	14	34	0	0	0	48	0	0	0	0	21	0	0	21	0	39	0	2	0	0	41	110	
12:30PM	0	18	40	0	0	0	58	0	0	0	0	15	0	0	15	0	45	0	0	0	0	45	118	
12:45PM	0	21	41	0	0	0	62	0	0	0	0	24	0	0	24	0	25	0	0	0	0	25	111	
Hour Total	0	69	148	0	0	0	217	0	0	0	0	83	0	0	83	0	140	0	2	0	0	142	442	
1:00PM	0	12	34	0	0	0	46	0	0	0	0	13	0	0	13	0	31	0	1	0	0	32	91	
1:15PM	0	22	38	0	0	0	60	0	0	0	0	17	0	0	17	0	35	0	0	0	0	35	112	
1:30PM	0	17	39	0	0	0	56	0	1	0	0	21	0	0	22	0	44	0	0	0	0	44	122	
1:45PM	0	16	41	0	0	0	57	0	0	0	0	27	0	0	27	0	40	0	3	0	0	43	127	
Hour Total	0	67	152	0	0	0	219	0	1	0	0	78	0	0	79	0	150	0	4	0	0	154	452	
2:00PM	0	22	41	0	0	0	63	0	0	0	0	15	0	0	15	0	42	0	0	0	0	42	120	
2:15PM	0	20	34	0	0	0	54	0	0	0	0	13	0	0	13	0	52	0	1	0	0	53	120	
2:30PM	0	14	42	0	0	0	56	0	0	0	0	26	0	0	26	0	45	0	3	0	0	48	130	
2:45PM	0	21	42	0	0	0	63	0	2	0	0	16	0	0	18	0	42	0	2	0	0	44	125	
Hour Total	0	77	159	0	0	0	236	0	2	0	0	70	0	0	72	0	181	0	6	0	0	187	495	
3:00PM	0	11	55	0	0	0	66	0	0	0	0	25	0	0	25	0	43	0	0	0	0	43	134	
3:15PM	0	20	47	0	0	0	67	0	0	0	0	24	0	0	24	0	47	0	0	0	0	47	138	
3:30PM	0	25	51	0	0	0	76	0	0	0	0	28	0	0	28	0	66	0	1	0	0	67	171	
3:45PM	0	15	52	0	0	0	67	0	1	0	0	31	0	0	32	0	55	0	0	0	0	55	0	
Hour Total	0	71	205	0	0	0	276	0	1	0	0	108	0	0	109	0	211	0	1	0	0	212	597	
4:00PM	0	15	50	0	0	0	65	0	1	0	0	32	0	0	33	0	64	0	0	0	0	64	162	
4:15PM	0	22	57	0	0	0	79	0	0	0	0	26	0	0	26	0	43	0	1	0	0	44	149	
4:30PM	0	30	65	0	0	0	95	0	0	0	0	50	0	0	50	0	58	0	0	0	0	58	203	
4:45PM	0	21	59	0	0	0	80	0	1	0	0	25	0	0	26	0	42	0	0	0	0	42	148	
Hour Total	0	88	231	0	0	0	319	0	2	0	0	133	0	0	135	0	207	0	1	0	0	208	662	

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

5:00PM	0	21	53	0	0	0	74	0	1	0	0	26	0	0	27	0	66	0	1	0	0	67	168
5:15PM	0	27	6	0	0	0	33	0	1	0	0	21	0	0	22	0	56	0	9	0	0	65	120
5:30PM	0	15	51	0	0	0	66	0	1	0	0	25	0	0	26	0	50	0	0	0	0	50	0
5:45PM	0	22	36	0	0	0	58	0	0	0	0	23	0	0	23	0	48	0	0	0	0	48	129
Hour Total	0	85	146	0	0	0	231	0	3	0	0	95	0	0	98	0	220	0	10	0	0	230	559
6:00PM	0	34	25	0	0	0	59	0	0	0	0	19	0	0	19	0	34	0	1	0	0	35	113
6:15PM	0	25	22	0	0	0	47	0	0	0	0	20	0	0	20	0	25	0	1	0	0	26	93
6:30PM	0	22	24	0	0	0	46	0	0	0	0	15	0	0	15	0	25	0	0	0	0	25	86
6:45PM	0	25	31	0	0	0	56	0	0	0	0	17	0	0	17	0	42	0	0	0	0	42	115
Hour Total	0	106	102	0	0	0	208	0	0	0	0	71	0	0	71	0	126	0	2	0	0	128	407
7:00PM	0	7	24	0	0	0	31	0	0	0	0	12	0	0	12	0	21	0	0	0	0	21	64
7:15PM	0	7	15	0	0	0	22	0	0	0	0	14	0	0	14	0	19	0	0	0	0	19	55
7:30PM	0	8	16	0	0	0	24	0	0	0	0	11	0	0	11	0	22	0	0	0	0	22	57
7:45PM	0	2	20	0	0	0	22	0	0	0	0	17	0	0	17	0	9	0	0	0	0	9	48
Hour Total	0	24	75	0	0	0	99	0	0	0	0	54	0	0	54	0	71	0	0	0	0	71	224
8:00PM	0	2	17	0	0	0	19	0	0	0	0	1	0	0	1	0	16	0	0	0	0	16	36
8:15PM	0	8	12	0	0	0	20	0	0	0	0	1	0	0	1	0	13	0	0	0	0	13	34
8:30PM	0	3	19	0	0	0	22	0	0	0	0	9	0	0	9	0	17	0	0	0	0	17	48
8:45PM	0	3	13	0	0	0	16	0	0	0	0	23	0	0	23	0	2	0	0	0	0	2	41
Hour Total	0	16	61	0	0	0	77	0	0	0	0	34	0	0	34	0	48	0	0	0	0	48	159
9:00PM	0	2	14	0	0	0	16	0	0	0	0	19	0	0	19	0	14	0	0	0	0	14	0
9:15PM	0	2	9	0	0	0	11	0	0	0	0	9	0	0	9	0	10	0	0	0	0	10	30
9:30PM	0	8	6	0	0	0	14	0	1	0	0	3	0	0	4	0	7	0	0	0	0	7	25
9:45PM	0	0	5	0	0	0	5	0	0	0	0	2	0	0	2	0	10	0	0	0	0	10	17
Hour Total	0	12	34	0	0	0	46	0	1	0	0	33	0	0	34	0	41	0	0	0	0	41	0
App Total	0	1062	2,216	0	0	-	3,278	0	20	0	0	1093	1	-	1,114	0	2,260	0	36	0	-	2,296	6,688
App %	0.0	32.4	67.6	0.0	0.0	-	-	0.0	1.8	0.0	0.0	98.1	0.1	-	-	0.0	98.4	0.0	1.6	0.0	-	-	-
Total %	0.0	15.9	33.1	0.0	0.0	-	49.0	0.0	0.3	0.0	0.0	16.3	0.0	-	16.7	0.0	33.8	0.0	0.5	0.0	-	34.3	-
Bike	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bike %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single trailer truck (5 or	0	2	51	0	0	0	53	0	0	0	0	3	0	0	3	0	54	0	0	0	0	54	110
Single trailer truck (5	0.0	0.2	2.3	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.3	0.0	2.4	0.0	0.0	0.0	0.0	2.4	1.6
Single unit truck (2	0	5	20	0	0	0	25	0	0	0	0	11	0	0	11	0	28	0	0	0	0	28	64
Single unit truck (2	0.0	0.5	0.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	10.1	0.0	0.0	1.0	0.0	1.2	0.0	0.0	0.0	0.0	1.2	1.0
Multi trailer truck (2 or	0	1	23	0	0	0	24	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	33
Multi trailer truck (2 or	0.0	0.1	1.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0.5
Motorcycles	0	7	11	0	0	0	18	0	0	0	0	7	0	0	7	0	13	0	0	0	0	13	38
Motorcycles %	0.0	0.7	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0	0.0	0.6	0.6
Multi trailer truck (5 or	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Multi trailer truck (5 or	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Single unit truck (2	0	46	131	0	0	0	177	0	3	0	0	22	0	0	25	0	107	0	3	0	0	110	312
Single unit truck (2	0.0	4.3	5.9	0.0	0.0	0.0	5.4	0.0	15.0	0.0	0.0	20.1	0.0	0.0	2.2	0.0	4.7	0.0	8.3	0.0	0.0	4.8	4.7
Car	0	984	1,850	0	0	0	2,834	0	16	0	0	892	1	0	909	0	1,637	0	23	0	0	1,660	5,403
Car %	0.0	92.7	83.5	0.0	0.0	0.0	86.5	0.0	80.0	0.0	0.0	81.6	100.0	0.0	81.6	0.0	72.4	0.0	63.9	0.0	0.0	72.3	80.8
Single trailer truck (6 or	0	8	73	0	0	0	81	0	0	0	0	8	0	0	8	0	132	0	1	0	0	133	222
Single trailer truck (6 or	0.0	0.8	3.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	7.3	0.0	0.0	0.7	0.0	5.8	0.0	2.8	0.0	0.0	5.8	3.3
Single trailer truck (8 or	0	1	25	0	0	0	26	0	0	0	0	3	0	0	3	0	6	0	1	0	0	7	36
Single trailer truck (4 or	0.0	0.1	1.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.3	0.0	0.3	0.0	2.8	0.0	0.0	0.3	0.5
Bus	0	7	12	0	0	0	19	0	0	0	0	3	0	0	3	0	9	0	0	0	0	9	31
Bus %	0.0	0.7	0.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0.5
Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light truck	0	0	4	0	0	0	4	0	1	0	0	139	0	0	140	0	258	0	8	0	0	266	410
Light truck %	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	5.0	0.0	0.0	127.2	0.0	0.0	12.6	0.0	11.4	0.0	22.2	0.0	0.0	11.6	6.1
Multi trailer truck (6	0	1	5	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Multi trailer truck (6	0.0	0.1	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Single unit truck (4 or	0	0	6	0	0	0	6	0	0	0	0	5	0	0	5	0	7	0	0	0	0	7	18
Single unit truck (4 or	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3

Oregon Traffic Monitoring System

Volume by Approach

10/1/2022 Through 10/31/2022

Intersection ID 999110257

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community Harrisburg

Roads ALBANY-JUNCTION CITY HWY. #58 (Third Street), ALBANY-JUNCTION CITY HWY. #58(Third Street),

LRS ID

LRS Milepoint

Start Time	ALBANY-JUNCTION CITY HWY. #58 (Third Street) Northbound						Smith Street Eastbound						ALBANY-JUNCTION CITY HWY. #58(Third Street) Southbound						Smith Street Westbound						Total
	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	EB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	
6:00AM	0	47	1	0	0	48	0	0	0	0	0	0	2	34	0	0	0	36	4	0	2	0	0	6	90
6:15AM	0	67	2	0	0	69	0	0	1	0	0	1	1	60	0	0	0	61	5	0	1	0	1	6	137
6:30AM	1	72	1	0	0	74	0	0	1	0	0	1	1	77	1	0	0	79	8	0	2	0	2	10	2
6:45AM	1	61	0	0	0	62	0	0	1	0	0	1	2	79	2	0	0	83	3	2	2	0	0	7	153
Hour Total	2	247	4	0	0	253	0	0	3	0	0	3	6	250	3	0	0	259	20	2	7	0	3	29	3
7:00AM	5	78	3	0	0	86	0	0	2	0	1	2	1	59	0	0	0	60	2	0	1	0	0	3	151
7:15AM	1	71	7	0	0	79	2	1	0	0	2	3	5	81	4	0	0	90	7	0	1	0	0	8	180
7:30AM	0	67	0	0	0	67	1	1	0	0	1	2	3	87	3	0	0	93	6	0	2	0	0	8	1
7:45AM	1	88	5	0	0	94	0	0	2	0	4	2	2	78	2	0	0	82	10	0	2	0	0	12	190
Hour Total	7	304	15	0	0	326	3	2	4	0	8	9	11	305	9	0	0	325	25	0	6	0	0	31	691
8:00AM	3	75	7	0	0	85	0	1	4	0	0	5	8	69	1	0	1	78	18	2	7	0	1	27	195
8:15AM	3	81	12	0	0	96	3	1	2	0	1	6	2	68	2	0	0	72	7	0	4	0	0	11	185
8:30AM	3	64	3	0	0	70	2	0	0	0	1	2	1	65	1	0	0	67	12	1	3	0	0	16	155
8:45AM	1	65	2	0	0	68	2	1	2	0	0	5	0	61	0	0	0	61	4	3	1	0	0	8	142
Hour Total	10	285	24	0	0	319	7	3	8	0	2	18	11	263	4	0	1	278	41	6	15	0	1	62	677
9:00AM	2	66	1	0	0	69	2	0	2	0	0	4	5	65	3	0	0	73	1	0	0	0	0	1	147
9:15AM	4	59	2	0	0	65	1	1	4	0	0	6	0	59	1	0	0	60	0	1	1	0	0	2	133
9:30AM	0	68	0	0	0	68	1	1	4	0	0	6	3	58	2	0	0	63	5	0	1	0	0	6	143
9:45AM	3	60	1	0	0	64	0	3	1	0	0	4	0	47	1	0	0	48	5	1	2	0	1	8	124
Hour Total	9	253	4	0	0	266	4	5	11	0	0	20	8	229	7	0	0	244	11	2	4	0	1	17	547
10:00AM	2	73	3	0	0	78	0	1	1	0	0	2	3	53	5	0	3	61	3	0	1	0	1	4	145
10:15AM	2	63	1	0	0	66	2	1	6	0	0	9	2	61	0	0	2	63	4	1	3	0	3	8	146
10:30AM	3	60	3	0	0	66	1	0	3	0	0	4	2	65	5	0	3	72	6	3	1	0	4	10	152
10:45AM	2	60	8	0	0	70	2	1	3	0	0	6	2	69	3	0	1	74	4	0	1	0	1	5	155
Hour Total	9	256	15	0	0	280	5	3	13	0	0	21	9	248	13	0	9	270	17	4	6	0	9	27	598
11:00AM	1	73	3	0	0	77	0	0	2	0	1	2	6	59	0	0	0	65	8	0	1	0	0	9	153
11:15AM	2	76	8	0	0	86	2	0	2	0	0	4	2	50	1	0	0	53	2	4	3	0	0	9	152
11:30AM	5	69	5	0	0	79	0	3	0	0	2	3	2	72	4	0	0	78	3	1	2	0	0	6	166
11:45AM	2	55	5	0	0	62	1	0	1	0	1	2	6	88	0	0	1	94	5	0	2	0	0	7	165
Hour Total	10	273	21	0	0	304	3	3	5	0	4	11	16	269	5	0	1	290	18	5	8	0	0	31	636
12:00PM	3	70	6	0	0	79	0	1	2	0	0	3	5	77	2	0	1	84	6	0	2	0	0	8	174
12:15PM	4	68	7	0	0	79	1	0	0	0	0	1	5	84	0	0	0	89	9	0	2	0	0	11	180
12:30PM	2	65	7	0	0	74	1	3	1	0	0	5	6	75	5	0	1	86	2	1	0	0	0	3	168
12:45PM	3	80	9	0	0	92	1	1	1	0	0	3	3	65	0	0	1	68	3	0	4	0	0	7	1
Hour Total	12	283	29	0	0	324	3	5	4	0	0	12	19	301	7	0	3	327	20	1	8	0	0	29	3
1:00PM	2	68	7	0	0	77	1	1	0	0	0	2	2	73	1	0	0	76	8	1	1	0	0	10	165
1:15PM	6	86	4	0	0	96	1	1	1	0	0	3	4	73	1	0	0	78	2	1	2	0	0	5	182
1:30PM	4	74	4	0	0	82	0	0	3	0	0	3	1	91	1	0	0	93	4	3	0	0	0	7	185
1:45PM	5	86	3	0	0	94	2	1	0	0	0	3	1	80	3	0	3	84	5	1	1	0	0	7	188
Hour Total	17	314	18	0	0	349	4	3	4	0	0	11	8	317	6	0	3	331	19	6	4	0	0	29	720
2:00PM	5	71	4	0	0	80	2	0	2	0	0	4	1	69	6	0	2	76	8	6	3	0	0	17	177
2:15PM	4	71	6	0	0	81	1	1	1	0	0	3	5	74	3	0	1	82	4	2	2	0	0	8	174
2:30PM	2	75	2	0	0	79	2	3	3	0	0	8	8	111	2	0	0	121	3	4	0	0	0	7	215
2:45PM	3	80	11	0	0	94	3	1	6	0	0	10	4	90	2	0	0	96	11	2	3	0	0	16	0
Hour Total	14	297	23	0	0	334	8	5	12	0	0	25	18	344	13	0	3	375	26	14	8	0	0	48	782
3:00PM	4	78	6	0	0	88	1	3	10	0	0	14	2	88	2	0	1	92	1	2	2	0	0	5	1
3:15PM	4	93	11	0	0	108	2	1	2	0	0	5	3	89	4	0	0	96	3	2	2	0	0	7	216
3:30PM	5	100	12	0	0	117	2	3	3	0	0	8	8	105	0	0	0	113	12	1	8	0	0	21	259
3:45PM	3	84	7	0	0	94	1	1	4	0	0	6	5	108	5	0	1	118	13	2	4	0	0	19	237
Hour Total	16	355	36	0	0	407	6	8	19	0	0	33	18	390	11	0	2	419	29	7	16	0	0	52	911
4:00PM	6	100	10	0	2	116	1	3	5	0	0	9	0	112	1	0	0	113	10	4	4	0	0	18	256
4:15PM	4	117	8	0	3	129	1	0	6	0	0	7	6	84	6	0	0	96	5	2	3	0	0	10	242
4:30PM	0	114	10	0	0	124	3	2	2	0	0	7	4	119	1	0	0	124	7	5	6	0	0	18	273
4:45PM	2	109	8	0	0	119	2	4	4	0	0	10	4	100	1	0	0	105	7	4	3	0	0	14	248
Hour Total	12	440	36	0	5	488	7	9	17	0	0	33	14	415	9	0	0	438	29	15	16	0	0	60	1,019
5:00PM	4	93	14	0	0	111	2	3	7	0	0	12	8	105	2	0	0	115	14	2	5	0	0	21	259

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

5:15PM	7	109	24	0	0	140	1	1	1	0	0	3	6	100	1	0	0	107	9	0	1	0	0	10	260
5:30PM	3	102	13	0	2	118	0	1	5	0	0	6	7	112	1	0	0	120	8	2	2	0	0	12	256
5:45PM	5	86	7	0	0	98	1	1	1	0	1	3	4	96	4	0	0	104	11	2	0	0	0	13	218
Hour Total	19	390	58	0	2	467	4	6	14	0	1	24	25	413	8	0	0	446	42	6	8	0	0	56	993
6:00PM	4	63	10	0	1	77	1	1	1	0	0	3	5	66	1	0	0	72	8	1	1	0	0	10	162
6:15PM	4	65	6	0	1	75	0	5	1	0	0	6	6	55	1	0	0	62	12	1	2	0	0	15	158
6:30PM	3	72	8	0	2	83	1	1	2	0	0	4	1	50	2	0	1	53	25	1	5	0	0	31	171
6:45PM	6	73	7	0	1	86	4	0	7	0	2	11	2	65	2	0	1	69	4	1	4	0	1	9	175
Hour Total	17	273	31	0	5	321	6	7	11	0	2	24	14	236	6	0	2	256	49	4	12	0	1	65	666
7:00PM	1	47	11	0	0	59	0	0	8	0	0	8	3	58	0	0	0	61	7	0	2	0	0	9	137
7:15PM	4	37	9	0	0	50	2	2	2	0	0	6	5	84	3	0	0	92	1	2	2	0	0	5	153
7:30PM	0	43	4	0	0	47	0	0	0	0	0	0	1	43	0	0	0	44	1	0	1	0	0	2	0
7:45PM	0	28	1	0	0	29	2	1	2	0	0	5	1	29	2	0	0	32	3	0	0	0	0	3	69
Hour Total	5	155	25	0	0	185	4	3	12	0	0	19	10	214	5	0	0	229	12	2	5	0	0	19	0
8:00PM	4	27	1	0	0	32	1	3	2	0	0	6	0	25	0	0	0	25	2	0	3	0	0	5	68
8:15PM	0	29	0	0	1	29	1	2	2	0	0	5	0	18	0	0	0	18	0	2	1	0	0	3	55
8:30PM	1	36	2	0	0	39	1	2	0	0	0	3	1	32	0	0	0	33	1	0	1	0	0	2	77
8:45PM	0	29	1	0	1	30	0	0	1	0	0	1	1	23	0	0	0	24	1	0	0	0	0	1	56
Hour Total	5	121	4	0	2	130	3	7	5	0	0	15	2	98	0	0	0	100	4	2	5	0	0	11	256
9:00PM	0	16	1	0	0	17	4	2	1	0	0	7	2	32	0	0	1	34	2	0	0	0	0	2	1
9:15PM	0	16	0	0	1	16	1	0	0	0	0	1	0	25	0	0	0	25	2	2	0	0	0	4	46
9:30PM	1	19	2	0	0	22	0	0	1	0	0	1	1	12	1	0	0	14	1	0	1	0	0	2	39
9:45PM	0	11	1	0	0	12	0	0	1	0	0	1	0	12	0	0	0	12	1	0	0	0	0	1	26
Hour Total	1	62	4	0	1	67	5	2	3	0	0	10	3	81	1	0	1	85	6	2	1	0	0	9	171
Pedestrian	0	0	0	0	15	0	0	0	0	0	17	0	0	0	0	0	25	0	0	0	0	0	15	0	0
Pedestrian %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Bus	0	13	5	0	0	18	0	0	1	0	0	1	0	8	0	0	0	8	1	0	1	0	0	2	29
Bus %	0.0	0.3	1.4	0.0	0.0	0.4	0.0	0.0	0.7	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.2	0.3	0.0	0.8	0.0	0.0	0.3	0.3
Light truck	14	289	47	0	0	350	2	4	6	0	0	12	25	651	20	0	0	696	75	16	19	0	0	110	1,168
Light truck %	8.5	6.7	13.5	0.0	0.0	7.3	2.8	5.6	4.1	0.0	0.0	4.2	13.0	14.9	18.7	0.0	0.0	14.9	20.4	20.5	14.7	0.0	0.0	19.1	11.3
Bike	3	0	1	0	0	4	0	0	0	0	0	0	2	0	0	0	0	2	1	3	0	0	0	4	10
Bike %	1.8	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.3	3.8	0.0	0.0	0.0	0.7	0.1	
Single trailer truck (5	0	55	0	0	0	55	0	0	0	0	0	0	0	74	0	0	0	74	1	0	0	0	0	1	130
Single trailer truck (5	0.0	1.3	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	1.6	0.3	0.0	0.0	0.0	0.0	0.2	1.3
Single unit truck (2	0	65	1	0	0	66	0	1	0	0	0	1	1	44	0	0	0	45	0	1	0	0	0	1	113
Single unit truck (2	0.0	1.5	0.3	0.0	0.0	1.4	0.0	1.4	0.0	0.0	0.0	0.3	0.5	1.0	0.0	0.0	0.0	1.0	0.0	1.3	0.0	0.0	0.0	0.2	1.1
Single trailer truck (3 ax.	0	14	0	0	0	14	0	0	0	0	0	0	0	15	0	0	0	15	0	0	0	0	0	0	29
Single trailer truck (3 ax.	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Motorcycles	0	16	3	0	0	19	0	0	3	0	0	3	2	15	0	0	0	17	5	2	0	0	0	7	46
Motorcycles %	0.0	0.4	0.9	0.0	0.0	0.4	0.0	0.0	2.1	0.0	0.0	1.0	1.0	0.3	0.0	0.0	0.0	0.4	1.4	2.6	0.0	0.0	0.0	1.2	0.4
Multi trailer truck (6	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2
Multi trailer truck (6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi trailer truck (5 or	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2
Multi trailer truck (5 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single unit truck (2	7	152	2	0	0	161	0	0	10	0	0	10	2	127	1	0	0	130	6	0	5	0	0	11	312
Single unit truck (2	4.2	3.5	0.6	0.0	0.0	3.3	0.0	0.0	6.9	0.0	0.0	3.5	1.0	2.9	0.9	0.0	0.0	2.8	1.6	0.0	3.9	0.0	0.0	1.9	3.0
Single trailer truck (3	0	101	0	0	0	101	0	0	0	0	0	0	0	94	0	0	0	94	0	0	0	0	0	0	195
Single trailer truck (3 or	0.0	2.3	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Single unit truck (3 or	0	21	1	0	0	22	1	1	0	0	0	2	0	22	0	0	0	22	0	0	0	0	0	0	46
Single unit truck (3 or	0.0	0.5	0.3	0.0	0.0	0.5	1.4	1.4	0.0	0.0	0.0	0.7	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Car	141	3,549	287	0	0	3,977	69	65	125	0	0	259	160	3,294	86	0	0	3,540	279	56	104	0	0	439	8,215
Car %	85.5	82.4	82.7	0.0	0.0	82.5	95.8	91.5	86.2	0.0	0.0	89.9	83.3	75.3	80.4	0.0	0.0	75.8	75.8	71.8	80.6	0.0	0.0	76.3	79.3
Multi trailer truck (7 or	0	33	0	0	0	33	0	0	0	0	0	0	0	25	0	0	0	25	0	0	0	0	0	0	58
Multi trailer truck (7 or	0.0	0.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.6

Oregon Traffic Monitoring System

Volume by Approach

10/1/2022 Through 10/31/2022

Intersection ID 999110258

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn

Community Harrisburg

Roads 7th Street, Territorial Street, Territorial Street

LRS ID

LRS Milepoint

Start Time	7th Street Northbound						Territorial Street Eastbound						7th Street Southbound						Territorial Street Westbound						Total
	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	EB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	
6:00AM	0	0	0	0	0	0	3	8	0	0	0	11	0	2	11	0	0	13	0	6	0	0	0	6	30
6:15AM	0	0	0	0	0	0	6	2	0	0	0	8	2	3	11	0	0	16	0	7	1	0	0	8	32
6:30AM	0	1	0	0	0	1	20	1	0	0	0	21	1	3	28	0	0	32	0	9	0	0	0	9	0
6:45AM	0	1	0	0	2	1	24	2	0	0	0	26	0	0	22	0	0	22	1	9	0	0	0	10	59
Hour Total	0	2	0	0	2	2	53	13	0	0	0	66	3	8	72	0	0	83	1	31	1	0	0	33	2
7:00AM	1	0	0	0	0	1	10	3	1	0	0	14	0	5	28	0	0	33	0	5	1	0	0	6	54
7:15AM	1	3	2	0	0	6	10	5	3	0	3	18	5	10	19	0	0	34	2	4	0	0	0	6	64
7:30AM	1	4	0	0	0	5	8	2	3	0	10	13	3	7	21	0	0	31	1	13	0	0	3	14	13
7:45AM	3	6	1	0	0	10	11	5	1	0	12	17	6	17	18	0	2	41	2	16	1	0	0	19	87
Hour Total	6	13	3	0	0	22	39	15	8	0	25	62	14	39	86	0	2	139	5	38	2	0	3	45	268
8:00AM	10	14	5	0	5	29	11	7	1	0	4	19	0	11	15	0	0	26	3	17	1	0	3	21	95
8:15AM	6	2	2	0	0	10	11	12	0	0	0	23	0	2	12	0	1	14	0	7	0	0	0	7	54
8:30AM	1	3	1	0	0	5	16	7	3	0	0	26	1	4	16	0	0	21	0	5	0	0	0	5	57
8:45AM	0	0	0	0	0	0	13	3	0	0	0	16	0	3	13	0	0	16	1	4	0	0	0	5	37
Hour Total	17	19	8	0	5	44	51	29	4	0	4	84	1	20	56	0	1	77	4	33	1	0	3	38	243
9:00AM	0	2	0	0	0	2	17	4	0	0	0	21	1	2	14	0	0	17	0	2	1	0	0	3	43
9:15AM	0	2	1	0	0	3	10	1	1	0	0	12	1	3	14	0	0	18	0	4	0	0	1	4	37
9:30AM	1	3	1	0	0	5	9	1	2	0	0	12	1	0	14	0	0	15	0	1	0	0	1	1	33
9:45AM	0	0	0	0	1	0	11	6	2	0	0	19	0	1	15	0	0	16	1	5	0	0	0	6	41
Hour Total	1	7	2	0	1	10	47	12	5	0	0	64	3	6	57	0	0	66	1	12	1	0	2	14	154
10:00AM	0	0	0	0	1	0	10	4	1	0	0	15	0	2	17	0	0	19	0	5	0	0	0	5	39
10:15AM	0	0	0	0	0	0	10	4	0	0	0	14	0	1	11	0	1	12	0	10	0	0	1	10	36
10:30AM	0	1	1	0	0	2	15	8	1	0	1	24	0	1	15	0	0	16	2	4	1	0	0	7	49
10:45AM	0	1	0	0	0	1	11	9	0	0	0	20	0	3	21	0	0	24	1	5	1	0	0	7	52
Hour Total	0	2	1	0	1	3	46	25	2	0	1	73	0	7	64	0	1	71	3	24	2	0	1	29	176
11:00AM	0	6	0	0	0	6	23	3	1	0	0	27	0	3	24	0	0	27	0	1	0	0	2	1	61
11:15AM	1	1	0	0	0	2	21	3	1	0	0	25	1	0	17	0	0	18	0	9	1	0	0	10	55
11:30AM	0	1	2	0	0	3	15	10	0	0	0	25	1	3	15	0	0	19	1	10	1	0	0	12	59
11:45AM	0	0	1	0	0	1	9	7	0	0	0	16	0	4	14	0	0	18	1	10	1	0	0	12	47
Hour Total	1	8	3	0	0	12	68	23	2	0	0	93	2	10	70	0	0	82	2	30	3	0	2	35	222
12:00PM	0	0	0	0	0	0	13	12	0	0	0	25	0	0	16	0	0	16	0	6	1	0	0	7	48
12:15PM	0	3	2	0	0	5	17	8	0	0	0	25	0	2	24	0	0	26	0	12	1	0	2	13	69
12:30PM	1	1	1	0	0	3	8	6	1	0	1	15	1	0	12	0	0	13	0	7	1	0	1	8	39
12:45PM	0	3	1	0	0	4	18	10	1	0	2	29	0	3	19	0	0	22	1	5	0	0	2	6	4
Hour Total	1	7	4	0	0	12	56	36	2	0	3	94	1	5	71	0	0	77	1	30	3	0	5	34	8
1:00PM	1	2	3	0	0	6	19	7	3	0	0	29	0	0	18	0	0	18	1	7	2	0	0	10	63
1:15PM	1	0	0	0	0	1	23	9	1	0	0	33	0	1	17	0	0	18	0	7	0	0	0	7	59
1:30PM	1	1	0	0	0	2	10	6	0	0	0	16	0	2	22	0	0	24	1	12	0	0	0	13	55
1:45PM	3	2	0	0	0	5	22	6	0	0	0	28	0	1	20	0	0	21	0	5	0	0	0	5	59
Hour Total	6	5	3	0	0	14	74	28	4	0	0	106	0	4	77	0	0	81	2	31	2	0	0	35	236
2:00PM	2	1	2	0	0	5	16	5	0	0	0	21	0	3	19	0	0	22	0	11	1	0	0	12	60
2:15PM	2	2	1	0	0	5	17	10	1	0	0	28	1	3	16	0	0	20	0	6	1	0	0	7	60
2:30PM	0	1	1	0	0	2	20	15	0	0	3	35	0	1	18	0	0	19	0	9	0	0	0	9	65
2:45PM	0	4	0	0	0	4	15	11	1	0	0	27	0	1	24	0	0	25	1	6	0	0	0	7	0
Hour Total	4	8	4	0	0	16	68	41	2	0	3	111	1	8	77	0	0	86	1	32	2	0	0	35	248
3:00PM	1	3	0	0	0	4	24	6	1	0	0	31	1	4	22	0	0	27	1	12	0	0	4	13	4
3:15PM	2	3	1	0	2	6	25	10	5	0	2	40	0	8	26	0	0	34	2	13	1	0	2	16	96
3:30PM	9	10	3	0	3	22	28	13	4	0	12	45	0	8	22	0	1	30	2	7	3	0	1	12	109
3:45PM	1	6	2	0	0	9	18	11	0	0	14	29	0	3	24	0	0	27	1	13	2	0	0	16	81
Hour Total	13	22	6	0	5	41	95	40	10	0	28	145	1	23	94	0	1	118	6	45	6	0	7	57	361
4:00PM	0	5	1	0	0	6	24	12	2	0	2	38	3	3	18	0	1	24	0	9	0	0	1	9	77
4:15PM	0	2	0	0	0	2	30	11	0	0	1	41	1	4	18	0	0	23	1	4	1	0	0	6	72
4:30PM	1	7	0	0	0	8	33	14	1	0	0	48	0	4	24	0	0	28	2	10	0	0	0	12	96
4:45PM	1	11	0	0	0	12	31	16	1	0	1	48	0	3	27	0	6	30	1	6	1	0	2	8	98
Hour Total	2	25	1	0	0	28	118	53	4	0	4	175	4	14	87	0	7	105	4	29	2	0	3	35	343
5:00PM	1	4	1	0	0	6	20	10	0	0	0	30	2	8	20	0	1	30	4	6	2	0	0	12	78
5:15PM	0	12	3	0	0	15	24	10	3	0	0	37	0	10	20	0	0	30	2	15	3	0	0	20	102

Oregon Traffic Monitoring System
Volume by Approach
10/1/2022 Through 10/31/2022

5:30PM	2	3	0	0	0	5	37	6	2	0	1	45	0	5	30	0	0	35	2	14	3	0	1	19	104
5:45PM	2	2	1	0	0	5	22	12	0	0	0	34	0	6	18	0	0	24	0	14	1	0	0	15	78
Hour Total	5	21	5	0	0	31	103	38	5	0	1	146	2	29	88	0	1	119	8	49	9	0	1	66	362
6:00PM	0	3	0	0	0	3	24	4	2	0	0	30	1	1	14	0	0	16	0	4	1	0	5	5	54
6:15PM	1	2	1	0	0	4	20	5	0	0	0	25	0	3	23	0	0	26	1	6	1	0	0	8	63
6:30PM	5	9	3	0	0	17	27	5	0	0	0	32	0	3	11	0	1	14	0	15	2	0	0	17	80
6:45PM	1	5	0	0	0	6	22	12	1	0	3	35	1	3	15	0	0	19	0	13	1	0	0	14	74
Hour Total	7	19	4	0	0	30	93	26	3	0	3	122	2	10	63	0	1	75	1	38	5	0	5	44	271
7:00PM	2	5	0	0	0	7	10	7	1	0	0	18	1	2	8	0	0	11	0	5	0	0	0	5	41
7:15PM	1	3	0	0	0	4	9	5	2	0	2	16	0	1	12	0	0	13	0	3	1	0	0	4	37
7:30PM	1	0	0	0	0	1	21	2	2	0	1	25	0	0	6	0	0	6	0	4	0	0	0	4	1
7:45PM	1	2	0	0	1	3	10	5	0	0	4	15	0	2	1	0	0	3	0	5	0	0	0	5	26
Hour Total	5	10	0	0	1	15	50	19	5	0	7	74	1	5	27	0	0	33	0	17	1	0	0	18	8
8:00PM	1	2	0	0	0	3	8	5	0	0	0	13	2	0	6	0	0	8	0	1	0	0	0	1	25
8:15PM	0	2	0	0	0	2	11	5	0	0	0	16	0	1	7	0	0	8	0	1	2	0	0	3	29
8:30PM	0	0	0	0	0	0	12	1	2	0	0	15	1	0	0	0	0	1	0	3	0	0	0	3	19
8:45PM	0	3	0	0	2	3	8	5	0	0	1	13	0	0	3	0	0	3	1	1	1	0	0	3	22
Hour Total	1	7	0	0	2	8	39	16	2	0	1	57	3	1	16	0	0	20	1	6	3	0	0	10	95
9:00PM	0	1	0	0	0	1	3	4	0	0	0	7	0	1	4	0	0	5	0	1	0	0	1	1	1
9:15PM	0	0	0	0	0	0	6	2	0	0	0	8	0	1	5	0	0	6	0	3	0	0	0	3	17
9:30PM	0	1	0	0	0	1	4	3	0	0	0	7	0	0	3	0	1	3	0	1	0	0	0	1	12
9:45PM	0	0	0	0	1	0	7	0	1	0	0	8	1	2	1	0	0	4	0	1	0	0	0	1	13
Hour Total	0	2	0	0	1	2	20	9	1	0	0	30	1	4	13	0	1	18	0	6	0	0	1	6	56
Pedestrian	0	0	0	0	18	0	0	0	0	0	80	0	0	0	0	0	15	0	0	0	0	0	33	0	0
Pedestrian %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Bus	0	4	1	0	0	5	2	0	1	0	0	3	0	4	2	0	0	6	4	2	1	0	0	7	21
Bus %	0.0	2.3	2.3	0.0	0.0	1.7	0.2	0.0	1.7	0.0	0.0	0.2	0.0	2.1	0.2	0.0	0.0	0.5	10.0	0.4	2.3	0.0	0.0	1.3	0.6
Light truck	2	6	4	0	0	12	89	41	2	0	0	132	3	23	96	0	0	122	1	87	3	0	0	91	357
Light truck %	2.9	3.4	9.1	0.0	0.0	4.1	8.7	9.7	3.4	0.0	0.0	8.8	7.7	11.9	9.4	0.0	0.0	9.8	2.5	19.3	7.0	0.0	0.0	17.0	10.0
Bike	0	0	0	0	0	0	1	2	0	0	0	3	0	3	0	0	0	3	0	0	1	0	0	1	7
Bike %	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.0	0.0	0.0	0.2	0.0	1.6	0.0	0.0	0.2	0.0	0.0	2.3	0.0	0.0	0.2	0.2	
Single trailer truck 15	0	0	0	0	0	0	14	0	0	0	0	14	0	1	3	0	0	4	0	1	0	0	0	1	19
Single trailer truck 15	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.9	0.0	0.5	0.3	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.2	0.5
Single unit truck 12	1	0	0	0	0	1	14	0	0	0	0	14	0	0	8	0	0	8	0	1	1	0	0	2	25
Single unit truck 12	1.4	0.0	0.0	0.0	0.0	0.3	1.4	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.8	0.0	0.0	0.6	0.0	0.2	2.3	0.0	0.0	0.4	0.7
Single trailer truck 16 or truck 16	1	1	0	0	0	2	3	0	0	0	0	3	0	2	4	0	0	6	0	0	0	0	0	0	11
Single trailer truck 16 or truck 16	1.4	0.6	0.0	0.0	0.0	0.7	0.3	0.0	0.0	0.0	0.0	0.2	0.0	1.0	0.4	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Motorcycles	0	0	0	0	0	0	3	1	0	0	0	4	0	0	2	0	0	2	0	2	0	0	0	2	8
Motorcycles or	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.4	0.2
Multi trailer truck 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi trailer truck 18 or truck 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck 18 or truck 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single unit truck 12	1	2	0	0	0	3	22	6	1	0	0	29	0	4	27	0	0	31	1	4	2	0	0	7	70
Single unit truck 12	1.4	1.1	0.0	0.0	0.0	1.0	2.2	1.4	1.7	0.0	0.0	1.9	0.0	2.1	2.7	0.0	0.0	2.5	2.5	0.9	4.7	0.0	0.0	1.3	2.0
Single trailer truck 18 or truck 18	0	0	0	0	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	2	0	0	0	2	9
Single trailer truck 18 or truck 18	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.3
Single unit truck 16 or truck 16	0	1	0	0	0	1	4	0	0	0	0	4	0	0	4	0	0	4	0	0	0	0	0	0	9
Single unit truck 16 or truck 16	0.0	0.6	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Car	64	163	39	0	0	266	855	373	55	0	0	1,283	36	156	867	0	0	1,059	34	350	35	0	0	419	3,027
Car %	92.8	92.1	88.6	0.0	0.0	91.7	83.8	88.2	93.2	0.0	0.0	85.4	92.3	80.8	85.2	0.0	0.0	84.7	85.0	77.6	81.4	0.0	0.0	78.5	84.6
Multi trailer truck 17 or truck 17	0	0	0	0	0	0	6	0	0	0	0	6	0	0	5	0	0	5	0	2	0	0	0	2	13
Multi trailer truck 17 or truck 17	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.5	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.4	0.4

Oregon Traffic Monitoring System

Volume by Approach
10/1/2022 Through 10/31/2022

Intersection ID 999110259

Time Interval 15 Min.

Classification Summary

TMC Date 10/11/2022

Owner ID conleybergh

County Linn
LRS IDCommunity Harrisburg
LRS Milepoint

Roads 6th Street, LaSalle Street

	6th Street Northbound						LaSalle Street Eastbound						6th Street Southbound						LaSalle Street Westbound						Total
Start Time	Left	Thru	Right	U-Turn	Ped	NB Total	Left	Thru	Right	U-Turn	Ped	EB Total	Left	Thru	Right	U-Turn	Ped	SB Total	Left	Thru	Right	U-Turn	Ped	WB Total	Total
6:00AM	17	2	1	0	0	20	0	1	13	0	0	14	0	1	2	0	0	3	0	2	0	0	1	2	39
6:15AM	15	1	2	0	0	18	1	0	20	0	0	21	1	2	1	0	0	4	2	3	0	0	1	5	48
6:30AM	15	0	0	0	0	15	1	1	30	0	0	32	0	0	2	0	0	2	3	5	1	0	1	9	1
6:45AM	18	1	3	0	0	22	0	1	18	0	0	19	2	5	4	0	0	11	3	3	1	0	0	7	59
Hour Total	65	4	6	0	0	75	2	3	81	0	0	86	3	8	9	0	0	20	8	13	2	0	3	23	3
7:00AM	14	3	2	0	0	19	2	4	21	0	0	27	0	5	3	0	0	8	9	6	1	0	1	16	70
7:15AM	20	7	2	0	0	29	6	9	30	0	0	45	0	6	5	0	0	11	3	7	3	0	1	13	98
7:30AM	21	10	6	0	0	37	3	7	31	0	0	41	1	8	4	0	0	13	5	10	4	0	2	19	2
7:45AM	36	20	21	0	0	77	9	15	35	0	0	59	2	4	5	0	0	11	12	14	13	0	4	39	186
Hour Total	91	40	31	0	0	162	20	35	117	0	0	172	3	23	17	0	0	43	29	37	21	0	8	87	464
8:00AM	25	20	6	0	0	51	13	3	32	0	0	48	4	12	7	0	0	23	6	12	13	0	1	31	153
8:15AM	25	3	2	0	0	30	4	3	20	0	0	27	2	8	0	0	0	10	6	4	0	0	2	10	77
8:30AM	21	4	1	0	0	26	1	5	23	0	0	29	0	6	4	0	0	10	5	2	1	0	3	8	73
8:45AM	31	1	0	0	0	32	0	2	17	0	0	19	0	1	0	0	0	1	0	2	2	0	1	4	56
Hour Total	102	28	9	0	0	139	18	13	92	0	0	123	6	27	11	0	0	44	17	20	16	0	7	53	359
9:00AM	20	2	0	0	0	22	3	1	19	0	0	23	2	4	1	0	0	7	1	2	1	0	1	4	56
9:15AM	28	1	2	0	0	31	2	2	15	0	0	19	1	3	5	0	0	9	1	2	0	0	0	3	62
9:30AM	20	6	1	0	0	27	4	3	25	0	0	32	0	2	4	0	0	6	0	4	0	0	0	4	69
9:45AM	13	2	2	0	0	17	1	5	26	0	0	32	0	4	2	0	0	6	2	7	1	0	1	10	65
Hour Total	81	11	5	0	0	97	10	11	85	0	0	106	3	13	12	0	0	28	4	15	2	0	2	21	252
10:00AM	21	3	3	0	0	27	0	1	19	0	0	20	2	3	0	0	0	5	1	5	2	0	0	8	60
10:15AM	15	1	0	0	0	16	0	2	19	0	0	21	0	1	0	0	0	1	2	1	0	0	2	3	41
10:30AM	23	1	2	0	0	26	1	4	24	0	0	29	0	3	2	0	0	5	1	4	0	0	0	5	65
10:45AM	24	3	1	0	0	28	3	4	18	0	0	25	1	5	4	0	0	10	1	4	1	0	0	6	69
Hour Total	83	8	6	0	0	97	4	11	80	0	0	95	3	12	6	0	0	21	5	14	3	0	2	22	235
11:00AM	27	5	2	0	0	34	0	2	19	0	0	21	1	2	1	0	0	4	3	5	2	0	0	10	69
11:15AM	17	3	1	0	1	21	2	5	27	0	0	34	0	8	4	0	0	12	3	3	3	0	0	9	76
11:30AM	16	3	2	0	0	21	2	3	24	0	0	29	0	7	0	0	0	7	5	7	0	0	1	12	69
11:45AM	16	5	4	0	0	25	2	6	21	0	0	29	1	1	1	0	0	3	2	5	0	0	0	7	64
Hour Total	76	16	9	0	1	101	6	16	91	0	0	113	2	18	6	0	0	26	13	20	5	0	1	38	278
12:00PM	18	4	3	0	0	25	8	3	28	0	0	39	1	3	2	0	0	6	2	6	1	0	0	9	79
12:15PM	27	5	1	0	0	33	3	5	18	0	0	26	1	6	2	0	0	9	3	6	0	0	1	9	77
12:30PM	24	3	6	0	0	33	2	6	38	0	0	46	1	3	2	0	0	6	3	2	0	0	1	5	90
12:45PM	19	5	2	0	0	26	2	6	27	0	0	35	0	4	3	0	0	7	1	5	1	0	0	7	0
Hour Total	88	17	12	0	0	117	15	20	111	0	0	146	3	16	9	0	0	28	9	19	2	0	2	30	2
1:00PM	21	3	2	0	0	26	0	2	23	0	0	25	2	4	0	0	0	6	4	2	1	0	4	7	64
1:15PM	22	3	1	0	0	26	2	7	31	0	0	40	0	3	2	0	0	5	1	7	0	0	0	8	79
1:30PM	17	3	3	0	0	23	2	8	23	0	0	33	0	3	1	0	0	4	3	2	0	0	0	5	65
1:45PM	24	5	3	0	0	32	3	3	24	0	0	30	0	4	3	0	0	7	3	3	2	0	0	8	77
Hour Total	84	14	9	0	0	107	7	20	101	0	0	128	2	14	6	0	0	22	11	14	3	0	4	28	285
2:00PM	24	9	0	0	1	33	3	3	34	0	0	40	0	5	2	0	0	7	4	4	1	0	0	9	89
2:15PM	21	3	2	0	0	26	1	4	25	0	0	30	0	6	1	0	0	7	4	4	0	0	1	8	71
2:30PM	25	2	2	0	0	29	2	5	32	0	0	39	0	3	0	0	0	3	2	6	2	0	1	10	81
2:45PM	33	13	2	0	0	48	1	3	32	0	0	36	0	1	1	0	0	2	1	8	1	0	4	10	4
Hour Total	103	27	6	0	1	136	7	15	123	0	0	145	0	15	4	0	0	19	11	22	4	0	6	37	337
3:00PM	33	12	1	0	0	46	5	4	27	0	1	36	0	2	6	0	0	8	0	3	4	0	0	7	1
3:15PM	27	20	8	0	0	55	7	6	32	0	0	45	0	5	2	0	0	7	3	1	3	0	3	7	114
3:30PM	30	12	7	0	0	49	4	8	45	0	0	57	7	16	7	0	0	30	8	4	3	0	7	15	151
3:45PM	30	5	2	0	0	37	2	8	48	0	0	58	0	15	2	0	0	17	15	10	4	0	15	29	141
Hour Total	120	49	18	0	0	187	18	26	152	0	1	196	7	38	17	0	0	62	26	18	14	0	25	58	503
4:00PM	43	5	6	0	0	54	3	8	35	0	0	46	0	10	1	0	0	11	7	10	0	0	4	17	128
4:15PM	38	7	4	0	0	49	2	9	37	0	0	48	2	4	3	0	0	9	5	2	1	0	0	8	114
4:30PM	42	8	1	0	0	51	1	10	33	0	0	44	1	10	6	0	0	17	5	11	4	0	5	20	132
4:45PM	39	16	7	0	0	62	4	4	43	0	0	51	2	13	9	0	0	24	9	5	3	0	2	17	154
Hour Total	162	36	18	0	0	216	10	31	148	0	0	189	5	37	19	0	0	61	26	28	8	0	11	62	528
5:00PM	39	13	8	0	0	60	4	10	55	0	0	69	3	12	2	0	0	17	2	7	0	0	3	9	155

Volume by Approach
10/1/2022 Through 10/31/2022

5:15PM	49	9	7	0	0	65	9	13	42	0	0	64	2	12	5	0	0	19	6	3	0	0	2	9	157
5:30PM	37	7	7	0	0	51	3	12	32	0	0	47	2	4	1	0	0	7	5	7	0	0	1	12	117
5:45PM	30	4	7	0	0	41	3	8	30	0	0	41	0	9	2	0	0	11	3	4	1	0	1	8	101
Hour Total	155	33	29	0	0	217	19	43	159	0	0	221	7	37	10	0	0	54	16	21	1	0	7	38	530
6:00PM	22	6	3	0	0	31	4	6	31	0	0	41	0	2	0	0	0	2	3	3	3	0	0	9	83
6:15PM	27	6	4	0	0	37	0	5	20	0	0	25	1	6	2	0	0	9	6	6	0	0	1	12	83
6:30PM	25	5	11	0	0	41	1	9	26	0	0	36	1	7	7	0	0	15	8	4	4	0	2	16	108
6:45PM	16	13	4	0	0	33	2	9	31	0	0	42	0	4	1	0	0	5	4	7	1	0	0	12	92
Hour Total	90	30	22	0	0	142	7	29	108	0	0	144	2	19	10	0	0	31	21	20	8	0	3	49	366
7:00PM	11	2	3	0	0	16	1	9	22	0	0	32	0	11	2	0	0	13	3	5	0	0	0	8	69
7:15PM	11	2	0	0	0	13	0	3	20	0	0	23	0	6	1	0	0	7	6	6	0	0	1	12	55
7:30PM	9	0	2	0	0	11	0	10	20	0	0	30	0	1	1	0	0	2	0	1	0	0	0	1	0
7:45PM	11	2	2	0	0	15	2	9	13	0	0	24	0	4	0	0	0	4	1	0	1	0	2	2	45
Hour Total	42	6	7	0	0	55	3	31	75	0	0	109	0	22	4	0	0	26	10	12	1	0	3	23	3
8:00PM	9	3	3	0	0	15	3	4	8	0	0	15	0	1	0	0	0	1	0	0	1	0	0	1	32
8:15PM	7	3	6	0	0	16	1	2	8	0	0	11	0	0	1	0	0	1	2	3	0	0	4	5	33
8:30PM	3	1	1	0	0	5	1	2	10	0	0	13	0	0	1	0	0	1	1	0	0	0	2	1	20
8:45PM	4	1	1	0	0	6	4	4	12	0	0	20	0	2	2	0	0	4	8	2	3	0	1	13	43
Hour Total	23	8	11	0	0	42	9	12	38	0	0	59	0	3	4	0	0	7	11	5	4	0	7	20	128
9:00PM	1	1	0	0	0	2	0	4	20	0	0	24	0	1	0	0	0	1	0	2	0	0	1	2	1
9:15PM	2	1	0	0	0	3	0	7	4	0	0	11	0	0	0	0	0	0	1	0	0	0	0	1	15
9:30PM	4	0	0	0	0	4	1	2	11	0	0	14	0	1	0	0	0	1	2	3	0	0	0	5	24
9:45PM	1	0	0	0	0	1	0	1	10	0	0	11	0	1	0	0	0	1	1	1	0	0	0	2	15
Hour Total	8	2	0	0	0	10	1	14	45	0	0	60	0	3	0	0	0	3	4	6	0	0	1	10	83
Pedestrian	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	92	0	0
Pedestrian %	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Bus	5	6	1	0	0	12	3	5	8	0	0	16	0	4	4	0	0	8	4	3	2	0	0	9	45
Bus %	0.4	1.8	0.5	0.0	0.0	0.6	1.9	1.5	0.5	0.0	0.0	0.8	0.0	1.3	2.8	0.0	0.0	1.6	1.8	1.1	2.1	0.0	0.0	1.5	0.9
Light truck	5	6	1	0	0	12	13	41	292	0	0	346	3	23	0	0	0	26	22	24	6	0	0	52	436
Light truck %	0.4	1.8	0.5	0.0	0.0	0.6	8.3	12.4	18.2	0.0	0.0	16.5	6.5	7.5	0.0	0.0	0.0	5.3	10.0	8.5	6.4	0.0	0.0	8.7	8.6
Bike	0	1	0	0	0	1	0	4	3	0	0	7	1	3	0	0	0	4	1	1	9	0	0	11	23
Bike %	0.0	0.3	0.0	0.0	0.0	0.1	0.0	1.2	0.2	0.0	0.0	0.3	2.2	1.0	0.0	0.0	0.0	0.8	0.5	0.4	9.6	0.0	0.0	1.8	0.5
Single trailer truck (5	8	1	0	0	0	9	0	0	24	0	0	24	0	0	1	0	0	1	0	0	0	0	0	0	34
Single trailer truck (5	0.6	0.3	0.0	0.0	0.0	0.5	0.0	0.0	1.5	0.0	0.0	1.1	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Single unit truck (3	11	2	0	0	0	13	0	0	16	0	0	16	0	0	0	0	0	0	1	0	1	0	0	2	31
Single unit truck (3	0.8	0.6	0.0	0.0	0.0	0.7	0.0	0.0	1.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.1	0.0	0.0	0.3	0.6
Single trailer truck (A or	7	2	0	0	0	9	0	6	33	0	0	39	0	3	0	0	0	3	0	0	0	0	0	0	51
Single trailer truck (A or	0.5	0.6	0.0	0.0	0.0	0.5	0.0	1.8	2.1	0.0	0.0	1.9	0.0	1.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Motorcycles	7	1	1	0	0	9	1	1	11	0	0	13	0	0	0	0	0	0	0	0	1	0	0	1	23
Motorcycles or	0.5	0.3	0.5	0.0	0.0	0.5	0.6	0.3	0.7	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.2	0.5
Multi trailer truck (6	1	0	0	0	0	1	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	8
Multi trailer truck (6	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Multi trailer truck (6 or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi trailer truck (6 or	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single unit truck (2	53	9	4	0	0	66	2	2	45	0	0	49	0	6	1	0	0	7	2	2	0	0	0	4	126
Single unit truck (2	3.9	2.7	2.0	0.0	0.0	3.5	1.3	0.6	2.8	0.0	0.0	2.3	0.0	2.0	0.7	0.0	0.0	1.4	0.9	0.7	0.0	0.0	0.0	0.7	2.5
Single trailer truck (6 or	26	0	0	0	0	26	0	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	41
Single trailer truck (6 or	1.9	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Single unit truck (A or	3	0	0	0	0	3	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
Single unit truck (A or	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Car	1,246	301	191	0	0	1,738	137	271	1147	0	0	1,555	42	266	138	0	0	446	191	254	75	0	0	520	4,259
Car %	90.8	91.5	96.5	0.0	0.0	91.5	87.8	82.1	71.4	0.0	0.0	74.3	91.3	87.2	95.8	0.0	0.0	90.1	86.4	89.4	79.8	0.0	0.0	86.8	83.7
Multi trailer truck (7 or	1	0	0	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
Multi trailer truck (7 or	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Appendix B

Synchro and SimTraffic Reports

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	5	5	5	5	5	5	5	5	5	5	30
Future Vol, veh/h	40	5	5	5	5	5	5	5	5	5	5	30
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	48	6	6	6	6	6	6	6	6	6	6	36
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.5	7	7.1	6.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	80%	33%	12%
Vol Thru, %	33%	10%	33%	12%
Vol Right, %	33%	10%	33%	75%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	50	15	40
LT Vol	5	40	5	5
Through Vol	5	5	5	5
RT Vol	5	5	5	30
Lane Flow Rate	18	60	18	48
Geometry Grp	1	1	1	1
Degree of Util (X)	0.02	0.069	0.02	0.049
Departure Headway (Hd)	3.94	4.129	3.928	3.625
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	904	868	909	983
Service Time	1.983	2.152	1.961	1.665
HCM Lane V/C Ratio	0.02	0.069	0.02	0.049
HCM Control Delay	7.1	7.5	7	6.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.2







Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	5	10	5	5	5	10	30	5	5	40	15
Future Vol, veh/h	5	5	10	5	5	5	10	30	5	5	40	15
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	6	13	6	6	6	13	38	6	6	50	19
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	145	142	60	148	148	41	69	0	0	44	0	0
Stage 1	72	72	-	67	67	-	-	-	-	-	-	-
Stage 2	73	70	-	81	81	-	-	-	-	-	-	-
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	828	753	1011	825	747	1036	1545	-	-	1577	-	-
Stage 1	943	839	-	948	843	-	-	-	-	-	-	-
Stage 2	942	841	-	932	832	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	810	743	1011	802	737	1036	1545	-	-	1577	-	-
Mov Cap-2 Maneuver	810	743	-	802	737	-	-	-	-	-	-	-
Stage 1	935	836	-	939	835	-	-	-	-	-	-	-
Stage 2	921	833	-	910	829	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.2		9.4		1.6		0.6					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1545	-	-	877	841	1577	-	-				
HCM Lane V/C Ratio	0.008	-	-	0.029	0.022	0.004	-	-				
HCM Control Delay (s)	7.3	0	-	9.2	9.4	7.3	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	5	30	15	20	35	10	10	20	5	5	30	5
Future Vol, veh/h	5	30	15	20	35	10	10	20	5	5	30	5
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	8	0	0	6	0	0	0	0	0	0	0
Mvmt Flow	6	34	17	23	40	11	11	23	6	6	34	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.5	7.4	7.4
HCM LOS	A	A	A	A






Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	10%	31%	12%
Vol Thru, %	57%	60%	54%	75%
Vol Right, %	14%	30%	15%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	50	65	40
LT Vol	10	5	20	5
Through Vol	20	30	35	30
RT Vol	5	15	10	5
Lane Flow Rate	40	57	75	46
Geometry Grp	1	1	1	1
Degree of Util (X)	0.046	0.063	0.084	0.052
Departure Headway (Hd)	4.135	3.947	4.063	4.109
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	857	900	876	863
Service Time	2.203	2.004	2.115	2.176
HCM Lane V/C Ratio	0.047	0.063	0.086	0.053
HCM Control Delay	7.4	7.3	7.5	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.3	0.2








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	15	80	5	25	90	15	5	10	15	5	5	5
Future Vol, veh/h	15	80	5	25	90	15	5	10	15	5	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	3	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	17	89	6	28	100	17	6	11	17	6	6	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	117	0	0	95	0	0	297	299	92	305	294	109
Stage 1	-	-	-	-	-	-	126	126	-	165	165	-
Stage 2	-	-	-	-	-	-	171	173	-	140	129	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1484	-	-	1512	-	-	659	616	971	651	620	950
Stage 1	-	-	-	-	-	-	883	796	-	842	766	-
Stage 2	-	-	-	-	-	-	836	760	-	868	793	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1484	-	-	1512	-	-	636	598	971	616	601	950
Mov Cap-2 Maneuver	-	-	-	-	-	-	636	598	-	616	601	-
Stage 1	-	-	-	-	-	-	873	787	-	833	751	-
Stage 2	-	-	-	-	-	-	810	746	-	831	784	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			1.4			10			10.3		
HCM LOS							B			B		




















Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	749	1484	-	-	1512	-	-	691
HCM Lane V/C Ratio	0.045	0.011	-	-	0.018	-	-	0.024
HCM Control Delay (s)	10	7.5	-	-	7.4	-	-	10.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.1

Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	85	165	10	90	120
Future Vol, veh/h	5	85	165	10	90	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	270	0	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	100	1	4	18	4	11
Mvmt Flow	6	99	192	12	105	140
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	542	192	0	-	192	0
Stage 1	192	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Critical Hdwy	7.4	6.21	-	-	4.14	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.309	-	-	2.236	-
Pot Cap-1 Maneuver	367	852	-	0	1370	-
Stage 1	652	-	-	0	-	-
Stage 2	540	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	339	852	-	-	1370	-
Mov Cap-2 Maneuver	339	-	-	-	-	-
Stage 1	652	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.1	0		3.4		
HCM LOS	B					
Minor Lane/Major Mvmt	NBTWBLn1WBLn2			SBL	SBT	
Capacity (veh/h)	- 339 852			1370	-	
HCM Lane V/C Ratio	- 0.017 0.116			0.076	-	
HCM Control Delay (s)	- 15.8 9.8			7.8	-	
HCM Lane LOS	- C A			A	-	
HCM 95th %tile Q(veh)	- 0.1 0.4			0.2	-	

Intersection												
Int Delay, s/veh	28.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	5	180	5	65	5	495	175	50	390	5
Future Vol, veh/h	5	5	5	180	5	65	5	495	175	50	390	5
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	-	-	-	100	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	1	0	2	0	5	8	4	8	0
Mvmt Flow	5	5	5	194	5	70	5	532	188	54	419	5
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1204	1260	422	1171	1168	626	424	0	0	720	0	0
Stage 1	530	530	-	636	636	-	-	-	-	-	-	-
Stage 2	674	730	-	535	532	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.5	6.22	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4	3.318	2.2	-	-	2.236	-	-
Pot Cap-1 Maneuver	162	172	636	~ 170	195	484	1146	-	-	872	-	-
Stage 1	536	530	-	468	475	-	-	-	-	-	-	-
Stage 2	448	431	-	531	529	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	129	161	636	~ 156	182	484	1146	-	-	872	-	-
Mov Cap-2 Maneuver	129	161	-	~ 156	182	-	-	-	-	-	-	-
Stage 1	534	497	-	466	473	-	-	-	-	-	-	-
Stage 2	377	429	-	489	496	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	25.3		154		0.1		1.1					
HCM LOS	D		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	1146	-	-	193	156	433	872	-	-			
HCM Lane V/C Ratio	0.005	-	-	0.084	1.241	0.174	0.062	-	-			
HCM Control Delay (s)	8.2	-	-	25.3	208	15.1	9.4	-	-			
HCM Lane LOS	A	-	-	D	F	C	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	0.3	11.2	0.6	0.2	-	-			
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												




















2022 Existing Conditions
Harrisburg TSP Update







7: OR 99E & Territorial Street
HCM Signalized Intersection Capacity Analysis







												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	15	5	135	10	25	5	350	110	65	365	5
Future Volume (vph)	10	15	5	135	10	25	5	350	110	65	365	5
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.0			4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.98			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1681			1642	1316	1662	1614		1599	1649	
Flt Permitted		0.43			0.72	1.00	0.46	1.00		0.39	1.00	
Satd. Flow (perm)		729			1230	1316	805	1614		653	1649	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	17	6	150	11	28	6	389	122	72	406	6
RTOR Reduction (vph)	0	6	0	0	0	23	0	7	0	0	0	0
Lane Group Flow (vph)	0	28	0	0	161	5	6	504	0	72	412	0
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	0%	6%	0%	4%	6%	0%
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)		6.2			17.0	17.0	53.8	53.8		53.8	53.8	
Effective Green, g (s)		6.2			17.0	17.0	53.8	53.8		53.8	53.8	
Actuated g/C Ratio		0.07			0.19	0.19	0.60	0.60		0.60	0.60	
Clearance Time (s)		4.0			4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		50			232	248	481	964		390	985	
v/s Ratio Prot								c0.31				0.25
v/s Ratio Perm		c0.04			c0.13	0.00	0.01			0.11		
v/c Ratio		0.57			0.69	0.02	0.01	0.52		0.18	0.42	
Uniform Delay, d1		40.6			34.1	29.7	7.3	10.6		8.2	9.7	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		14.0			8.7	0.0	0.0	2.0		1.0	1.3	
Delay (s)		54.6			42.7	29.8	7.4	12.6		9.2	11.0	
Level of Service		D			D	C	A	B		A	B	
Approach Delay (s)		54.6			40.8			12.6			10.7	
Approach LOS		D			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			17.4		HCM 2000 Level of Service					B		
HCM 2000 Volume to Capacity ratio			0.56									
Actuated Cycle Length (s)			90.0		Sum of lost time (s)					13.0		
Intersection Capacity Utilization			60.5%		ICU Level of Service					B		
Analysis Period (min)			15									
c Critical Lane Group												

2022 Existing Conditions
Harrisburg TSP Update

7: OR 99E & Territorial Street
HCM 6th Signalized Intersection Summary

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	15	5	135	10	25	5	350	110	65	365	5
Future Volume (veh/h)	10	15	5	135	10	25	5	350	110	65	365	5
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	1750	1750	1750	1723	1750	1573	1750	1668	1750	1695	1668	1750
Adj Flow Rate, veh/h	11	17	6	150	11	28	6	389	122	72	406	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	2	0	13	0	6	0	4	6	0
Cap, veh/h	66	84	21	252	16	349	593	777	244	489	1046	15
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	49	321	79	666	60	1333	989	1218	382	875	1640	24
Grp Volume(v), veh/h	34	0	0	161	0	28	6	0	511	72	0	412
Grp Sat Flow(s),veh/h/ln	450	0	0	725	0	1333	989	0	1599	875	0	1664
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	1.4	0.3	0.0	15.3	4.3	0.0	10.7
Cycle Q Clear(g_c), s	21.7	0.0	0.0	21.3	0.0	1.4	11.0	0.0	15.3	19.6	0.0	10.7
Prop In Lane	0.32		0.18	0.93		1.00	1.00		0.24	1.00		0.01
Lane Grp Cap(c), veh/h	171	0	0	267	0	349	593	0	1020	489	0	1061
V/C Ratio(X)	0.20	0.00	0.00	0.60	0.00	0.08	0.01	0.00	0.50	0.15	0.00	0.39
Avail Cap(c_a), veh/h	213	0	0	298	0	378	593	0	1020	489	0	1061
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.7	0.0	0.0	32.2	0.0	25.0	10.5	0.0	8.7	13.9	0.0	7.8
Incr Delay (d2), s/veh	0.6	0.0	0.0	2.8	0.0	0.1	0.0	0.0	1.8	0.6	0.0	1.1
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	0.0	0.0	3.6	0.0	0.5	0.1	0.0	5.1	0.9	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.0	0.0	35.1	0.0	25.1	10.5	0.0	10.4	14.5	0.0	8.9
LnGrp LOS	C	A	A	D	A	C	B	A	B	B	A	A
Approach Vol, veh/h		34			189			517			484	
Approach Delay, s/veh		27.2			33.6			10.4			9.7	
Approach LOS		C			C			B			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		61.9		28.1		61.9		28.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		* 4.5				
Max Green Setting (Gmax), s		25.5		25.5		25.5		* 26				
Max Q Clear Time (g_c+I1), s		21.6		23.3		17.3		23.7				
Green Ext Time (p_c), s		1.1		0.2		2.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				14.2								
HCM 6th LOS				B								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	135	110	200	245	10
Future Vol, veh/h	5	135	110	200	245	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	200	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	4	8	9	0
Mvmt Flow	6	171	139	253	310	13
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	848	317	310	0	-	0
Stage 1	317	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.14	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.236	-	-	-
Pot Cap-1 Maneuver	334	728	1239	-	-	-
Stage 1	743	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	297	728	1239	-	-	-
Mov Cap-2 Maneuver	297	-	-	-	-	-
Stage 1	660	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.7	2.9		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1239	-	297	728	-	-
HCM Lane V/C Ratio	0.112	-	0.021	0.235	-	-
HCM Control Delay (s)	8.3	-	17.4	11.5	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.1	0.9	-	-

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	10	10	15	40	10	15	15	470	60	25	465	5
Future Vol, veh/h	10	10	15	40	10	15	15	470	60	25	465	5
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	4	2	5	5	0
Mvmt Flow	11	11	16	42	11	16	16	495	63	26	489	5
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1116	1134	492	1116	1105	527	494	0	0	558	0	0
Stage 1	544	544	-	559	559	-	-	-	-	-	-	-
Stage 2	572	590	-	557	546	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.15	-	-
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	-	-	2.245	-	-
Pot Cap-1 Maneuver	187	204	581	187	213	555	1080	-	-	998	-	-
Stage 1	527	522	-	517	514	-	-	-	-	-	-	-
Stage 2	509	498	-	518	521	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	169	196	581	169	204	555	1080	-	-	998	-	-
Mov Cap-2 Maneuver	169	196	-	169	204	-	-	-	-	-	-	-
Stage 1	519	508	-	509	506	-	-	-	-	-	-	-
Stage 2	477	491	-	481	507	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	21.3		30.6		0.2		0.4					
HCM LOS	C		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1080	-	-	257	208	998	-	-				
HCM Lane V/C Ratio	0.015	-	-	0.143	0.329	0.026	-	-				
HCM Control Delay (s)	8.4	-	-	21.3	30.6	8.7	-	-				
HCM Lane LOS	A	-	-	C	D	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.5	1.4	0.1	-	-				

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	120	55	5	10	40	5	5	35	5	5	30	100
Future Vol, veh/h	120	55	5	10	40	5	5	35	5	5	30	100
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	4	0	0	11	5	0	0	3	0	0	8	5
Mvmt Flow	130	60	5	11	43	5	5	38	5	5	33	109
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0







Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	8.2	8	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	67%	18%	4%
Vol Thru, %	78%	31%	73%	22%
Vol Right, %	11%	3%	9%	74%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	180	55	135
LT Vol	5	120	10	5
Through Vol	35	55	40	30
RT Vol	5	5	5	100
Lane Flow Rate	49	196	60	147
Geometry Grp	1	1	1	1
Degree of Util (X)	0.063	0.249	0.078	0.168
Departure Headway (Hd)	4.627	4.583	4.724	4.132
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	775	785	759	870
Service Time	2.65	2.605	2.75	2.15
HCM Lane V/C Ratio	0.063	0.25	0.079	0.169
HCM Control Delay	8	9.1	8.2	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	1	0.3	0.6

Intersection

Intersection Delay, s/veh 10

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	40	190	25	30	10	185	50	25	10	50	25
Future Vol, veh/h	20	40	190	25	30	10	185	50	25	10	50	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	11	3	8	0	0	0	2	4	0	0	6	0
Mvmt Flow	21	42	200	26	32	11	195	53	26	11	53	26
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	9.5	9.6	10.8	9.6
HCM LOS	A	A	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	33%	0%	38%	12%
Vol Thru, %	0%	67%	67%	0%	46%	59%
Vol Right, %	0%	33%	0%	100%	15%	29%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	185	75	60	190	65	85
LT Vol	185	0	20	0	25	10
Through Vol	0	50	40	0	30	50
RT Vol	0	25	0	190	10	25
Lane Flow Rate	195	79	63	200	68	89
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.323	0.115	0.104	0.273	0.11	0.138
Departure Headway (Hd)	5.966	5.261	5.928	4.917	5.804	5.555
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	598	675	601	726	612	639
Service Time	3.746	3.041	3.697	2.686	3.896	3.649
HCM Lane V/C Ratio	0.326	0.117	0.105	0.275	0.111	0.139
HCM Control Delay	11.6	8.7	9.4	9.5	9.6	9.6
HCM Lane LOS	B	A	A	A	A	A
HCM 95th-tile Q	1.4	0.4	0.3	1.1	0.4	0.5

2045 Future No Build Conditions
Harrisburg TSP Update

1: 9th Street & Lasalle Street
HCM 6th AWSC

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	5	10	5	5	5	5	5	5	5	5	35
Future Vol, veh/h	45	5	10	5	5	5	5	5	5	5	5	35
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	54	6	12	6	6	6	6	6	6	6	6	42
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.5	7.1	7.1	6.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	75%	33%	11%
Vol Thru, %	33%	8%	33%	11%
Vol Right, %	33%	17%	33%	78%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	60	15	45
LT Vol	5	45	5	5
Through Vol	5	5	5	5
RT Vol	5	10	5	35
Lane Flow Rate	18	72	18	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.02	0.082	0.02	0.055
Departure Headway (Hd)	3.964	4.089	3.946	3.625
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	897	876	904	981
Service Time	2.013	2.114	1.984	1.671
HCM Lane V/C Ratio	0.02	0.082	0.02	0.055
HCM Control Delay	7.1	7.5	7.1	6.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.1	0.2







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	5	5	10	5	5	5	10	35	5	5	50	15
Future Vol, veh/h	5	5	10	5	5	5	10	35	5	5	50	15
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	6	13	6	6	6	13	44	6	6	63	19
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	164	161	73	167	167	47	82	0	0	50	0	0
Stage 1	85	85	-	73	73	-	-	-	-	-	-	-
Stage 2	79	76	-	94	94	-	-	-	-	-	-	-
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	805	735	995	802	729	1028	1528	-	-	1570	-	-
Stage 1	928	828	-	942	838	-	-	-	-	-	-	-
Stage 2	935	836	-	918	821	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	787	725	995	779	720	1028	1528	-	-	1570	-	-
Mov Cap-2 Maneuver	787	725	-	779	720	-	-	-	-	-	-	-
Stage 1	920	825	-	934	830	-	-	-	-	-	-	-
Stage 2	914	828	-	896	818	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.3		9.5		1.5		0.5					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1528	-	-	858	823	1570	-	-				
HCM Lane V/C Ratio	0.008	-	-	0.029	0.023	0.004	-	-				
HCM Control Delay (s)	7.4	0	-	9.3	9.5	7.3	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	35	20	25	45	10	10	20	10	5	30	5
Future Vol, veh/h	10	35	20	25	45	10	10	20	10	5	30	5
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	8	0	0	6	0	0	0	0	0	0	0
Mvmt Flow	11	40	23	29	52	11	11	23	11	6	34	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.4	7.7	7.4	7.5
HCM LOS	A	A	A	A






Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	15%	31%	12%
Vol Thru, %	50%	54%	56%	75%
Vol Right, %	25%	31%	12%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	65	80	40
LT Vol	10	10	25	5
Through Vol	20	35	45	30
RT Vol	10	20	10	5
Lane Flow Rate	46	75	92	46
Geometry Grp	1	1	1	1
Degree of Util (X)	0.053	0.083	0.105	0.053
Departure Headway (Hd)	4.123	3.977	4.104	4.173
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	856	891	865	846
Service Time	2.211	2.044	2.166	2.261
HCM Lane V/C Ratio	0.054	0.084	0.106	0.054
HCM Control Delay	7.4	7.4	7.7	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.4	0.2

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	15	95	5	30	105	20	5	10	15	5	10	5
Future Vol, veh/h	15	95	5	30	105	20	5	10	15	5	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	3	0	0	5	0	0	0	0	0	0	0
Mvmt Flow	17	106	6	33	117	22	6	11	17	6	11	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	139	0	0	112	0	0	346	348	109	351	340	128
Stage 1	-	-	-	-	-	-	143	143	-	194	194	-
Stage 2	-	-	-	-	-	-	203	205	-	157	146	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1457	-	-	1490	-	-	612	579	950	608	585	927
Stage 1	-	-	-	-	-	-	865	782	-	812	744	-
Stage 2	-	-	-	-	-	-	804	736	-	850	780	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1457	-	-	1490	-	-	584	559	950	573	565	927
Mov Cap-2 Maneuver	-	-	-	-	-	-	584	559	-	573	565	-
Stage 1	-	-	-	-	-	-	855	773	-	802	728	-
Stage 2	-	-	-	-	-	-	770	720	-	813	771	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.4			10.3			10.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	710	1457	-	-	1490	-	-	629
HCM Lane V/C Ratio	0.047	0.011	-	-	0.022	-	-	0.035
HCM Control Delay (s)	10.3	7.5	-	-	7.5	-	-	10.9
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.1

Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	95	190	15	100	140
Future Vol, veh/h	5	95	190	15	100	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	270	0	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	100	1	4	18	4	11
Mvmt Flow	6	110	221	17	116	163








Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	616	221	0	-	221
Stage 1	221	-	-	-	-
Stage 2	395	-	-	-	-
Critical Hdwy	7.4	6.21	-	-	4.14
Critical Hdwy Stg 1	6.4	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-
Follow-up Hdwy	4.4	3.309	-	-	2.236
Pot Cap-1 Maneuver	328	821	-	0	1336
Stage 1	630	-	-	0	-
Stage 2	511	-	-	0	-
Platoon blocked, %			-		-
Mov Cap-1 Maneuver	299	821	-	-	1336
Mov Cap-2 Maneuver	299	-	-	-	-
Stage 1	630	-	-	-	-
Stage 2	467	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	3.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	299	821	1336
HCM Lane V/C Ratio	-	0.019	0.135	0.087
HCM Control Delay (s)	-	17.3	10.1	8
HCM Lane LOS	-	C	B	A
HCM 95th %tile Q(veh)	-	0.1	0.5	0.3




















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6: OR 99E & Lasalle Street
HCM 6th TWSC

Intersection												
Int Delay, s/veh	45.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	5	205	5	75	5	575	205	60	455	5
Future Vol, veh/h	5	5	5	205	5	75	5	575	205	60	455	5
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	-	-	-	100	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	1	0	2	0	5	8	4	8	0
Mvmt Flow	5	5	5	205	5	75	5	575	205	60	455	5
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1306	1368	458	1271	1268	678	460	0	0	780	0	0
Stage 1	578	578	-	688	688	-	-	-	-	-	-	-
Stage 2	728	790	-	583	580	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.5	6.22	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4	3.318	2.2	-	-	2.236	-	-
Pot Cap-1 Maneuver	138	148	607	~ 145	170	452	1112	-	-	828	-	-
Stage 1	505	504	-	438	450	-	-	-	-	-	-	-
Stage 2	418	404	-	500	503	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	106	137	607	~ 132	157	452	1112	-	-	828	-	-
Mov Cap-2 Maneuver	106	137	-	~ 132	157	-	-	-	-	-	-	-
Stage 1	503	468	-	436	448	-	-	-	-	-	-	-
Stage 2	343	402	-	455	467	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	29.3		251		0.1		1.1					
HCM LOS	D		F									
Minor Lane/Major Mvmt	NBL		NBT		NBR		EBLn1WBLn1WBLn2		SBL	SBT	SBR	
Capacity (veh/h)	1112		-		-		163 132 404		828	-	-	
HCM Lane V/C Ratio	0.004		-		-		0.092 1.553 0.198		0.072	-	-	
HCM Control Delay (s)	8.3		-		-		29.3\$ 342.6 16.1		9.7	-	-	
HCM Lane LOS	A		-		-		D F C		A	-	-	
HCM 95th %tile Q(veh)	0		-		-		0.3 14.4 0.7		0.2	-	-	
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				




















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7: OR 99E & Territorial Street
HCM Signalized Intersection Capacity Analysis

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	15	10	155	15	30	5	405	125	75	420	5
Future Volume (vph)	10	15	10	155	15	30	5	405	125	75	420	5
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.0			4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.96			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1660			1644	1316	1662	1614		1599	1649	
Flt Permitted		0.40			0.72	1.00	0.41	1.00		0.32	1.00	
Satd. Flow (perm)		674			1232	1316	709	1614		541	1649	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	17	11	172	17	33	6	450	139	83	467	6
RTOR Reduction (vph)	0	10	0	0	0	26	0	7	0	0	0	0
Lane Group Flow (vph)	0	29	0	0	189	7	6	582	0	83	473	0
Heavy Vehicles (%)	0%	0%	0%	2%	0%	13%	0%	6%	0%	4%	6%	0%
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)		6.4			18.9	18.9	51.7	51.7		51.7	51.7	
Effective Green, g (s)		6.4			18.9	18.9	51.7	51.7		51.7	51.7	
Actuated g/C Ratio		0.07			0.21	0.21	0.57	0.57		0.57	0.57	
Clearance Time (s)		4.0			4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		47			258	276	407	927		310	947	
v/s Ratio Prot								c0.36				0.29
v/s Ratio Perm		c0.04			c0.15	0.01	0.01			0.15		
v/c Ratio		0.61			0.73	0.03	0.01	0.63		0.27	0.50	
Uniform Delay, d1		40.6			33.2	28.2	8.2	12.7		9.6	11.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		21.3			10.2	0.0	0.1	3.2		2.1	1.9	
Delay (s)		61.9			43.4	28.3	8.3	16.0		11.7	13.3	
Level of Service		E			D	C	A	B		B	B	
Approach Delay (s)		61.9			41.2			15.9			13.1	
Approach LOS		E			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			20.0									
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			90.0									
Intersection Capacity Utilization			66.2%									
Analysis Period (min)			15									
c Critical Lane Group												

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7: OR 99E & Territorial Street
HCM 6th Signalized Intersection Summary







												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	15	10	155	15	30	5	405	125	75	420	5
Future Volume (veh/h)	10	15	10	155	15	30	5	405	125	75	420	5
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	1750	1750	1750	1723	1750	1573	1750	1668	1750	1695	1668	1750
Adj Flow Rate, veh/h	11	17	11	172	17	33	6	450	139	83	467	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	2	0	13	0	6	0	4	6	0
Cap, veh/h	51	67	26	228	17	385	507	747	231	393	1004	13
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	0	231	91	525	60	1333	935	1223	378	814	1643	21
Grp Volume(v), veh/h	39	0	0	189	0	33	6	0	589	83	0	473
Grp Sat Flow(s),veh/h/ln	322	0	0	585	0	1333	935	0	1600	814	0	1664
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.6	0.3	0.0	20.4	6.3	0.0	13.9
Cycle Q Clear(g_c), s	26.0	0.0	0.0	26.0	0.0	1.6	14.2	0.0	20.4	26.7	0.0	13.9
Prop In Lane	0.28		0.28	0.91		1.00	1.00		0.24	1.00		0.01
Lane Grp Cap(c), veh/h	144	0	0	245	0	385	507	0	978	393	0	1017
V/C Ratio(X)	0.27	0.00	0.00	0.77	0.00	0.09	0.01	0.00	0.60	0.21	0.00	0.47
Avail Cap(c_a), veh/h	144	0	0	245	0	385	507	0	978	393	0	1017
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	0.0	33.3	0.0	23.3	13.4	0.0	10.8	19.0	0.0	9.5
Incr Delay (d2), s/veh	1.0	0.0	0.0	13.9	0.0	0.1	0.0	0.0	2.7	1.2	0.0	1.5
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	0.6	0.0	0.0	5.2	0.0	0.5	0.1	0.0	7.1	1.3	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	0.0	47.2	0.0	23.4	13.4	0.0	13.5	20.2	0.0	11.0
LnGrp LOS	C	A	A	D	A	C	B	A	B	C	A	B
Approach Vol, veh/h		39			222			595			556	
Approach Delay, s/veh		26.7			43.6			13.5			12.4	
Approach LOS		C			D			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		59.5		30.5		59.5		30.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		* 4.5				
Max Green Setting (Gmax), s		25.5		25.5		25.5		* 26				
Max Q Clear Time (g_c+I1), s		28.7		28.0		22.4		28.0				
Green Ext Time (p_c), s		0.0		0.0		1.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				18.2								
HCM 6th LOS				B								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	155	125	235	285	15
Future Vol, veh/h	5	155	125	235	285	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	200	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	4	8	9	0
Mvmt Flow	6	196	158	297	361	19





Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	984	371	361	0	-	0
Stage 1	371	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.14	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.236	-	-	-
Pot Cap-1 Maneuver	278	679	1187	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	241	679	1187	-	-	-
Mov Cap-2 Maneuver	241	-	-	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	544	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1187	-	241	679	-	-
HCM Lane V/C Ratio	0.133	-	0.026	0.289	-	-
HCM Control Delay (s)	8.5	-	20.3	12.4	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.1	1.2	-	-

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	15	20	45	15	20	15	545	70	30	540	5
Future Vol, veh/h	10	15	20	45	15	20	15	545	70	30	540	5
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	4	2	5	5	0
Mvmt Flow	11	16	21	47	16	21	16	574	74	32	568	5
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1297	1315	571	1296	1280	611	573	0	0	648	0	0
Stage 1	635	635	-	643	643	-	-	-	-	-	-	-
Stage 2	662	680	-	653	637	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.15	-	-
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	-	-	2.245	-	-
Pot Cap-1 Maneuver	140	159	524	140	167	497	1010	-	-	924	-	-
Stage 1	470	476	-	465	472	-	-	-	-	-	-	-
Stage 2	454	454	-	460	475	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	119	151	524	119	159	497	1010	-	-	924	-	-
Mov Cap-2 Maneuver	119	151	-	119	159	-	-	-	-	-	-	-
Stage 1	462	459	-	458	464	-	-	-	-	-	-	-
Stage 2	413	447	-	412	458	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	28.1		52.3			0.2			0.5			
HCM LOS	D		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1010	-	-	203	156	924	-	-				
HCM Lane V/C Ratio	0.016	-	-	0.233	0.54	0.034	-	-				
HCM Control Delay (s)	8.6	-	-	28.1	52.3	9	-	-				
HCM Lane LOS	A	-	-	D	F	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.9	2.7	0.1	-	-				

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	140	65	5	10	45	10	5	45	5	5	30	115
Future Vol, veh/h	140	65	5	10	45	10	5	45	5	5	30	115
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	11	5	0	0	3	0	0	8	5
Mvmt Flow	152	71	5	11	49	11	5	49	5	5	33	125
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.5	8.3	8.2	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	67%	15%	3%
Vol Thru, %	82%	31%	69%	20%
Vol Right, %	9%	2%	15%	77%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	55	210	65	150
LT Vol	5	140	10	5
Through Vol	45	65	45	30
RT Vol	5	5	10	115
Lane Flow Rate	60	228	71	163
Geometry Grp	1	1	1	1
Degree of Util (X)	0.079	0.292	0.094	0.192
Departure Headway (Hd)	4.762	4.6	4.792	4.233
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	751	781	747	848
Service Time	2.798	2.631	2.829	2.262
HCM Lane V/C Ratio	0.08	0.292	0.095	0.192
HCM Control Delay	8.2	9.5	8.3	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1.2	0.3	0.7

Intersection

Intersection Delay, s/veh 10.9

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰		↰	↱			↰	
Traffic Vol, veh/h	25	45	220	30	35	10	215	60	30	10	60	30
Future Vol, veh/h	25	45	220	30	35	10	215	60	30	10	60	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	11	3	8	0	0	0	2	4	0	0	6	0
Mvmt Flow	26	47	232	32	37	11	226	63	32	11	63	32
Number of Lanes	0	1	1	0	1	0	1	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay	10.4	10.2	11.9	10.2
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	36%	0%	40%	10%
Vol Thru, %	0%	67%	64%	0%	47%	60%
Vol Right, %	0%	33%	0%	100%	13%	30%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	215	90	70	220	75	100
LT Vol	215	0	25	0	30	10
Through Vol	0	60	45	0	35	60
RT Vol	0	30	0	220	10	30
Lane Flow Rate	226	95	74	232	79	105
Geometry Grp	7	7	7	7	6	6
Degree of Util (X)	0.393	0.146	0.128	0.337	0.136	0.173
Departure Headway (Hd)	6.254	5.548	6.266	5.24	6.202	5.908
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	577	647	575	690	579	607
Service Time	3.981	3.274	3.966	2.94	4.237	3.941
HCM Lane V/C Ratio	0.392	0.147	0.129	0.336	0.136	0.173
HCM Control Delay	13	9.2	9.9	10.6	10.2	10.2
HCM Lane LOS	B	A	A	B	B	B
HCM 95th-tile Q	1.9	0.5	0.4	1.5	0.5	0.6

Appendix B

Goals, Objectives, and Evaluation Criteria

MEMORANDUM

DATE: December 28, 2023
TO: City of Harrisburg
FROM: Erin David, Natalie Chavez
SUBJECT: Revised Memo #1: Goals and Objectives for Transportation System Improvements
CC:
PROJECT NUMBER: 2742395123
PROJECT NAME: Harrisburg TSP

INTRODUCTION

This memorandum summarizes the goals and objectives for the Harrisburg Transportation System Plan (TSP). The recommended goals and objectives are informed by the previous TSP and the Comprehensive Plan; they also consider recently updated plans, including the Parks Master Plan and the Water Master Plan. The goals and objectives will guide the development of the TSP, including projects, programs, standards, and policies that would be used to prioritize potential transportation system investments. These goals will be review by the City and the community during outreach prior to finalizing for the plan.

EXISTING GOALS AND POLICIES

The existing goals are based on Harrisburg Transportation System Plan (1999 and 2004 Addendum) and Harrisburg Comprehensive Plan (2013). Both plans implement the Transportation Planning Rule (TPR) Goal 12. Goal 12 requires cities to create a transportation system that supports all relevant modes of transportation. These existing goals will help develop the potential goals and objectives to add to the Updated TSP.

Harrisburg TSP Goals

Harrisburg Transportation System Plan (1999) includes the following goals that support a multimodal system within the city. As stated in the TSP, goals are based on the goals identified in the Comprehensive Plan, Master Bicycle Plan and in the TPR.

Goals

1. To provide and encourage a safe, convenient, and economic transportation system.
2. To encourage convenient and economic transportation services for seniors and other transportation disadvantaged.
3. To ensure access to all modes of transportation for the citizens of Harrisburg.
4. To provide for alternative travel modes that reduce primary dependence on the automobile.

5. To eliminate potentially hazardous situations and facilitate pedestrian access to the downtown commercial districts the City shall encourage the Oregon Department of Transportation to:¹
 - a. Approve a four way stop or stop light at the intersection of 3rd Street (Hwy 99E) and Smith Street; and
 - b. Evaluate all speed zones in the city.
6. Encourage alternative truck routes for industry, agricultural business and commercial traffic.
7. Encourage the development of a system of sidewalks and bike paths linking major areas of the City.
8. Provide an adequate system of arterial and collector streets to provide for the needs of the residential, commercial and industrial areas of the community shall be maintained.
9. Continue to seek funding to implement Harrisburg's Bicycle Master Plan.
10. Encourage the Oregon Department of Transportation (ODOT) to construct a bikeway from Harrisburg to Junction City.

Harrisburg Comprehensive Plan Goals

The Harrisburg Comprehensive Plan (2013) includes the following policies under Goal 12. Transportation. The goal is to provide and encourage a safe, convenient, and economic transportation system.

Policies

1. Encourage transportation services for senior citizens and other transportation disadvantaged.
2. Encourage the development of a system of sidewalks and bike paths linking major areas of the City.
3. Continue to seek funding to implement Harrisburg's Bicycle Master Plan.
4. Participate in regional and statewide transportation planning in order to ensure access to all modes of transportation for the citizens of Harrisburg.
5. Encourage alternative truck routes for industry, agricultural business and commercial traffic.
6. To eliminate potentially hazardous situations and facilitate pedestrian access to the downtown commercial district, the City shall encourage the State Department of Transportation to:
 - a. Approve a four way stop or stop light at the intersection of 3rd Street (highway 99E) and Smith Street; and
 - b. Evaluate all speed zones in the city.
7. The City shall encourage Linn County to upgrade all County roads within the city limits and Urban Growth Boundary, to city standards for curbs, gutters, streets, and sidewalks.
8. Provide an adequate system of arterial and collector streets to provide for the needs of the residential, commercial and industrial areas of the community shall be maintained.

¹ While both the Comprehensive Plan and previous TSP identify specific actions for ODOT, it should be noted that specific solutions must align with ODOT guidelines, funding availability, and procedure/process.

9. The City will encourage the Oregon Department of Transportation (ODOT) to construct a bikeway from Harrisburg to Junction City.
10. The City's Transportation System Plan shall serve as the city's transportation planning document and the prioritized capital improvement projects therein shall be reflected in the City's Capital Improvement Plan.

Other Plans

The City recently updated both the Parks System Plan (2022) and the Water System Plan (2019). Both of these documents identify key project needs within the context of the city's expanded Urban Growth Boundary as well as updated city code. While they do not specifically influence the recommended Goals and Objectives for the TSP, it's important that projects, programs, and policies consider the links between these systems. This may include opportunities to coordinate projects through the capital improvements plan (CIP) or identify opportunities for transportation improvements to enhance park access; overall, this coordination should influence project prioritization in later phases of this plan.

CITY PRIORITIES

While the updated TSP goals will reflect priorities outlined in previous planning efforts, it's also important to recognize that much has changed since these plans were adopted. The project team met with the city to learn more about the present and future priorities of Harrisburg that may not be reflected in these past documents. Overall, the City hopes the updated TSP can guide future improvements and provide a clear process for achieving them. In general, priorities include:

- Expanding and enhancing the pedestrian and bicycling networks to better meet the needs of all people in Harrisburg, especially within older and underserved areas of the UGB.
- Creating a better balance in the facilities and services provided by the City for multiple modes of travel while also enhancing connectivity for all modes of travel.
- Increasing compatibility of planned transportation improvements with the City's Zoning and Subdivision development code updates.
- Revising the City's Street Capital Improvement Plan, including updated facility costs.
- Identifying funding sources for future projects and programs and aligning projects with funding opportunities.
- Mitigating transportation impacts on wetlands in coordination with land use.
- Supporting the freight industry and expanding accessibility to industrial sites.
- Improving safety and accessibility across the transportation system.
- Improve coordination with ODOT related to 3rd Street (OR 99E), especially regarding strategies to response to local community concerns and identified barriers, such as at the intersection of LaSalle St and high travel speeds along the 3rd Street corridor.

TSP GOALS AND OBJECTIVES

The TSP goals reflect the vision for Harrisburg's transportation system while acknowledging the previously established goals from the Harrisburg Transportation System Plan (1999 and 2004 Addendum) and the Harrisburg Comprehensive Plan (2013). The goals and objectives listed below will guide the development of new projects, programs, and policies that would help implement transportation system improvements.

1. **Goal 1. Transportation for All People** – Provide a safe, reliable, and affordable transportation system for everyone and promote the needs of all people, including populations that are traditionally underserved.

Objectives

- 1.1. Ensure the transportation system is accessible to everyone, including seniors, people with disabilities, low-income individuals, people of color, and individuals living in underserved areas.
- 1.2. Develop street and path connections between streets to enhance connectivity for all people.
- 1.3. Address known safety issues, especially for people who walk, bike, or roll.
- 1.4. Maintain acceptable traffic flow and minimize delay city-wide, in coordination with ODOT guidelines.
- 1.5. Balance freight access with the needs of other modes of travel, including access to industrial parcels.
- 1.6. Coordinate with ODOT to improve safety along 3rd Street (OR 99E), including working within ODOT guidelines to evaluate alternative traffic controls at the intersection of LaSalle and 3rd Street (OR99E).

2. **Goal 2. Livability and Economic Vitality** – Ensure the transportation system supports the community's quality of life by maintaining a healthy economy, encouraging employment opportunities, and providing housing affordability.

Objectives

- 2.1. Minimize negative impacts to people, places, and environment from the transportation system.
- 2.2. Balance transportation needs on 3rd Street (OR 99E) to improve safety and comfort for all people, support business, and enhance the character of downtown.
- 2.3. Improve access to jobs for both residents and employers in Harrisburg.
- 2.4. Maintain and enhance freight accessibility to the industrial sites in the City's UGB.
- 2.5. Develop projects and programs that are scaled appropriately to Harrisburg's small-town context.
- 2.6. Coordinate with local, state, and regional agencies on transportation issues and system improvements.
- 2.7. Prioritize and coordinate investments to support the City's present and future development.
- 2.8. Improve access to Harrisburg parks for people walking and bicycling.

3. **Goal 3. Well-Connected Multi-Modal System** – Prioritize improvements that support people safely and comfortably walking, biking, and using public transportation services.

Objectives

- 3.1. Improve connectivity in the City's transportation network for all modes of travel, with an emphasis on walking and biking.
- 3.2. Balance the facilities and services provided by the City for multiple modes of travel, with an emphasis on walking and biking, as well as providing improved access to parks in Harrisburg.
- 3.3. Improve street crossings on arterial and local streets to increase safety and comfort.
- 3.4. Work to provide convenient and affordable transportation services for seniors, people with disabilities, and other underserved populations.

3.5. Work to establish public transportation access, including through partnerships with nearby service providers.

4. **Goal 4. Environmentally Sustainable** – Promote a sustainable transportation system by maintaining and preserving the existing system, mitigating environmental impacts from new development, and meeting the present and future needs of Harrisburg.

Objectives

- 4.1. Coordinate planned transportation improvements with the recent revision of the City’s Zoning and Subdivision Development Codes and new development to ensure new development complements the community, supports all modes of travel, and helps implement the TSP.
- 4.2. Preserve, maintain, and manage demand on the existing system before making new investments.
- 4.3. Minimize transportation impacts to the Willamette River, wetlands, and other natural features.

5. **Goal 5. Fiscal Responsibility**– Develop local funding sources and seek grants to implement future projects and programs.

Objectives

- 5.1. Evaluate new local funding options for transportation maintenance and improvements by revising the City’s Street Capital Improvement Plan and updating the facility costs in the City’s Transportation Systems Development Charge.
- 5.2. Develop transportation projects that align with federal, state, and regional grant program goals and requirements.
- 5.3. Prioritize transportation investments in older and underserved areas of the City’s UGB, with an emphasis on walking, biking, and public transit, such as Safe Route to School grant.

EVALUATION FRAMEWORK

Evaluation criteria in Table 1 are based on the goals and objectives and will be used to evaluate and prioritize transportation system investments. Each criterion will be evaluated using a “Consumer Reports” scale as follows:

- Project meets or fully addresses the criterion
- ◐ Project partially meets or addresses the criterion
- Project does not meet or has negative impacts with respect to the criterion

N/A Not applicable

Table 1. Project and Program Evaluation Criteria

Goal	Criterion	How will we measure?
Goal 1. Transportation for All People	Project enhances multimodal options for people who walk, bike, or use a mobility device, and considers the needs of groups that have difficulty in obtaining transportation because of their age, income, or physical or mental disability	<ul style="list-style-type: none"> Qualitative assessment of effects on multimodal access or improved mobility options for low-income residents, elderly populations, youth, or people living with disabilities Qualitative assessment of effects on multimodal access based on Level of Traffic Stress
	Project addresses known safety issue, especially for people who walk, bike, or roll.	<ul style="list-style-type: none"> Qualitative assessment based on crash data and community feedback.
	Project enhances connectivity while maintaining acceptable traffic flow and minimizing delay city-wide	<ul style="list-style-type: none"> Quantitative assessment of connectivity with consideration for impacts on measures such as v/c ratio, LOS (Level of Service), parking, etc.
Goal 2. Livability and Economic Vitality	Project supports transportation disadvantaged populations and avoids disproportionate negative impacts to social, economic, or environmental resources	<ul style="list-style-type: none"> Qualitative assessment based on available data
	Project is supported by the community	<ul style="list-style-type: none"> Public and stakeholder feedback during outreach
	Project improves or maintains freight access	<ul style="list-style-type: none"> Qualitative assessment of connectivity and access related to industrial sites
Goal 3. Well-Connected Multimodal System	Project enhances connectivity, safety, and comfort of walking and cycling network, improves access to key destinations, and reduces the need for driving	<ul style="list-style-type: none"> Improvement to cycling/walking network connectivity, including an increase in cycling or walking facilities Improves bike/pedestrian Level of Traffic Stress (LTS) - Qualitative assessment of project's impact on safety, comfort, or access for people walking, biking, or using a mobility device
	Project improves access to transit	<ul style="list-style-type: none"> Qualitative assessment of partnerships with transit service providers, connections to future routes, etc.
Goal 4. Environmentally Sustainable	Project avoids impacts to estuary, the shoreline, wetlands, and natural features	<ul style="list-style-type: none"> Qualitative assessment based on potential impacts to important natural resources
	Project manages demand on the existing system or otherwise supports preservation and maintenance of existing assets	<ul style="list-style-type: none"> Qualitative assessment of project impact
Goal 5. Fiscal Responsibility	Project provides high benefits relative to costs	<ul style="list-style-type: none"> Cost/benefit assessment
	Project would likely be eligible for one or more grant programs	<ul style="list-style-type: none"> Project's likely consistency with existing grant program goals

Goal	Criterion	How will we measure?
	Project would likely be built partially or in full through developer frontage improvements, etc.	<ul style="list-style-type: none"> • Likelihood (or not) of developer participation in the project

v/c = volume to capacity ratio, a measure of traffic congestion. The higher the v/c ratio, the greater the vehicle congestion and associated delay

LOS = Level of Service, a measure of vehicle delay. Graded "A" through "F," with "A" being free-flow conditions and "F" being gridlock.

Level of Traffic Stress (LTS) is a rating given to a road segment or crossing indicating the traffic stress it imposes on bicyclists and/or pedestrians.

Appendix C

Proposed Transportation System Improvements

Harrisburg TSP System Improvements

Prepared for
City of Harrisburg



July 2024

Harrisburg TSP System Improvements

Prepared for

City of Harrisburg
120 Smith Street
Harrisburg, OR 97446

Prepared by

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APPENDICES

- A Traffic Analysis Results

Acronyms and Abbreviations

HDM	Highway Design Manual
LOS	level of service
ODOT	Oregon Department of Transportation
RRFB	rectangular rapid-flashing beacon
SUP	shared-use paths
TSMO	transportation systems management and operations
TSP	transportation system plan
UGB	urban growth boundary

1. Introduction

This report identifies and evaluates draft transportation alternatives for the City of Harrisburg Transportation System Plan (TSP) Update. Draft alternatives consist of transportation improvement projects, strategies, and potential programs to address transportation needs and opportunities in the City. Draft alternatives were evaluated against multiple criteria including TSP goals and objectives, technical analysis of benefits and trade-offs, and planning-level costs to develop recommendations and priorities for the TSP. This report also identifies conceptual amendments to the City's development code to support future implementation of recommended projects and programs.

The alternatives analysis considered options for all transportation modes within the city, including driving, cycling, walking, transit, and freight. These alternatives consist of a range of different types of investments that can be made to the City's transportation system—such as physical improvements to roads and crossings—strategies for managing traffic, and transit service options through town.

2. Key Issues and Needs

The issues and needs derived from the prior Existing and Future Conditions analysis (see TM#2: Transportation System Conditions and Deficiencies) are summarized below.

2.1 Streets and Bridges

- **Multimodal Conflicts.** OR 99E/S 3rd Street is the main north-south connection through the city and is the primary connection out of the city. While OR 99E/S 3rd Street is an important thoroughfare in Harrisburg, it can act as a dividing line within the community due to the high number of vehicles, limited enhanced crossing opportunities, and prevalence of freight movement. Community members have identified OR 99E/S 3rd Street as the most significant barrier to travel in and through Harrisburg.
- **Road Connectivity.** Few routes in Harrisburg provide continuous connections across the city. A complete grid network in and around Harrisburg's downtown enhances connectivity for all modes of travel and provides system redundancy; however, developments to the north, east, and south in the city more typically feature cul-de-sac or dead-end roadways that reduce neighborhood connectivity. Further, roadway connectivity is reduced in locations adjacent to the railroad. Roads such as Schooling Road, Fountain Street, Kesling Street, and Moore Street dead-end at track locations, which limits the number of east-west connections in the city.
- **Pavement Condition.** The City recently completed a comprehensive pavement inventory, resulting in an average score of "Fair" for pavement condition. Staff have identified the need to improve pavement preservation efforts to enhance the transportation system and reduce future costs associated with failing pavement.
- **Congestion.** Community members have identified congestion along OR 99E/S 3rd Street as a challenge to the transportation system in Harrisburg, particularly at the intersection with LaSalle Street. Community comments specifically note the impact of freight movement on congestion.

- **Additional Connections.** New and extended public streets will be needed to serve areas of new development and to improve connectivity of the local street system. Some new and extended streets will create new intersections on the arterial and collector street system.

2.2 Freight

- **Freight.** Currently, most freight travels on OR 99E/S 3rd Street, which is a designated freight route and Reduction Review Route. However, freight traffic also requires connections to industrial sites in Harrisburg, including businesses along S 2nd Street south of OR 99E, LaSalle Street east of OR 99E/S 3rd Street, and areas north of Territorial Street along OR 99E and Peoria Road. Freight traffic movement, especially along LaSalle Street, results in potential conflict for all modes. Intersection improvements may be needed on OR 99 at S 2nd Street to accommodate existing industrial users and expected development in the area south of OR 99. While Tandy Lane is outside of City limits but within the UGB, intersection improvements on OR 99E at Tandy Lane may also be needed to accommodate future industrial development in that area.

2.3 Traffic Operations

- **Mobility Targets.** Roadway mobility targets are measures of traffic congestion based on volume-to-capacity (V/C) ratios and level of service (LOS). The intersection of OR 99E/S 3rd Street and LaSalle Street currently exceeds the mobility target and is expected to exceed the mobility target in the future. This intersection currently operates at a v/c ratio of 1.24 in existing conditions and is expected to operate at a v/c ratio of 1.55 in future conditions. The intersection of OR 99E/S 3rd Street and LaSalle Street will likely require measures to ensure it meets mobility targets.
- **Traffic Congestion.** City staff and community members have noted congestion and potential conflicts along OR 99E/S 3rd Street, particularly at LaSalle Street. This is consistent with the results of the intersection analysis completed as part of this report. Community members have expressed specific concern with the movement of freight vehicles in this area and the impact to safe travel.

2.4 Walking and Bicycling

- **Pedestrian Level of Traffic Stress.** Generally, streets in Harrisburg provide relatively low-stress routes for walking. Connections among neighborhoods along major roadways are rated 2 for pedestrian level of traffic stress, meaning that the route is suitable for adults. High-stress routes, however, include OR 99E/S 3rd Street, which is the primary route through the city and where many businesses and services are located. In addition to being a high-stress route for pedestrian travel along S 3rd Street is also a barrier for pedestrian travel across the roadway, effectively limiting connections between the eastern and western areas of Harrisburg.
- **Bicycle Level of Traffic Stress.** Harrisburg's shared street and dedicated bike lane facilities contribute to low-stress routes in several key areas of the city. For example, low-stress connections near the schools on S 6th Street, S 9th Street, Smith Street, and LaSalle Street facilitate student connections to educational opportunity. However, high-stress routes, including OR 99E/S 3rd Street and Territorial Drive, limit the connectivity of the bicycle network and create barriers for people traveling from residential areas in both the northern and southern areas of the city. Additionally, while some routes, such as Diamond Hill Drive, may be identified as low stress based on the analysis, feedback from city staff and

community members indicate that these routes are less comfortable to travel along by bicycle.

- **Bicycle and Pedestrian Gaps.** The pedestrian network is relatively complete along major roadways (arterials and collectors) in Harrisburg, with sidewalks generally present on at least one side of the roadway. However, many areas of the city lack dedicated walking facilities to support travel within neighborhoods. The bicycle network is limited in Harrisburg, with dedicated bike lanes on only a few key roads, such as Diamond Hill Drive, portions of LaSalle Street, and S 6th Street.

2.4.1 Pedestrian Crossings

- **Crossings on OR 99E/S 3rd Street.** There is one signalized crossing at Territorial Street and an additional unsignalized marked crossing at Smith Street. Smith Street is also a designated school crossing. Smith Street has stop signs, but OR 99E/S 3rd St does not currently include any stop control. City staff have requested that a rectangular rapid-flashing beacon (RRFB) be installed at the intersection of Smith Street and OR 99E/S 3rd Street. Project partners identified challenges for people walking and biking that try to cross OR 99E/S 3rd Street.
- **Enhanced Crosswalk Treatment.** Marked crosswalks facilitate connections in many areas of the city. Most crosswalks are striped with transverse markings and are fading in many areas; however, several locations include high-visibility crosswalk striping, and the intersection of Diamond Hill Drive and N 9th Street features a pedestrian-activated beacon to further support crossing. Further, while curb ramps are present in many locations, most lack detectable warning surfaces. Recent improvements, including the addition of curb extensions at S 2nd Street and Smith Street and the enhanced crossing at Diamond Hill Drive and N 9th Street, have updated the existing curb ramps to include detectable surfaces.

2.5 Public Transportation

- **Public Transit.** The city does not currently have transit service, but there is interest in providing access to service through partnerships with neighboring jurisdictions and Linn County (County).
- **Populations that may Benefit from Public Transportation.** According to the U.S. Census, over 30% of Harrisburg residents are under the age of 18, and 16% of Harrisburg residents identify as having a disability. Public transportation can expand mobility opportunities for these groups. Additionally, public transportation that connects to nearby cities could support commuter travel patterns and help manage demand on the roadway system.

2.6 Safety Concerns and Deficiencies

- **Crash Summary.** Crash data from 2017 through 2021 show that crashes occurred most frequently on OR 99E/S 3rd Street. During this 5-year period, 57 crashes occurred, with crash severities ranging from property damage only to serious injury.
- **Crash Severity.** Of the 57 total car crashes, 30 involved property damage only (no injury), 17 resulted in a possible injury, 6 resulted in a suspected minor injury, and 4 resulted in a suspected serious injury.
- **Crashes Involving People Walking or Biking.** Analysis focused on crashes involving people walking or cycling; two crashes involved a person walking, and no crashes involved people bicycling. Both pedestrian-involved crashes were identified as possible injury crashes. One

occurred on Smith Street at OR 99E/S 3rd Street; the crash report indicated that a failure to yield contributed to this crash. The second occurred on S 9th Street south of Heather Turn. Limited information is available about this crash, but it occurred in the evening during the winter months. Other Improper Driving was identified as a contributing factor.

- **Crash Locations.** Over 40% of crashes occurred at an intersection, with rear-end and turning movements as the most common crash type. Crashes most frequently occurred on OR 99E/S 3rd Street, with nearly 50% of all crashes occurring on this corridor.
- **Locations for Further Safety Review.** The safety analysis did not identify intersections with a crash rate over the 90th percentile crash rate. However, based on review of both frequency and severity of crashes, further review should be considered along the OR 99E/S 3rd Street corridor. This corridor represents not only close to half of all crashes in Harrisburg, it also represents a significant proportion of intersection-related crashes and suspected minor injury crashes in the city.

3. Introduction to Solutions

The following sections review solutions for identified transportation needs and issues. This analysis supports updating the 1999 TSP. Where applicable, 1999 TSP project are carried forward. However, based on the significant change in transportation needs for the city, many recommendations represent new projects or modifications of previous recommendations. Finally, new projects or programs that address needs are also proposed. Figure 1 below displays all recommended improvements, which are outlined in more detail in the sections that follow.

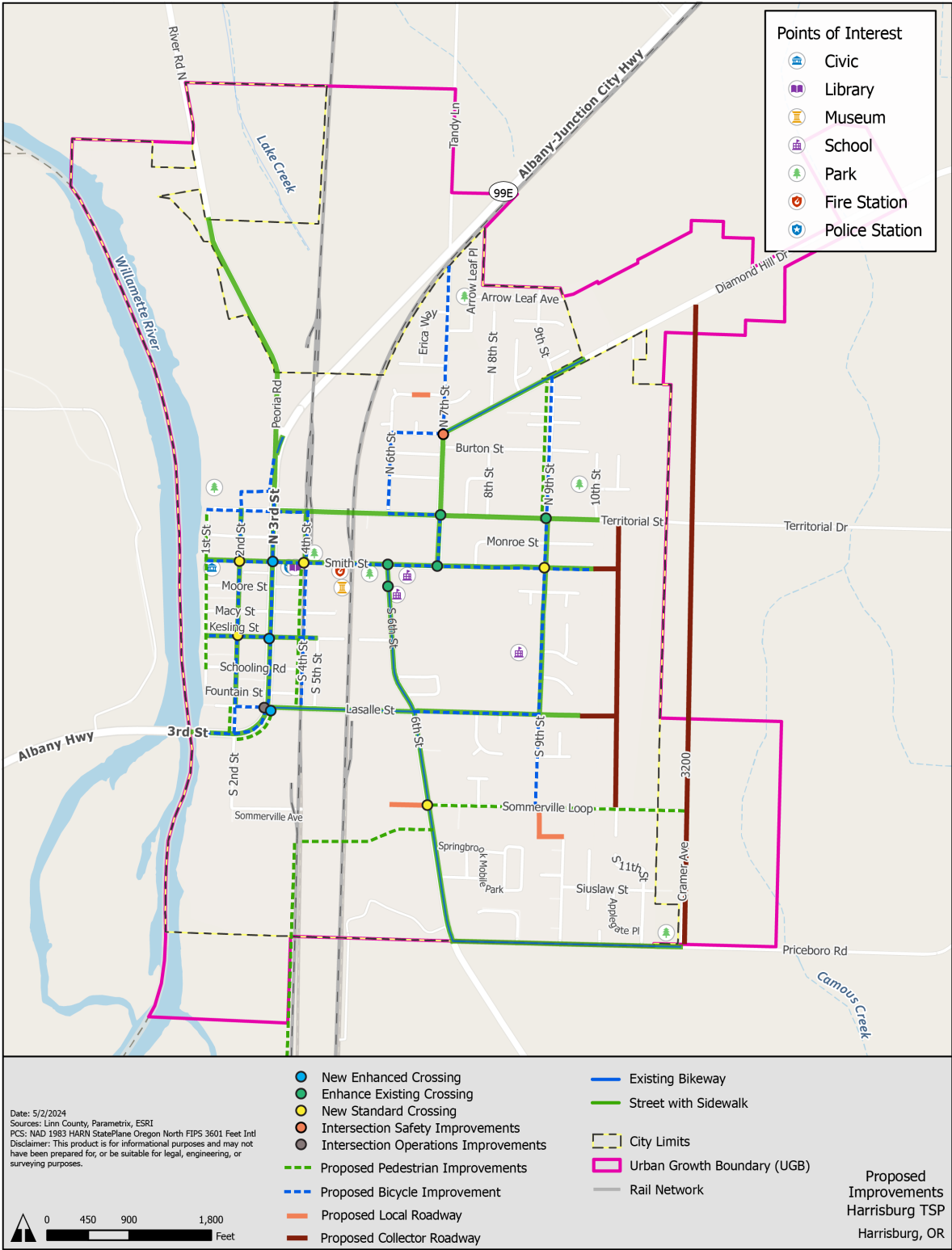


Figure 1: Proposed Transportation Improvements

4. OR 99E/S 3rd Street

This section reviews proposed improvements to the OR 99E/S 3rd Street corridor. This corridor is the main north-south route through Harrisburg, providing access to both local businesses and destinations, as well as connection to neighboring jurisdictions. While traffic analysis indicated that the roadway has sufficient capacity now and in the future—except at key intersections described above—the community frequently experiences congestion in the corridor and has identified safety concerns for travel, regardless of mode of travel. Solutions for S 3rd Street focus on the following:

- Approaches to meeting the Oregon Department of Transportation (ODOT) *Highway Design Manual* (HDM; ODOT 2024) guidance.
- Alternatives that support improved safety performance on S 3rd Street.

4.1 Intersection Operations

The project team conducted traffic analysis to understand roadway system performance in Harrisburg both today and in the future (2045). The intersection of OR 99E and LaSalle Street exceeds its mobility target in both scenarios. In addition to the traffic analysis, feedback from the City, Project Advisory Committee, and public indicate that this intersection experiences significant congestion and is a safety concern for people traveling in Harrisburg. This intersection currently accommodates freight travel on both roadways, including access to industrial parcels on LaSalle east of S 3rd Street. Future expansion of industrial uses in this area would further exacerbate operations concerns.

To address operational deficiencies at the intersection, the project team evaluated two potential solutions for this location, described in detail in Table 1 and the text that follows. Both options are expected to improve intersection operations and meet mobility targets in the future.

Table 1: OR 99E/S 3rd Street and LaSalle Street Alternatives

Existing Conditions V/C	Future No Build Conditions V/C	Discussion and Potential Solutions
<ul style="list-style-type: none">▪ Major Street: 0.06▪ Minor Street: 1.24	<ul style="list-style-type: none">▪ Major Street: 0.07▪ Minor Street: 1.55	<ul style="list-style-type: none">▪ Implement a single-lane roundabout at the intersection, including modifications to the approaches to minimize the impact to surrounding parcels.<ul style="list-style-type: none">○ Modeled future year V/C for this solution is 0.65, meeting ODOT mobility targets.○ Limitations of this solution, including freight movement and available right-of-way, are discussed in more detail below.▪ Install a traffic signal.<ul style="list-style-type: none">○ Modeled future year V/C for this solution is 0.70, meeting ODOT mobility targets.○ While the intersection meets signal warrants, there are limitations regarding available right-of-way, discussed in more detail below.

Preliminary options explored for the single-lane roundabout included options for varying size, placement, and access requirements. Exploration of roundabout configurations at the intersection revealed several limitations, including expected impacts to surrounding private property and anticipated constraints for freight turning movements. Data from the Motor Carrier Unit indicates that this intersection needs to accommodate wide and long freight loads. More information about modeled future conditions can be found in Appendix A.

The City had indicated a preference for a traffic signal at the intersection of S 3rd Street/OR 99E and LaSalle Street. Traffic signals generally require less right-of-way than roundabouts; however, there may not be sufficient existing right-of-way for a traffic signal. A preliminary analysis indicates that this location meets signal warrants (see Appendix A for additional information). An Intersection Control Evaluation by ODOT will be required when the City seeks traffic control at this intersection; that evaluation will provide the final determination of traffic control measures.

4.2 **S 3rd Street Multimodal Improvements**

The S 3rd Street corridor does not meet the design guidelines established in the ODOT HDM (2024) based on the assumed urban contexts for the corridor (Table 2). The HDM was revised recently to include new design guidance and standards for accommodating all transportation modes on state highways within cities. This relatively new guidance emphasizes safety and mobility for people walking and cycling, and it seeks to implement context-sensitive improvements that reflect the surrounding land use. The proposed urban context establishes how the corridor should function for all users. Table 2 provides design guidance from the HDM about the desired features for S 3rd Street.

Table 2. Highway Design Manual Guidelines – OR 99E/S 3rd Street

Street Boundaries	HDM Urban Context	Recommended Crossing Spacing Target	Recommended Pedestrian Facility	Recommended Bicycle Facilities
Kesling Street to south City Limits	Residential Corridor	<ul style="list-style-type: none">500–1,000 feetDoes not meet target.	<ul style="list-style-type: none">Continuous and buffered sidewalks.Does not meet target.	<ul style="list-style-type: none">Start with separated bicycle facility, consider roadway characteristics.Does not meet target.
North City Limit to Kesling Street	Commercial Corridor	<ul style="list-style-type: none">500–1,000 feetCrossing spacing between Territorial and Smith meets target; remaining corridor does not meet target.	<ul style="list-style-type: none">Continuous and buffered sidewalks, with space for transit stations.Does not meet target.	<ul style="list-style-type: none">Start with separated bicycle facility, consider roadway characteristics.Does not meet target.

The following sections outline recommended improvements align S 3rd Street with HDM guidance for supporting all transportation modes.

4.2.1 Implement Bicycle Facilities on S 3rd Street

OR 99E/S 3rd Street does not currently have bike lanes. Wide shoulders are present in limited locations. Based on the proposed urban context and roadway context, separated bicycle lanes are the preferred option. If on-street bikeways are provided, they should be between 7 and 8 feet wide. Current roadway width (curb to curb) varies but is generally around 40 feet. The roadway has one general purpose travel lane in each direction and one center turn lane. This route is also a reduction review route. Accommodation of bike facilities in each direction would require removal of the center turn lane or widening of the roadway. The City has expressed a preference for maintaining the center turn lane on OR 99E/S 3rd Street for the following reasons:

- The center turn lane currently facilitates access to intersecting corridors and businesses located along OR 99E/S 3rd Street. Removal of the turn lane is expected to have operational impacts for travel along OR 99E/S 3rd Street. Further, reported crashes along OR 99E/S 3rd Street were frequently associated with intersections, specifically turning movements and rear-end crashes. Removal of the center turn lane may increase the potential for conflict related to the safety performance of the corridor.
- Roadway widening would require acquisition of right-of-way from properties adjoining the highway. Along significant portions of the corridor, buildings are located immediately adjacent to the existing sidewalk, which would result in impacts to those buildings to expand the roadway width for accommodation of both bicycle facilities and sidewalks.

4.2.2 Develop Parallel Routes for People Cycling

S 3rd Street does not currently have enough right-of-way to accommodate a bicycle facility without substantial changes to the roadway configuration and operation (e.g., removal of the center two-way left turn lane). Bicycle travel could instead be accommodated on routes adjacent to S 3rd Street, consistent with the Transportation Planning Rule (OAR 660-012-0000) and ODOT HDM guidance. Both S 2nd Street and S 4th Street could be improved as cycling routes to facilitate north-south travel through Harrisburg's downtown.

These roads have lower traffic volumes and lower posted speed limits that would support development of bicycle boulevards. Improvements should include elements that prioritize bicycle travel, including traffic calming and placement of stop signs to limit stop control for north-south travel, and pavement markings indicating shared-use travel lanes. Wayfinding signage and/or pavement markings can help support bicycle navigation and reinforce the bicycle boulevard designation.

There are potential drawbacks to this approach:

- It may be more difficult to reach destinations on S 3rd Street. However, by providing routes on both the east and west sides of S 3rd Street, these routes offer opportunities to reach destinations via the local cross streets.
- Both roads do not provide routes of travel for the full length of OR 99E/S 3rd Street in Harrisburg. OR 99E north of Territorial Street has limited right-of-way to provide for an on-street bikeway on both sides of the roadway. A shoulder on OR 99E and a short segment of striped bicycle lane currently support southbound travel until approximately 500 feet north of Territorial Street. A connection should be established between the existing bike lane and the local street network in Harrisburg. The City has indicated previous interest in developing S 2nd Street north of Territorial and establishing a connection in coordination with private property owners on the northwest corner of Territorial and S 3rd Street.

- The southern terminus for S 2nd Street is OR 99E. South of OR 99E, S 2nd Street provides access to industrial businesses and to Eagle Park. The intersection of S 2nd Street with OR 99E is challenging for pedestrian and bicycle crossing due to the curve of OR 99E and the speed of traffic transitioning from a rural to urban context. A safer connection to S 2nd Street south of OR 99E will be a proposed sidewalk/path on the east/south side of OR 99E from LaSalle Street to S 2nd Street. Wayfinding improvements should be provided to support bicycle navigation to destinations such as Eagle Park.
- S 2nd Street south of Schooling Street has a rating of “Poor” based on the City’s completed street assessment and requires significant improvement and upgrades to support development of a bicycle boulevard.
- The Portland & Western Railroad runs down the middle of 4th Street between Territorial Street and LaSalle Street. North of Smith Street the railroad has been exposed and separated from the travel lanes. South of Smith Street the railroad tracks are embedded in the pavement with no separation from the travel lanes. A planned project will improve conditions along 4th Street, including designation of pedestrian facilities. This project will also eliminate crossings/connections with 4th Street at Macy, Schooling, and Fountain Streets.

4.2.3 Sidewalk Infill

While sidewalks are present along most of S 3rd Street, there are utility poles within the sidewalk that make some sidewalks too narrow and not ADA-compliant. Older sidewalks in the city are likely less than 6 feet as required by the City Standards. Sidewalks are not present along the south side of S 3rd Street between LaSalle Street and S 2nd Street. This missing sidewalk and conditions at the intersection of S 2nd Street and OR 99E limits pedestrian and bicycle access to S 2nd Street, south of OR 99E. The segment of S 2nd Street south of OR 99E provides access to Eagle Park and industrial businesses in the area. Improved walking and biking access to Eagle Park was frequently requested through public engagement activities. Provision of a shared-use path along this block is needed to provide safe access to Eagle Park and other destinations on S 2nd Street for pedestrians and cyclists.

4.2.4 Improved and Additional Enhanced Pedestrian Crossings

The following approximate locations should be considered for enhanced crossings that include features such as high-visibility continental crosswalk pavement markings, RRFBs, signage, street lighting, or other features determined during the design process:

- Kesling Street
- LaSalle Street
- Smith Street

The addition of an enhanced crossings at LaSalle Street would increase connectivity across OR 99E/S 3rd Street to support access to destinations such as Harrisburg schools, recreation, and services. LaSalle Street is an important crossing that is well used today to connect residential areas west of OR 99E with services along OR 99E and destinations, such as the schools, east of the highway. While alternatives for traffic control changes are identified above for this location, interim improvements could be considered to improve pedestrian and bicycle safety and connectivity. Interim improvements may include installation of a high visibility crosswalk on the north leg of the intersection, improved lighting, advanced crossing signs, and RRFB. Crossings should support both pedestrian and bicycle travel.

The addition of an enhanced crossing at Kesling Street would further increase connectivity across OR 99E/S 3rd Street. OR 99E/S 3rd Street between Kesling Street and the city limits does not meet recommended crossing spacing targets. While crosswalk improvements at Smith Street and LaSalle Street will improve connectivity, these two streets are over 1,500 feet apart. A new, enhanced crosswalk at Kesling Street would reduce this distance and meet the recommended spacing target for this area. Enhanced crossing improvements should align with the ODOT Traffic Manual Table 310.3-A, including continental crosswalk markings, improved lighting, and parking restrictions on crosswalk approach to improve visibility. Treatments, such as an RRFB may be considered.

Smith Street is an existing crosswalk marked with high-visibility continental crosswalk markings; there are pedestrian crossing signs on the southern leg of the intersection. This location is an important connection for residential, commercial, and recreational areas west of OR 99E to the Harrisburg library, skate park, and schools east of OR 99E. Improvements should include RRFBs and improved lighting.

4.3 Additional Considerations

While the Willamette River Bridge lies just outside of the Harrisburg city boundaries, the City has significant interest in the function and state of repair for this structure. There is an ODOT project in design for 2027 construction that will update the bridge rails to meet current safety standards and accommodate the high volume of truck traffic. The City will continue to collaborate with ODOT to identify opportunities to repair this structure.

4.4 Summary of OR 99E/S 3rd Street Improvements

Recommended improvements and alternatives discussed in the previous section for OR 99E/S 3rd Street are summarized in Table 3 below, as well as shown in Figure 2. Project numbers correspond with projects identified in future sections as applicable.

Table 3. OR 99E Improvement Summary

Map ID	Location	Description	Benefits/Impacts
R-1	OR 99E/S 3 rd Street and LaSalle Street	▪ Alternative 1: Install roundabout.	Improve traffic operations. However, may impact freight mobility and is expected to have private property impacts. An intersection control evaluation (ICE) is required for final determination of traffic control.
		▪ Alternative 2: Install traffic signal.	Improve traffic operations. Preliminary analysis shows that location warrants the addition of a traffic signal. An intersection control evaluation (ICE) is required for final determination of traffic control.
PB-3	S 3rd Street from 2nd Street to LaSalle Street	▪ Provide shared use-use path on east/south side of roadway.	Closes a gap in the S 3rd Street pedestrian network on the east and south side of S 3rd Street and provides a safer and more comfortable pedestrian facility for travel toward Eagle Park.
C-1	▪ 3rd Street and Smith Street	▪ Enhance existing crosswalk, including installation of RRFB, at Smith Street	Connects key destinations on either side of S 3rd Street in a location where pedestrians currently cross the highway.
	▪ Kesling Street at S 3rd Street	▪ Install new enhanced crossings at LaSalle Street and Kesling Street	Improves connectivity across S 3rd Street; LaSalle Street crossing further improves connections to schools, parks, and areas east of OR 99E.
B-1	OR 99E/S 3rd Street	▪ Alternative 1: Implement bicycle facilities on OR 99E/S 3 rd Street through downtown Harrisburg.	Provides dedicated facility for bicycle travel through Harrisburg. However, due to limited roadway width will require removal of center turn lane or roadway widening.
	▪ 2nd Street between Territorial and S 3rd Street	▪ Alternative 2: Develop parallel bicycle routes on 2nd Street and 4th Street.	Provides low-stress north-south connection, improving bicycle connectivity in Harrisburg. This route is a parallel route alternative to S 3rd Street. Required improvement of S 2nd Street.
	▪ S 4th Street between Territorial and LaSalle Street		

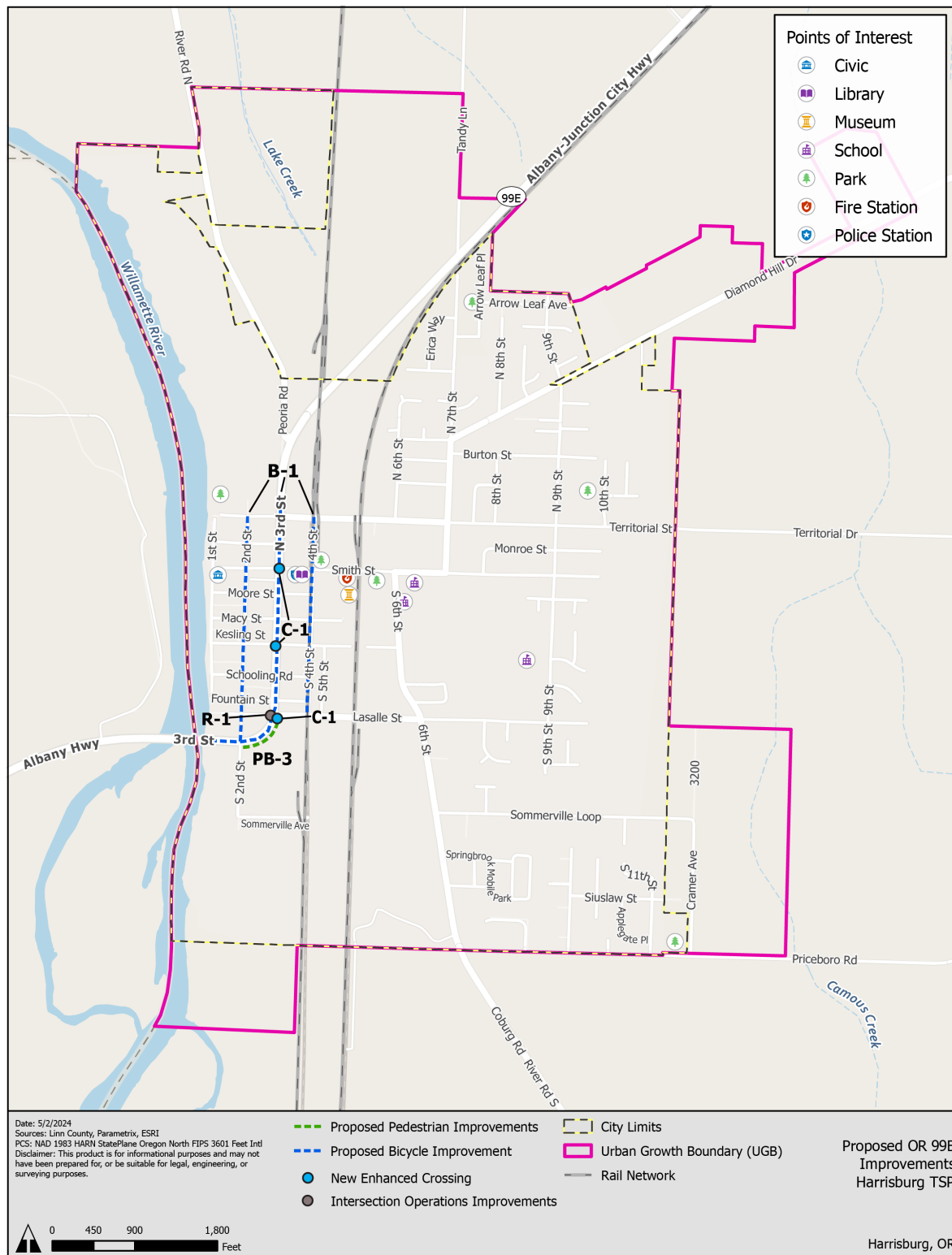


Figure 2. OR 99E Improvement Summary

4.5 Functional Classification and New Connections

Table 4 describes future street connections and the associated functional class. As Harrisburg continues to grow, new roadway connections can improve system connectivity across the city, improve access to destinations for all modes of travel, and enhance circulation, especially considering developing areas. Proposed new connections focus on needed connectivity as well as future street connections to serve development. While several local street connections are included in Table 4 that would improve connectivity within developed areas, future street connections are generally focused on collector or higher-order streets, with the knowledge that local street layout will be determined through platting and development.

In the 1999 TSP, the following roadway connections or extensions were proposed:

- Smith Street extension
- LaSalle Street extension
- 9th Street extension
- 10th Street extension
- Cramer Avenue extension along the urban growth boundary (UGB) between Priceboro and Diamond Hill Drive; extension of UGB would be required.

The extension of 9th Street is partially complete, with recent improvements connecting 9th Street south of LaSalle Street. The remaining connection is retained as part of this TSP update, as are the previously proposed connections.

Figure 3 shows the functional classification system and new roadway connections proposed in the 1999 TSP, as well as new considerations for roadway connections and functional classification updates.

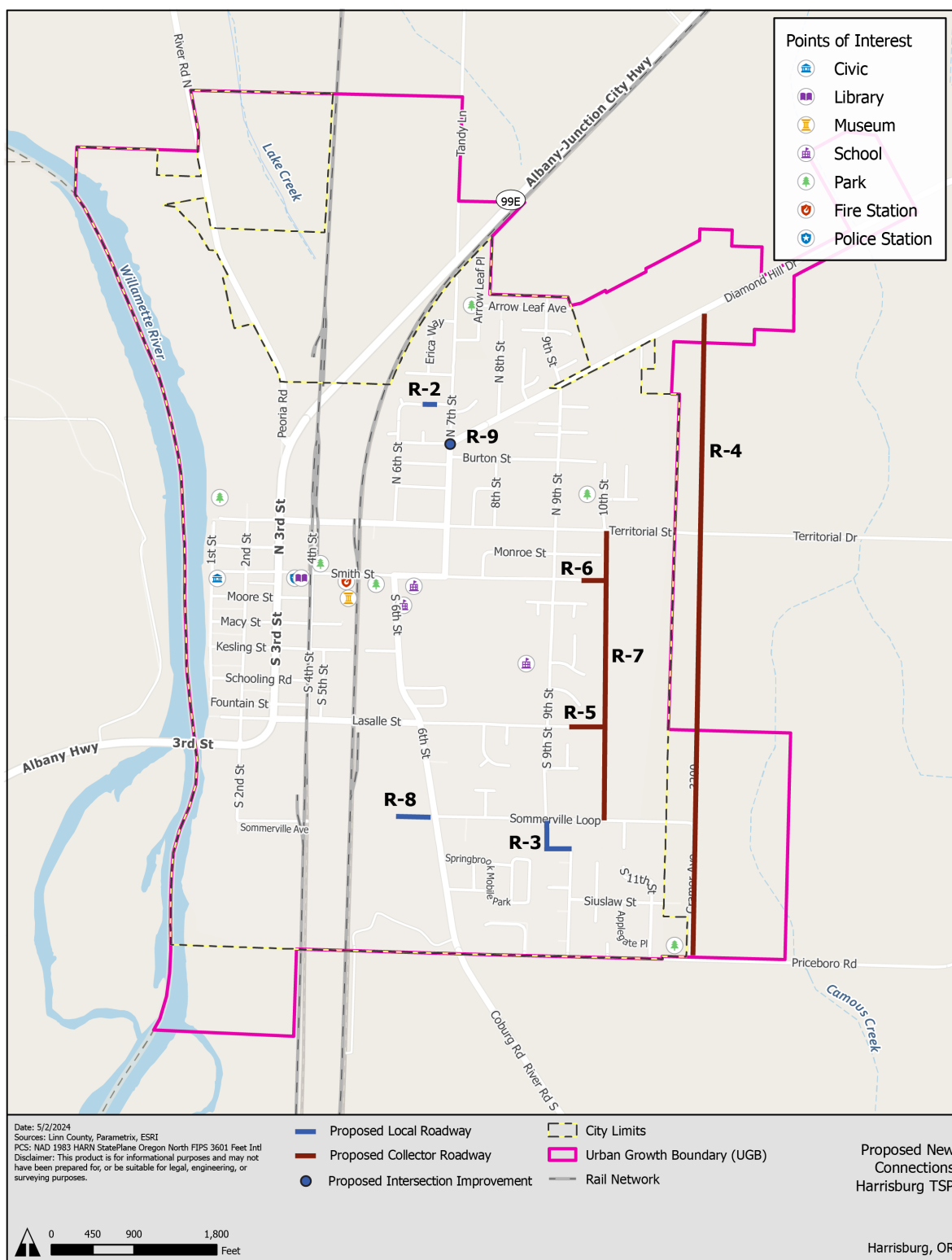


Figure 3. Proposed New Connections

Table 4. Proposed New Connections and Functional Class

Project Number	Location	Description	Functional Class	Benefits/Impacts	Previous TSP
R-2	Riley Way between N 6th Street and N 7th Street	Complete Riley Way between N 6th Street and N 7th Street in coordination with development.	Local	Improves emergency response access by increasing access to residential development west of N 7th Street. Improves overall network connectivity and circulation opportunities for area northwest of Diamond Hill Drive and 7th Street.	No
R-3	S 9th Street, between Sommerville Loop and S 9th Street	Complete connection between S 9th Street north of Sommerville Loop to S 9th Street north of Siuslaw Street.	Local	Increase connectivity for residential areas, including improving access opportunities to Priceboro Park and Harrisburg schools.	Yes
R-4	Cramer Street extension between Priceboro Road and Diamond Hill Drive	Implement a new collector supporting north-south travel in eastern area of UGB in coordination with development.	Collector	Increase connectivity for residential areas, including improving access opportunities to Priceboro Park and Harrisburg schools. Alignment may have wetland impacts that require mitigation. Alignment extends outside of existing UGB and would require extension of the UGB.	Yes
R-5	LaSalle Street, east of 9th Street	Extend LaSalle Street east of 9th Street in coordination with development.	Collector	Alignment may have wetland impacts that require mitigation.	Yes
R-6	Smith Street, east of 9th Street	Extend Smith Street east of 9th Street in coordination with development.	Collector	Alignment may have wetland impacts that require mitigation.	Yes
R-7	10 th Street	Develop new alignment to connect 10 th Street with Sommerville Loop.	Collector	Alignment may have wetland impacts that require mitigation.	Yes
R-8	Sommerville Loop, west of S 6th Street	Reduce roadway standard or vacate alignment.	Local	Route provides access to parcels west of S 6th Street. Updated functional class will better align with intended function of roadway.	No

4.6 Safety

The safety analysis reviewed crash data and safety conditions throughout Harrisburg. While none of the locations studied exceeded the critical crash rate, the analysis revealed that nearly half of all reported crashes occurred on S 3rd Street. Further, crashes were most commonly associated with intersections, with rear-end crashes accounting for 34% of intersection crashes. Contributing factors most frequently included failure to yield (19%), inattention (16%), and failed to avoid vehicle ahead (11%). Additionally, community members identified speeding, especially along OR 99E/S 3rd Street as a key safety issue affecting travel for all modes in the city.

Safety improvements both along S 3rd Street and at intersections should identify opportunities to improve visibility, increase predictability, and slow travel speeds through downtown Harrisburg. Improvements should align with the Safe System Approach and leverage proven countermeasures to the extent possible. Table 5 summarizes examples of potential safety investments to address these issues.

Table 5. Safety Toolbox Treatments

Treatment	Benefit or Impact	Example Location
Install lighting at intersection	Increases visibility for pedestrian and bicycle crossings.	S 3rd Street and Smith Street
Install rectangular rapid-flashing beacon	Increases motorist yielding rates for pedestrian/bicycle crossings.	S 3rd Street and Smith Street
Install raised or profiled thermoplastic pavement markers	Improve visibility of pavement markings at night or in wet conditions.	S 3rd Street near city limits and S 2nd Street
Install a speed feedback sign <i>Requires region traffic engineer approval if installed along an ODOT facility according to ODOT's Traffic Manual.</i>	Encourages drivers to slow down by showing them if they are speeding. Suggests to drivers that enforcement is nearby.	Near S 3rd Street and S 2nd Street
Upgrade to reflective pavement markings	Increases visibility in dark and/or wet conditions.	S 3 rd Street between S 2 nd Street and LaSalle Street
Evaluate opportunities to reduce speed limit on OR 99E. <i>Speed zones are established by ODOT based on characteristics such as crash history, observed speed, traffic volumes, and others. The City can request that ODOT conduct a speed zone investigation.</i>	In coordination with other safety and traffic calming measures, speed limit reductions may help slow operating speeds and improve safety outcomes.	S 3rd Street in Harrisburg

4.6.1 Diamond Hill Drive and N 7th Street

In addition to the improvements discussed above, feedback from community members and city staff identified the intersection of N 7th Street and Diamond Hill Drive as a location of concern. Diamond Hill Drive is a local truck route and key route to connect to Interstate 5. Stop signs are present on three legs of the intersection (eastbound, southbound, and northbound travel); westbound travel

from Diamond Hill Drive does not have any stop control. While Diamond Hill Drive has a posted speed limit of 25mph, community members report high travel speeds for westbound traffic. Safety data shows that this intersection experienced one suspected serious injury crash. This intersection is also an important access route for neighborhoods to the north and west, as street connectivity is limited in these areas. Traffic count data was not available for this intersection as part of the Traffic Operations Analysis.

Additional information is needed, including traffic count data, to assess potential solutions at this intersection. Further, improved street connectivity, such as the completion of Riley Way north of the intersection, may expand potential solutions for this location. Measures may be considered to slow westbound traffic in advance of the intersection, such as advanced warning signs for the pedestrian crossing on the eastern leg of the intersection.

Table 6: Safety Improvements

Project Number	Location	Description	Benefits/Impacts	Previous TSP
R-9	Diamond Hill Drive and N 7 th Street	Improve intersection safety and operations	Intersection was identified by city staff and community members as a key safety concern.	No

4.7 Access Management

Section 18.70.030 of the City of Harrisburg Municipal Code provides guidelines for vehicular and pedestrian access, circulation, and connectivity. The standards apply to new development or changes in land use necessitating new connections; they also apply to all connections to a street as well as driveways and walkways except where another roadway authority’s standards supersede the City standards. The standards were updated as part of the City’s code update on February 1, 2024. There has been no need identified to revisit the currently adopted access management standards.

Access management along OR 99E/3rd Street is subject to ODOT policy and procedures. The northern extent of OR 99E within the UGB, near Tandy Lane, is adjacent to parcels zoned for Rural Commercial and Light Industrial. If these areas are further developed, Tandy Lane will need to be improved to an appropriate standard to serve the development and eliminate access needs on OR 99E. While this land is within the UGB, Tandy Lane is owned and maintained by the County.

4.8 Transportation Systems Management and Operations

The 1999 TSP does not include TSMO projects or programs. TSMO is a set of strategies that focus on operational improvements that can maintain and even restore the performance of the existing transportation system before extra capacity is needed. TSMO strategies also encompass strategies typically considered transportation demand management. The goal is to get the most performance out of the transportation facilities that are already in place. The project team reviewed potential TSMO strategies as described in Chapter 18 of the *ODOT Analysis Procedures Manual* (ODOT 2023).

Table 7 reviews potential TSMO projects or policies that the City can consider to manage traffic and mitigate the need for roadway capacity increases. Note that no costs are provided for these possible investments given substantial unknowns about the scale and scope of these projects. However, in general, TSMO projects provide substantial benefit relative to cost.

Table 7. Possible TSMO Investments

TSMO Strategy	Need Addressed	Recommendation	Supporting Information Required
Weather Warning Systems	There is no weather information signage in Harrisburg. Weather information signage could provide travelers with information about weather conditions on regional highways.	Coordinate with ODOT as intelligent transportation system plans are updated.	Air and road weather conditions, including new weather station at city water plant.
Freight Signal Priority	Depends on future intersection improvements. Access to industrial parcels is required and need may increase with growth of associated industries in Harrisburg.	If a signal is installed at 3rd Street/LaSalle Street, assess operations to determine if freight signal priority is needed to improve access to and from adjacent industrial parcels.	Freight demand
Marketing/Traveler Information	Traveler information programs can help people understand different ways of getting around town. In Harrisburg, a marketing and information program that provided information about walking and cycling routes could help people make more trips by other modes.	Consider a local program for disseminating information about how and where to walk and bike in Harrisburg. These programs can take many forms, including information provided on the City's website, by mailers, or other means.	Staff resources for supporting travel options programs

4.9 Freight

The 1999 TSP recommended establishing a truck route along the proposed roadway extension from Cramer Avenue. This route would provide additional freight access as the city develops, providing alternate routes to OR 99E. Additionally, proposed intersection improvements at OR 99E/S 3rd Street and LaSalle Street include consideration for freight movements and access to destinations in Harrisburg.

5. Bicycle and Pedestrian System

5.1 Pedestrian System

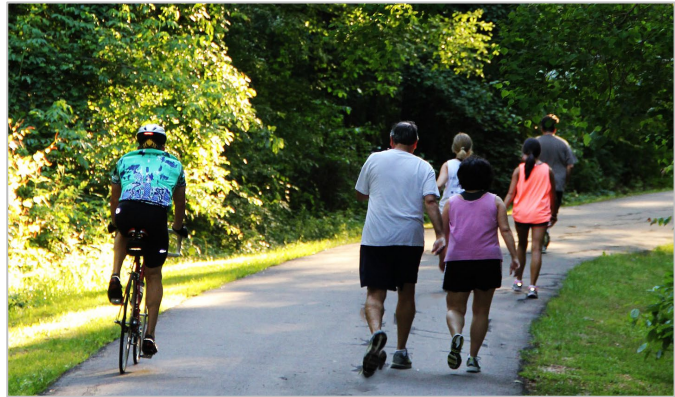
Proposed pedestrian facilities focus on improving the City's existing pedestrian network by providing greater connectivity, safety, access, and comfort. Proposed facilities consider cost-effective options to improve Harrisburg's pedestrian network while acknowledging that not all streets require the same level of facility. For example, while some streets may require sidewalks to best support City goals, other routes may be suitable for shared street treatments that can provide a more cost-effective approach to improving pedestrian routes.

This analysis also assessed opportunities to develop shared-use paths for pedestrian- and bicycle-only travel. These improvements would provide substantial benefits to both pedestrians and bicyclists. Example pedestrian facility types are outlined below. Proposed improvements to Harrisburg's pedestrian system are illustrated in Figure 4 and Table 8.

The project team also proposes projects that prioritize safety improvements for people walking, biking, rolling, and driving to school and may be eligible for Safe Routes to School funding. Proposed TSP projects adjacent to the school campus area can target funding opportunities for safety improvements based on their proximity to schools. Examples include new sidewalks along the west side of N 9th Street between Territorial Street and Diamond Hill Road.

5.1.1 Pedestrian Facilities

Shared-Use Paths. Shared-use paths (SUPs) are typically constructed at grade and provide adequate space for use by both pedestrians and bicyclists. SUPs are free from vehicle traffic and generally are set back away from roadways. Usually, SUPs are paved using asphalt or another hard-surface material. SUPs often require significantly more right-of-way than other options, such as sidepaths and walkways, to provide for a fully-separated path. They may also be more expensive to construct than other pedestrian facilities. However, SUPs can facilitate travel for active modes in areas with limited roadway connectivity. By providing space for all active modes that is fully separate from motor vehicles, SUPs provide a higher level of protection for active modes by reducing potential conflicts with motor vehicles.



Photograph 1. Shared-Use Path

Source: National Park Service

Sidewalks. Sidewalks provide a high level of comfort and separation for people walking and using mobility devices. They are located adjacent to roadways and may include a buffer between the travel lane and walkway. Sidewalks are also constructed to accessible standards for people who use mobility devices. They are more expensive to construct than gravel or hard-packed shoulders and require construction of curb and gutter to address drainage issues.



Photograph 2. Wide Shoulder

Source: Pedsafe

Pedestrian Lanes. Pedestrian lanes are typically constructed at grade. Surfaces may include asphalt, hard-packed materials, like compacted gravel, or turf. The area intended for pedestrian travel can be delineated with paint. Pedestrian lanes are relatively easy to construct and cost-effective. They can be added to roads designated as Neighborhood Greenways (see Section 5.2, Bicycling Improvements). However, they provide less protection to pedestrians than sidewalks, and may not be ADA-compliant. Research suggests that designating space for pedestrian travel through walkways or wide shoulders, pedestrian-involved crashes may be reduced by as much 71% (FHWA 2024).

5.1.2 Crossings

Crossing alternatives can improve safety, access, and network connectivity for walking and biking throughout town. Two kinds of crossings are generally considered:

Standard Crossings. Standard crossings refer to basic crossing improvements, most often consisting of pavement markings and signage. Pavement markings include crosswalk markings and stop bars, while signage includes pedestrian crossing signs. Signage may also include stop signs to control traffic at intersections. Standard crossings are relatively low-cost investments that can have a high impact on pedestrian safety in town.

Enhanced Crossings. Enhanced crossings refer to crossings with treatments that improve visibility of pedestrians and/or improve safety for pedestrians. Enhanced crossings can include a range of treatments, such as pedestrian-activated flashing beacons, median refuge islands, and pedestrian-scale lighting. These crossings are more costly than standard marked crossings but substantially improve safety for pedestrians, people using mobility devices, and bicyclists. Research has shown that pedestrian-involved crashes may be reduced by as much as 40% with use of high-visibility crosswalk improvements. Enhanced crossings are reserved for locations within the City's transportation system support student travel to school or are located along priority pedestrian corridors.



Photograph 3. Enhanced Crossing

Source: ODOT

Table 8. Proposed Pedestrian Improvements

Map ID	Location	Description	Benefits/Impacts
Proposed Pedestrian Improvements			
PB-2	▪ New Alignment between 6th Street and Eagle Park Access Road	▪ Using existing easement, develop new shared-use path connection.	Provides a new direct and more comfortable bicycle and pedestrian connection to Eagle Park along the existing city easement. Recognizes and formalizes existing easement to connect to Eagle Park. May have environmental impacts (i.e., wetlands).
P-4	▪ Sommerville Loop from S 6th Street to Cramer Ave	▪ Improve shared travel condition along Sommerville Loop to improve pedestrian safety and comfort. Treatments may include pedestrian lane or walkway.	Improved shared travel accommodations enhances connectivity to nearby destinations, including connections to Harrisburg High School and Priceboro Park.
P-5	▪ N 9th Street between Diamond Hill Drive and Territorial Drive	▪ Install sidewalks, curb, and gutter on west side of roadway.	Improves connectivity between residential areas and Harrisburg High School.
P-6	▪ S 2nd Street between LaSalle Street and S 3rd St/OR 99E	▪ Complete pedestrian facility connection consistent with bicycle boulevard improvement. Treatment may include pedestrian lane or sidewalk.	Completes pedestrian route along S 2nd Street, consistent with the provision of a dedicated bicycle facility. Increase connectivity to residential areas and other destinations near S 2nd Street and OR 99E.
P-7	▪ S 4th Street between LaSalle Street and Smith Street	▪ <i>Planned Project:</i> Improve pedestrian facilities along rail corridor.	Improves pedestrian north-south connectivity. Improves accessibility and definition of space adjacent to rail corridor.
PB-8	▪ 1st Street between Territorial Street and Schooling Street	▪ Develop shared use path along west side of roadway between Monroe Street and School Street; convert 1st Street to one-way for motor vehicle. Continue shared use path north to Territorial Street.	Creates a low-stress route along the Willamette River, improving access to Riverfront Park.
Proposed Crossing Improvements			
C-2	▪ Smith Street and S 6th Street ▪ Smith Street and N 7th St ▪ S 6th Street, south of Smith Street ▪ N 7th Street and Territorial Street ▪ N 9th Street and Territorial Street	▪ Enhance existing crosswalk through installation of high-visibility continental crosswalk markings, improved signage, and advanced stop lines. RRFBs may be considered at high volume locations and/or key school crossings.	Improves connectivity of the pedestrian network and improves visibility at crossing locations to support access to destinations.

Map ID	Location	Description	Benefits/Impacts
C-3	<ul style="list-style-type: none"> 2nd Street and Smith Street 4th Street and Smith Street S 2nd Street and Kesling Street S 9th Street and Smith Street Sommerville Loop and S 6th Street 	<ul style="list-style-type: none"> Install new standard crosswalk. 	Improves pedestrian connectivity in support of a complete and connect network. Increases visibility at crossing locations. Improves access to destinations.

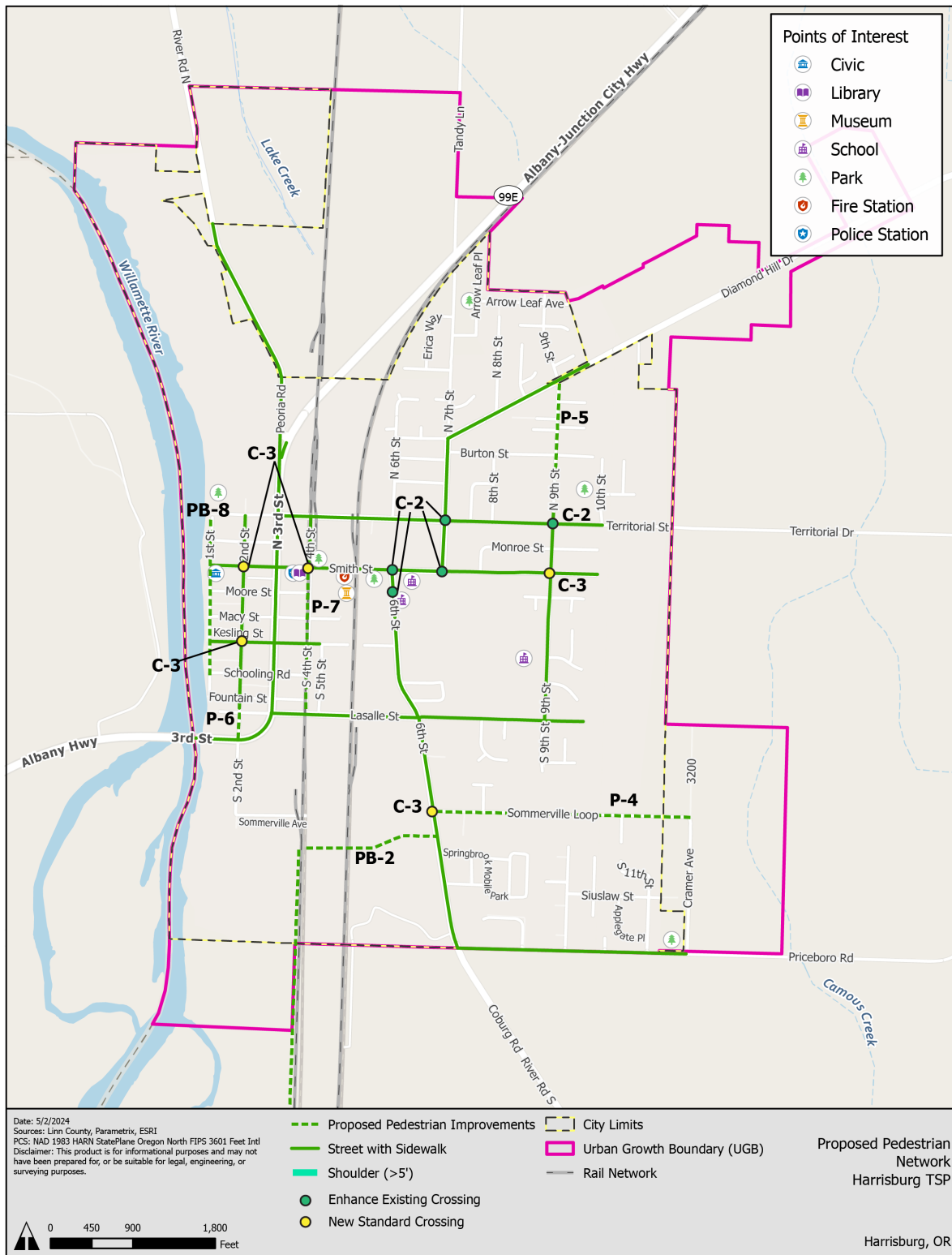


Figure 4. Proposed Pedestrian Network

5.2 Bicycling Improvements

Figure 5 and Table 9 summarize draft bicycling improvements, including low-stress, neighborhood greenway treatments, standard bike lanes, and investments in off-street shared-use paths. Example bicycling improvements are detailed below.

5.2.1 Bicycle Facilities

Shared-Use Paths. As described in the Pedestrian Improvements section, shared-use paths provide adequate space for use by both pedestrians and bicyclists. These are typically paved using asphalt or some other hard-surface material, are free from vehicle traffic, and are typically set back away from roadways or located in their own right-of-way.

Bike Lanes. Bike lanes provide a dedicated space for people to bike. They are intended to be used exclusively for biking without interference from motor vehicles, and run adjacent to traffic lanes, typically in the same direction as motorized traffic.

At a minimum, bike lanes are visually separated from automobile traffic by striping or pavement markers. A spectrum of improvements is available for bike lanes, ranging from conventional bike lanes with a single painted line, to buffered bike lanes as shown in Photograph 4, to protected bike lanes with vertical separation, such as flexible delineators or bollards. The type of improvement recommended is dependent on factors such as traffic volumes, posted speed limit, number of travel lanes, and available right-of-way.

Neighborhood Greenways. Neighborhood greenways are bikeways that provide safe and comfortable travel for people of all ages and abilities. They are instrumental in creating a cost-effective bicycling network on low-traffic, low-speed streets. Greenways are shared-lane facilities where bike traffic and motorized traffic use the same lane without separation. Improvements primarily consist of signage and “sharrow” pavement markings to make navigation easy and to encourage people to walk and bike. However, they may also include traffic calming measures, such as speed tables, to slow traffic and prioritize bicycle and pedestrian travel. With traffic calming measures in place, neighborhood greenways also provide benefit to pedestrian travel. These routes would join with other pedestrian and biking facilities to form a network that is continuous and connected.



Photograph 4. Buffered Bike Lane

Source: City of Corvallis



Photograph 5. Neighborhood Greenway

Source: City of Seattle

Table 9. Proposed Bicycle Improvements

Project Number	Location	Description	Benefits/Impacts	Previous TSP
B-2	<ul style="list-style-type: none"> LaSalle Street between S 2nd Street and S 3rd Street 	<ul style="list-style-type: none"> Develop bicycle boulevard, prioritizing bicycle travel through traffic calming and signage. Dependent on crossing improvements at LaSalle Street. 	Increases network connectivity across S 3rd Street by enhancing connections between S 2nd Street and existing bike lane on LaSalle Street.	No
B-3	<ul style="list-style-type: none"> LaSalle Street between S 6th Street and S 9th Street 	<ul style="list-style-type: none"> Extend bicycle facility east of 6th St. Improvements may include a striped bicycle lane or bicycle boulevard. 	Extends existing bike lane on LaSalle to improve connectivity to residential areas east of S 6th Street as well as improved connectivity to Harrisburg High School.	Yes
B-4	<ul style="list-style-type: none"> Smith Street between 1st Street and 9th Street 	<ul style="list-style-type: none"> Develop bicycle boulevard, prioritizing bicycle travel through traffic calming and signage. 	Creates a low-stress east-west connection between downtown Harrisburg, Harrisburg Elementary and Middle Schools, and residential areas in the east of the city.	No
B-5	<ul style="list-style-type: none"> Kesling Street between 1st Street and S 5th Street 	<ul style="list-style-type: none"> Develop bicycle boulevard, prioritizing bicycle travel through traffic calming and signage. 	Creates a low-stress east-west connection across OR 99E.	Yes
B-7	<ul style="list-style-type: none"> N 6th Street, N Dempsey Street, and N 7th Street between Territorial Street and City Limits 	<ul style="list-style-type: none"> Develop bicycle boulevard, prioritizing bicycle travel through traffic calming and signage. 	Improves connectivity to Arrowleaf Park and Harrisburg schools.	No
B-8	<ul style="list-style-type: none"> N 7th Street between Smith Street and Territorial Street 	<ul style="list-style-type: none"> Develop bicycle boulevard, prioritizing bicycle travel through traffic calming and signage. 	Improve connectivity between neighborhoods in northern areas of Harrisburg with schools and downtown destinations.	Yes
B-9	<ul style="list-style-type: none"> 9th Street between Diamond Hill Drive and Sommerville Loop 	<ul style="list-style-type: none"> Develop bicycle boulevard, prioritizing bicycle travel through traffic calming and signage. Treatment should continue with future extension of 9th Street. 	Improve connectivity to Harrisburg schools from residential areas east and north of schools; improve comfort and safety for students traveling to school by active modes.	No
B-10	<ul style="list-style-type: none"> Connection between N 1st Street/Territorial and OR 99E 	<ul style="list-style-type: none"> Develop connection between N 1st Street proposed bikeway and existing bike lane on southbound OR 99E, if B-1 Alternative 2 is selected. 	Expands bicycle network connection into Harrisburg to meet guidance identified in the <i>Highway Design Manual</i> . Requires coordination with private property.	Yes
B-11	<ul style="list-style-type: none"> Territorial Street between N 2nd Street and N 4th Street 	<ul style="list-style-type: none"> Develop bicycle lane connection to N 2nd Street and N 4th Street bikeways, if B-1 Alternative 2 is selected. 	Expands bicycle network connection into Harrisburg to meet guidance identified in the <i>Highway Design Manual</i> .	Yes

Project Number	Location	Description	Benefits/Impacts	Previous TSP
B-12	<ul style="list-style-type: none"> ▪ Territorial Street between N 6th Street and N 7th Street 	<ul style="list-style-type: none"> ▪ Install striped bicycle lane, in coordination with projects B-7 and B-8. 	Improves bicycle connectivity between residential areas, Arrowleaf Park, and Harrisburg Schools. Parking removal or consolidation may be required.	No

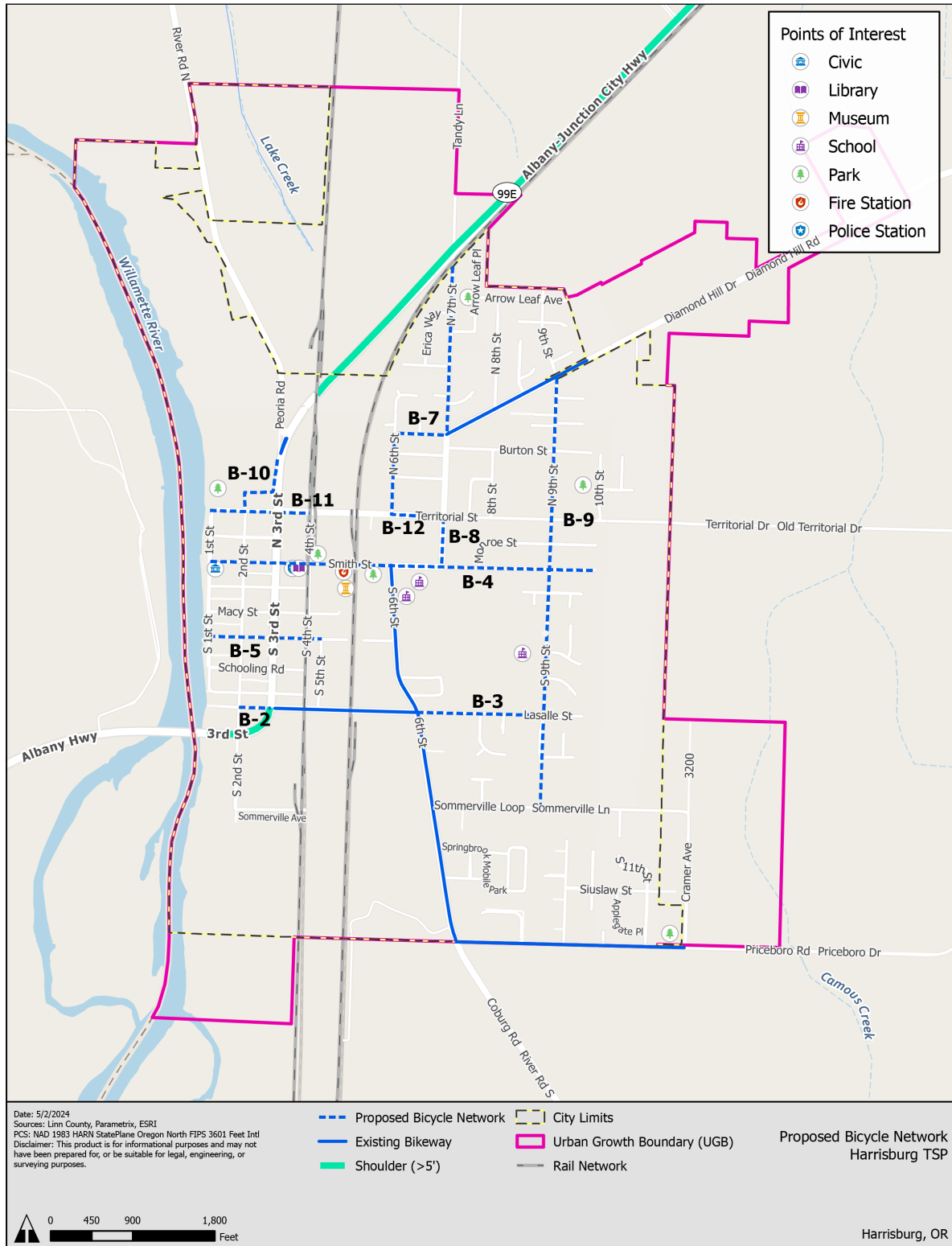


Figure 5. Proposed Bicycle Network

6. Public Transportation

There is currently no transit service in Harrisburg. There is an existing transit service in Junction City, less than 5 miles away. There appears to be a sufficiently wide sidewalk or shoulder on the northwest side of the highway between the two cities but it would take about 2 hours of walking with no apparent rest areas. The 1999 TSP identified public interest in expanding coordination with Lane Transit District to establish a stop on the Lane County side of the Willamette Bridge; additional interest was expressed for limited service leaving from downtown Harrisburg. This limited service proposal included one stop in the morning and one stop in the evening.

Advancing public transportation in and near Harrisburg will require further exploration of intended customers, destinations served, operational partners, and scale of investment. In all instances, STIF is a potential source of funding, but would require partnership with a qualified entity, such as the Oregon Cascades West Council of Governments, to access this funding. Table 10 below summarizes several options and additional considerations to help guide next steps.

Table 10. Public Transportation Approaches

Transit Improvement	Who Benefits?	Potential Operators	Cost (\$ – \$\$\$\$)	Regional Examples	Considerations
Local Circulator. A short-distance fixed-route or deviated fixed-route service that can improve connection to other transit systems, local destinations, and services. Could connect to LTD Route 95 in Junction City.	Residents traveling to local destinations and every day needs, like shopping in Harrisburg. Harrisburg residents connecting to other transit service to reach employment or service destinations in Lane County.	<ul style="list-style-type: none">City of HarrisburgLinn CountyCascades West Transportation	\$\$\$	<ul style="list-style-type: none">Linn Shuttle – Operated by non-profit Senior Citizens of Sweet Home; the shuttle provides a fixed-route connection between Sweet Home, Lebanon, and Albany. Service is available Monday through Friday.	<ul style="list-style-type: none">Requires ongoing funding and staff support.Requires vehicle purchase, maintenance, and operation.
Intercity Fixed Route. Work with Link Lane or Cascade West to establish intercity route between Harrisburg and Eugene. Could operate several round trips per day during morning and evening.	Residents traveling to regional transit hubs.	<ul style="list-style-type: none">Link LaneCascades West Transportation	\$-\$\$\$	<ul style="list-style-type: none">Linn-Benton Loop – The City of Albany (contractor) operated the inter-city loop service to connect Albany and Corvallis. Program is a partnership between agencies and education providers. Service is available Monday through Saturday.	<ul style="list-style-type: none">Requires ongoing funding and staff support.May require vehicle purchase, maintenance, and operation.Jurisdictional coordination; the stop locations in other cities determine the usefulness of service.More trips per day requires more vehicles, staff.
Dial-a-Ride. Demand responsive service that requires advance reservations for trips.	Harrisburg residents traveling within Harrisburg; residents connecting to other transit service to reach employment and services in Lane County.	<ul style="list-style-type: none">City of HarrisburgLinn CountyCascades West TransportationPrivate company (taxi, ride hail)	\$\$\$	<ul style="list-style-type: none">Sweet Home Dial-A-Bus – Operated by non-profit Senior Citizens of Sweet Home and provides curb-to-curb service for people within the boundaries of the Sweet Home School District. Service is available Monday through Friday and must be scheduled in advance.Lebanon Dial-A-Bus Provides curb-to-curb service for people within the boundaries of the City of Lebanon. Service is available Monday through Friday; reservations are not required.	<ul style="list-style-type: none">Requires ongoing funding and staff support.Requires vehicle purchases, maintenance.Could provide vouchers for people to schedule trips with existing providers, or operate service.
Volunteer Driver Programs. Transportation service where volunteer drivers provide transportation services. This may include volunteer vehicles as well as vehicles that are owned or leased by the organization providing transportation.	Harrisburg residents traveling within Harrisburg or traveling to meet every day needs, such as shopping or other services in nearby communities.	<ul style="list-style-type: none">City of HarrisburgLinn CountyCascades West Transportation	\$-\$\$	<ul style="list-style-type: none">Transportation Reaching People – Clackamas County residents over the age of 65 or who have a disability are given rides free of charge to medical appointments, shopping, or other essential errands. Volunteer drivers provide rides using private vehicles, then are reimbursed for mileage.	<ul style="list-style-type: none">Requires ongoing funding and staff support.Could require vehicle purchase, maintenance.
Carpool Program Support. Promote and provide coordination support for a carpool program to help people working outside of Harrisburg reach employment locations.	Employees commuting outside of Harrisburg.	<ul style="list-style-type: none">City of HarrisburgCascade West/OCWCOGMajor Employers	\$	<ul style="list-style-type: none">Get There Oregon – Statewide platform that helps connect to commuters with carpool and vanpool options. Provides additional educational resources and support for commuters and employers.	<ul style="list-style-type: none">Requires ongoing funding and staff support, depending on level of implementation.May be opportunities to coordinate with major employers.Can leverage existing Get There Oregon programs.

LTD = Lane Transit District; OCWCOG = Oregon Cascades West Council of Governments

7. Improvement Evaluation

Table 11 shows the evaluation of the projects and programs considered in the previous sections. The technical evaluation aids in selection of the preferred improvements, in combination with feedback received from the City, ODOT, other project partners, and the public. Each project and program idea is evaluated using a Consumer Reports–style scale:

- Project meets or fully addresses the criterion
- ◐ Project partially meets or addresses the criterion
- Project does not meet or has negative impacts with respect to the criterion

N/A Not applicable

The forthcoming Technical Memorandum 4 will identify improvements as near-term (0 to 5 years), medium-term (5 to 10 years), and long-term (> 10 years) based on their perceived level of implementation difficulty, as well as the timing and scale of the need a given project or program addresses, using the results of this evaluation as part of the decision-making process.

Table 11. Project Evaluation

			Evaluation Criteria						Improvement Time Frame (Near-, Medium-, and Long-Term)
Map ID	Location	Improvement Concept	Enhances Multimodal Options	Addresses Known Safety Issue	Walking/ Cycling Improvement	Improves Freight Access	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	
R-1	OR 99E/S 3rd Street and LaSalle Street Intersection	Alternative 1: Roundabout.	●	◐	●	○	◐	○	N/A
		Alternative 2: Signalization.	●	◐	●	●	●	●	Medium/Long
PB-3	S 3rd Street from 2nd Street to LaSalle Street	Complete shared-use path on east/south side of roadway.	●	●	●	N/A	◐	◐	Medium
C-1	OR 99E/S 3rd Street and Kesling Street, OR 99E/S 3rd Street and Smith Street, OR 99E/S 3 rd Street and LaSalle Street	Install enhanced crossings.	●	●	●	N/A	◐	◐	Near
B-1	OR 99E/S 3rd Street	Alternative 1: Implement bicycle facilities on S 3 rd Street	◐	◐	●	N/A	○	○	N/A
		Alternative 2: Develop parallel bicycle routes on 2nd Street and 4th Street..	●	●	●	N/A	◐	●	Near
R-2	Riley Way between N 6th Street and N 7th Street	Complete Riley Way between N 6th Street and N 7th Street in coordination with development.	●	N/A	◐	N/A	●	○	Medium
R-3	S 9th Street between Sommerville Loop and Siuslaw Street	Complete connection between S 9th Street north of Sommerville Loop to S 9th Street north of Siuslaw Street; coordination with development.	●	N/A	◐	N/A	●	○	Medium
R-4	Cramer Street Extension	Implement a new collector supporting north-south travel in eastern area of UGB in coordination with development.	○	N/A	○	●	●	○	Long
R-5	LaSalle Street, east of 9 th Street	Extend LaSalle Street east of 9th Street in coordination with development.	◐	N/A	◐	N/A	●	○	Long
R-6	Smith Street, east of 9 th Street	Extend Smith Street east of 9th Street in coordination with development.	◐	N/A	◐	N/A	●	○	Long
R-7	10th Street	Develop new alignment to connect 10 th Street with Sommerville Loop	◐	N/A	○	N/A	●	○	Long
R-8	Sommerville Loop, west of S 6th Street	Reduce roadway standard or vacate alignment.	N/A	N/A	N/A	N/A	N/A	●	Medium
R-9	Diamond Hill Drive and N 7 th Street	Improve intersection safety and operations.	◐	●	◐	◐	TBD	TBD	Long
PB-2	New Alignment between 6th Street and Eagle Park Access Road	Using existing easement, develop new shared-use path connection.	●	◐	●	N/A	◐	◐	Long
P-4	Sommerville Loop from S 6th Street to Cramer Avenue	Improve shared travel condition along Sommerville Loop to improve pedestrian safety and comfort. Treatments may include pedestrian lane or walkway.	●	●	●	N/A	N/A	◐	Medium
P-5	N 9th Street between Diamond Hill Drive and Territorial Drive	Install sidewalks, curb, and gutter on west side of roadway.	●	●	●	N/A	◐	◐	Near
P-6	S 2nd Street between LaSalle Street and S 3rd St/OR 99E	Complete pedestrian facility connection consistent with bicycle boulevard improvement. Treatment may include pedestrian lane or sidewalk.	●	◐	●	N/A	N/A	◐	Medium
P-7	S 4th Street between LaSalle Street and Smith Street	Planned Project. Improve pedestrian facilities along rail corridor.	●	●	●	N/A	◐	◐	Near

Evaluation Criteria									
Map ID	Location	Improvement Concept	Enhances Multimodal Options	Addresses Known Safety Issue	Walking/ Cycling Improvement	Improves Freight Access	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Improvement Time Frame (Near-, Medium-, and Long-Term)
PB-8	1st Street between Territorial and Schooling	Develop shared use path along west side of roadway; convert 1 st Street to one-way for motor vehicle traffic.	●	◐	●	N/A	◐	◐	Long
C-2	<ul style="list-style-type: none">Smith Street and S 6th StreetSmith Street and N 7th StreetS 6th St, south of Smith StreetN 7th Street and Territorial StreetN 9th Street and Territorial Street	Enhance existing crosswalk through installation of high-visibility continental crosswalk markings, improved signage, and advanced stop lines. RRFBs may be considered at high volume locations or key school crossings.	●	●	●	N/A	◐	●	Medium
C-3	<ul style="list-style-type: none">2nd Street and Smith Street4th Street and Smith StreetS 2nd Street and Kesling StreetS 9th Street and Smith StreetSommerville Loop and S 6th Street	Install new standard crosswalk.	●	◐	●	N/A	◐	●	Near
B-2	LaSalle Street between S 2nd Street and S 3rd Street	Develop bicycle boulevard to connect 2 nd Street bicycle boulevard with LaSalle Street east of OR 99E. Should be coordinated with improvement to LaSalle Street and OR 99E intersection.	●	◐	●	N/A	◐	●	Medium
B-3	LaSalle Street between S 6th Street and S 9th Street	Extend bicycle facility east of 6th Street. Improvements may include a striped bicycle lane or bicycle boulevard.	●	◐	●	N/A	◐	●	Medium
B-4	Smith Street between 1st Street and 9th Street	Develop bicycle boulevard prioritizing bicycle travel through traffic-calming and signage.	●	◐	●	N/A	◐	●	Medium
B-5	Kesling Street between 1st Street and S 5th Street	Develop bicycle boulevard, prioritizing bicycle travel through traffic calming and signage.	●	◐	●	N/A	◐	●	Medium
B-7	N 6 th Street, N 7th Street, and Dempsey Street between Territorial Street and City Limits	Develop bicycle boulevard prioritizing bicycle travel through traffic-calming and signage.	●	◐	●	N/A	◐	●	Long
B-8	N 7th Street between Smith Street and Territorial Street	Develop bicycle boulevard prioritizing bicycle travel through traffic-calming and signage.	●	◐	●	N/A	◐	◐	Medium
B-9	9th Street between Diamond Hill Drive and Sommerville Loop	Develop bicycle boulevard prioritizing bicycle travel through traffic-calming and signage. Treatment should continue with future extension of 9th Street.	●	◐	●	N/A	◐	●	Medium
B-10	Connection between N 1st Street/Territorial and OR 99E	If bicycle boulevard alternatives are selected for OR-99E, develop connection between N 1st Street proposed bikeway and existing bike lane on southbound OR 99E. May include coordination with private property.	●	●	●	N/A	◐	○	Medium/Long
B-11	Territorial Street between N 1st Street and N 4th Street	If bicycle boulevard alternatives are selected for OR-99E, develop bicycle lane connection to N 2nd Street and N 4th Street bikeways. Extend connection to proposed 1 st Street shared use path.	●	●	●	N/A	◐	◐	Medium
B-12	Territorial Street between N 6 th Street and N 7 th Street	Install striped bicycle lane, in coordination with projects B-7 and B-8.	●	◐	●	N/A	◐	◐	Medium

N/A = not applicable; ODOT = Oregon Department of Transportation; RRFB = rectangular rapid-flashing beacon; UGB = urban growth boundary
Near Term = 5 years; Medium Term = 5-10 years; Long Term = More than 10 years

8. Standards and Targets

8.1 Local Street Standards

Table 12 shows the current adopted local street standards for Harrisburg. These apply to new or redeveloped local streets.

Table 12. Street Standards

Street Type	Extra Right-of- Way Width	Planter or Utility	Sidewalks	Bike Lane	Parking Lane	Travel or Turn Lane	Railroad Corridor	Minimum Street Width	Right-of- Way Width
Alleys									
Right-of-Way	2 ft	–	–	–	–	–	–	12 ft	14 ft
Street	–	–	–	–	–	12 ft	–		
Neighborhood/Local									
Right-of-Way	1 ft	5 ft	5 ft	–	8 ft	10 ft	–	29 ft	45–50 ft
Street	–	–	–	–	8 ft	10 ft	–		
Collectors									
Right-of-Way	1 ft	6 ft	6 ft	6 ft	8 ft	11 ft	–	36 ft	60 ft
Street	–	–	–	6 ft	8 ft	11 ft	–		
Arterials									
Right-of-Way	1 ft	6 ft	6 ft	6 ft	8 ft	12 ft	–	48 ft	60–72 ft
Street	–	–	–	6 ft	8 ft	12 ft	–		
Transit/Rail Corridor									
Right-of-Way	1 ft	–	5 ft	–	8 ft	14 ft	14–20 ft	48 ft	60–72 ft
Street	–	–	5 ft	–	8 ft	14 ft	14–20 ft		
Recreational Street									
Right-of-Way	1 ft	6 ft	6 ft	6 ft	8 ft	–	–	36 ft	60 ft
Street	–	–	–	6 ft	8 ft	11 ft	–		

Source: [City of Harrisburg Oregon Municipal Code](#) (2024), Chapter 18.85

ft = feet; in = inches

Table 13 lists potential recommended updates or considerations for the local street standards to reflect the latest best practices in transportation system design and development, considering both American Association of State Highway and Transportation Officials and National Association of City

Transportation Officials standards. As no new arterial streets have been identified, the proposed updates to local street standards focus on Commercial, Collector, and Local street classifications.

Table 13. Recommended Street Standard Updates

Street Characteristic	Collector		Neighborhood/Local	
	Current	Potential Change	Current	Potential Change
Travel Lane Width	11 ft.	No change.	10 ft	No change.
Parking	Both sides, 8 ft	No change.	Both sides, 8 ft	No change.
Bike Lanes	Both sides, 6 ft.	No change.	None	None, but add sharrows and greenway treatments if part of Neighborhood Greenway system.
Sidewalks	Both sides, 6 ft	No change.	Both sides, 6 ft.	No change.
Provision of Conduits	No standard.	At the direction of the city engineer.	No standard.	At the direction of the city engineer.

8.2 Access and Roadway Spacing

Table 14 shows existing roadway spacing standards, and Table 15 show Harrisburg’s current adopted vehicular access and circulation standards. The standards apply to new developments or changes in land uses entailing a new or modified street or highway connection.

Table 14. Existing Roadway Spacing Standards

Zoning	Maximum Block Size (Street to Street)	Minimum Block Size (Street to Street)
Residential	750 ft	200 ft
Downtown/Main Street	400 ft	200 ft
General Commercial/Light Industrial	1,000 ft	100 ft

Source: [City of Harrisburg Oregon Municipal Code](#) (2024), Chapter 18.85
ft = feet

Table 15. Existing Vehicular Access and Circulation Standard

Functional Classification	Minimum Approach Separation from Street Intersections	Minimum Approach Spacing
Arterial	100 ft	150–250 ft
Collector	50 ft	50–100 ft
Local	20 ft	20 ft

Source: [City of Harrisburg Oregon Municipal Code](#) (2024), Chapter 18.70.
Where existing conditions and easements limit separation distances, the City Engineer may grant reductions of up to 25%.
ft = feet

8.3 Traffic Impact Analysis

City code allows for requiring a traffic impact analysis as part of an application for development, change in use, or change in access. A traffic impact analysis is required when one or more of the following are involved:

- Change in zoning or a plan amendment designation.
- Operational or safety concerns documented in writing by a road authority.
- An increase in site traffic volume generation by 300 average daily trips or more.
- An increase in the peak-hour volume of a particular movement to and from a street or highway by 20% or more.
- An increase in the use of adjacent streets by vehicles exceeding the 20,000 pound gross vehicle weights by 10 vehicles or more per day.
- Existing or proposed approach or access connections do not meet minimum spacing or sight distance requirement. Location for entering/leaving property is restricted or vehicles are likely to queue/hesitate at a connection and create a safety hazard.
- A change in internal traffic patterns that may cause safety concerns.
- A traffic impact analysis required by ODOT pursuant to OAR 734-051.

Any proposed code amendments required to support implementation of the TSP will be considered during development of Technical Memorandum 5, which will include potential code amendments.

8.4 Local Mobility Standards

The City has not adopted mobility standards for local roadways or intersections. The City could consider adopting local mobility standards for all intersections within the city that would complement the traffic impact analysis standards noted above and identify standards based on types of intersection control.

9. References

- FHWA (Federal Highway Administration). 2024. Walkways. Accessed May 9, 2024.
<https://highways.dot.gov/safety/proven-safety-countermeasures/walkways>.
- ODOT (Oregon Department of Transportation). 2023. Analysis Procedures Manual Version 2.
Accessed May 9, 2024. <https://www.oregon.gov/odot/planning/pages/apm.aspx>.
- ODOT. 2024. Highway Design Manual. Accessed May 9, 2024.
<https://www.oregon.gov/odot/engineering/pages/hwy-design-manual.aspx>.
- U.S. DOT (United States Department of Transportation). 2022. Safe System Approach. Accessed May 9, 2024. <https://www.transportation.gov/NRSS/SafeSystem>

Appendix D

Costs and Potential Funding
Strategies for Proposed
Improvements

DATE: Revised January 27, 2025
TO: City of Harrisburg
FROM: Parametrix
SUBJECT: Memorandum #4: Costs and Potential Funding Strategies for Proposed Improvements
PROJECT NUMBER: 2742395123
PROJECT NAME: Harrisburg TSP

Introduction

This memorandum provides an overview of revenue sources and funding and finance mechanisms for the City of Harrisburg that could be used to fund future projects identified in the Transportation System Plan (TSP). The memorandum outlines existing revenue and funding sources, levels of funding, and provides an estimate of future transportation revenues.

This memorandum also includes planning-level cost estimates for recommended improvements to the transportation system identified in TM#3 and identifies the likely timing and priority of recommended improvements. Finally, this report identifies other funding sources and reviews project eligibility for these sources, including local, state, federal, and private funding sources that the City could pursue for transportation investments.

Existing Funding Source Overview

Local Transportation Funding Sources

The City of Harrisburg relies primarily on local and state funding to operate, maintain, and improve the transportation system. Funds for operation, maintenance, and improvement of the City's streets, sidewalks, and storm drainage systems are provided from a number of sources, including the City's General Fund, the City's share of the State gas taxes that are deposited into the Street Fund, capital projects funding from the Transportation SDC funds, and the Bike Path Reserve Fund. The City's General Fund transfers some funding to the Street Fund. Most major capital improvement transportation projects are funded through the Street Fund. The descriptions below include trends highlighted in the [City's Budget Message Fiscal Year 2024-2025](#).

Street Fund

Harrisburg's Street Fund is funded through transfers from the General Fund, the City's share of the State gas taxes, and grants such as those from the Small Cities Allotment (SCA) and the Transportation Growth Management (TGM) program. State gas tax revenues within this fund must go to streets and roads. A contingency is maintained as part of the overall Street Fund to support unexpected or new needs. Revenues through this fund have increased slightly, though construction and labor costs have risen faster than revenues. Gas Tax revenues remain stable. In capital outlay, the \$250,000 to provide street maintenance is present, although other construction projects have declined.



General Fund

The General Fund is the main operating account for the City of Harrisburg. Many of the usual activities associated with the City are paid for using general fund revenues. The general fund sources revenue through property taxes, franchise fees, licenses and permits, fines, and intergovernmental revenue such as liquor and cigarette taxes and state revenue sharing. State Revenue Sharing money comes from the State of Oregon and is annually distributed to municipalities. The City transfers a limited portion of revenues from the General Fund to the Street Fund.

System Development Charges (SDCs)

There are five distinct SDC Funds: Transportation, Parks, Storm, Water, and Sewer. System Development Charges may only be used for new public improvements, master planning, or expansions to the infrastructure. These funds cannot be used for maintenance of any part of the infrastructure system. Revenues for these funds are collected through development permits. Rates are tied to the city's master plans and capital improvement plans. The largest apportionments of the Transportation SDC and Parks SDC go towards transportation capital improvements and parks capital improvements, respectively. The City uses a portion of these funds to cover the matches needed from the LGGP (Local Government Grant Program) Small Grant and the RTP (Recreational Trails Program) grant. SDC assessments and interest have fluctuated over the past 4 years, though they have increased from the 2023-2024 budget to 2024-2025 budget.

Bike Path Reserve Fund

This fund's revenues are derived from 1% of gas tax revenues. The Bike Path Reserve Fund is used for bike path projects within the City. This fund will likely play a future role in developing a trail to link S. 6th street with Eagle Park.

Community and Economic Development Fund

Harrisburg's Community and Economic Development Fund is funded through transfers from the General Fund and business license revenue, and other miscellaneous revenue. Included in planned expenditures is money for the Main Street Program and the Community Assistance Grant, among others. The money in Capital Outlay is planned for a new boat ramp in Eagle Park, and for other amenities in this park, although Parks SDCs will also be used for the development of Eagle Park.

Revenues and Expenditures

Table 1 outlines transportation revenue from various sources from fiscal years 2021 to 2025, as reported in the [FY 2024-2025 Adopted Budget](#) and prior Harrisburg budget documents. Future funding was forecast using this information as a starting point. Funds for operation, maintenance, and improvement of the City's streets, sidewalks, and bike paths are provided from a number of sources, indicated below.

Table 1. Harrisburg General Transportation Revenues (2021 to 2025)

Funding Account	Subcategory	2021-2022 Adopted	2022-2023 Adopted	2023-2024 Adopted	2024-2025 Adopted
General Fund	Intergovernmental Revenue	\$545,100	\$581,830	\$201,970	\$362,090
Street Fund	Total Resources	\$1,800,746	\$1,466,540	\$1,784,755	\$1,347,690
System Development Charges	Transportation Resources	\$365,545	\$347,855	\$321,630	\$304,395
System Development Charges	Parks Resources	\$256,120	\$245,235	\$160,860	\$247,805
Bike Path Reserve Fund	Total Resources	\$43,510	\$46,505	\$50,250	\$54,825
TOTAL*		\$3,011,021	\$2,687,965	\$2,519,465	\$2,316,805

Notes:

The General Fund is the main operating account for the City of Harrisburg. A small portion of General Fund revenues are available to fund transportation projects within the City. Most General Fund revenue that is transferred to transportation-related accounts comes from intergovernmental revenues; this subcategory is reflected in the table above. However, this amount is not considered for future funding availability based on direction provided by the City.

For consistency across years, revenues are based on *adopted* budget for the fiscal year. This may differ from actual revenues accrued.

Table 2. Harrisburg General Transportation Expenditures (2020 to 2025)

		2021-2022 Adopted	2022-2023 Adopted	2023-2024 Adopted	2024-2025 Adopted
Street Fund	Total Requirements	\$1,800,746	\$1,466,540	\$1,784,755	\$1,347,690
System Development Charges	Transportation	\$365,545	\$347,855	\$321,630	\$304,395
System Development Charges	Parks	\$256,120	\$245,235	\$160,860	\$247,805
Bike Path Reserve Fund	Total Requirements	\$43,510	\$46,505	\$50,250	\$54,825
TOTAL*		\$2,465,921	\$2,106,135	\$2,317,495	\$1,954,715

Notes:

The Street Fund total represents historical expenditures on transportation in Harrisburg, which includes maintenance and operations. It does not necessarily represent funds available for capital improvement projects. This total also includes the annual \$150,000 interfund transfer from the General Fund.

Future Revenue Forecast

To generate a baseline estimate of funding potentially available over the 20-year lifespan of the TSP, the project team assumes:

- Inflation-adjusted revenues will not change substantially over the 20-year lifespan of the TSP.
- Of the annual Street Fund Capital Outlay expenditures, \$250,000 is allotted to street maintenance. This leaves approximately \$400,000 to \$870,000 annually to fund capital improvement construction projects and grant matching requirements through the Street Fund.
- Improvements on OR 99 could likely be implemented in partnership with ODOT and not directly funded by the City.
- SDCs for standard residential construction is \$13,107, with approximately \$3,000 towards Transportation SDCs and approximately \$1,800 towards Parks and Recreation SDCs. Approximately 7 housing units per year (based on future population estimates and city staff’s recent experience with development) will be constructed per year, resulting in approximately \$91,749 per year in Transportation and Parks SDC revenue.
- 1% of the Gas Tax is devoted to the bike path fund each year, approximately \$2,900 per year.

The City is conservatively estimated to have a baseline funding of \$450,000 available annually for transportation capital projects, for a total of \$9,900,000 (in 2024 dollars) available over the 20-year life of the TSP. Additional funding measures are explored below to augment the City’s transportation budget.

Funding And Finance Options

A variety of established funding sources from federal, state, and local sources are available to fund future transportation projects in the City of Harrisburg. Table 4 provides an overview of potential grants, funding dollar amount, eligibility, and other considerations.

Grants

Table 3. Potential Grants for TSP Projects

Source	Funding \$ Available	Description	Eligibility and Considerations
Statewide Transportation Improvement Program (STIP) <i>Administrated by ODOT</i>	Approximately \$2 billion available statewide for the 2024-2027 STIP. Match requirements vary.	The STIP is the major statewide program for funding significant projects, usually of regional importance. The STIP programs both state and federal dollars.	Major projects on OR 99 are most likely eligible for funding, though the STIP process is extremely competitive. Projects included in the STIP are generally regionally significant and are prioritized by ODOT, metropolitan planning organizations, and area commissions on transportation.

Source	Funding \$ Available	Description	Eligibility and Considerations
Recreational Trails Program <i>Administrated by OPRD</i>	Approximately \$1.6M allocated each year. Minimum grant request: \$10,000. Recommended grant request maximum: \$150,000 for non-motorized proposals. Applicants must commit to at least 20% match. Match can include volunteer labor or other donations.	Funds to develop, improve, or expand motorized and non-motorized trails and their facilities. RTP funding is intended for recreational trail projects and can be used for construction of new trails, major rehabilitation of existing trails, development or improvement of trailhead or other support facilities, acquisition of land or easements for the purpose of trail development, and safety and education projects.	Harrisburg has previously received an RTP grant. This funding source is very competitive, and funding is generally based on the needs identified in the Oregon Statewide Trails Plan.
Oregon Community Paths <i>Administrated by ODOT</i>	Project Refinement funding: \$150,000 to \$750,000 per project. Construction funding: \$500,000 to \$6,000,000 per project. 10% to 30% depending on funding source (federal or state)	Supports multiuse path projects; including paths that pass through a park, along a greenway, to connect community centers, services, housing, employment, schools, and recreation. Types of community path projects: 1) Critical Links – walking and biking connections to schools, downtowns, shopping, employment, and other essential destinations 2) Regional Paths - connecting communities no more than 15 miles apart, or traverses one community with a path 10 miles long or greater	OCP projects must serve a transportation purpose (not recreational). TSP is likely to include projects that fall under the Critical Links project type, and potentially the Regional Path project type.
Local Government Grant Program (LGGP) <i>Administrated by OPRD</i>	Small Community Planning Grants: Maximum of \$40,000 Small Grant Request: Maximum \$75,000 Large Grant Requests: Maximum \$750,000 Land acquisition projects: \$1,000,000 20-50% match required, based on city, district, or county population.	Awards grant funds for outdoor park and recreation areas and facilities, acquisition of property for park purposes, bicycle and pedestrian recreation and transportation trails, bicycle recreation opportunities, and non-motorized water-based recreation.	Harrisburg has previously won an LGGP Grant for parks improvements. Eligible projects involve land acquisition, development, major rehabilitation projects, and planning and feasibility studies. Past projects funded include non-motorized trails, , a regional dog park, and site-specific master planning efforts.
Small City Allotment (SCA) Grants <i>Administrated by ODOT</i>	\$5M is allocated each year. Maximum award of \$250,000 per selected project. No match required.	Many types of projects, with preference given to those projects that remedy safety or capacity issues. Grants available only to cities under 5,000 people. Eligible projects must be on city streets that are not part of a county road or the state highway system.	SCA funds can only be used on streets that are “inadequate for the capacity they serve or are in a condition detrimental to safety” (ORS 366.805). Some agencies use SCA funds as a local match for larger projects that also meet the intent of SCA. Harrisburg has previously received a SCA grant and is likely to be eligible for SCA funds in the future given the population thresholds of the program.

Source	Funding \$ Available	Description	Eligibility and Considerations
Safe Routes to School (SRTS) <i>Administrated by ODOT</i>	\$60,000 to \$2,000,000 New funding program guidance is under development by ODOT. 20% to 40% match required.	Projects that improve, educate, or encourage children safely walking or biking to school. Projects within a one-mile radius of a school, within a local roadway, and in a jurisdictional plan. Projects in smaller communities, for elementary and middle schools, and that can demonstrate substantial need are likely to fare best.	The Harrisburg School District has previously received a small Safety SRTS grant. Because the Harrisburg TSP is likely to include projects that would have a direct impact on cycling and walking to school, SRTS is likely a promising source of funding for projects.
Sidewalk Improvement Program (SWIP) <i>Administrated by ODOT</i>	\$7.4 million annually for federal fiscal years 2022 to 2024. No match is required. State Pedestrian and Bicycle funds can be used as a match for federal dollars.	Allocates funds to improve walking and biking infrastructure (e.g., crossings, sidewalks, bike facilities) on or along state highways. Provides grants on a rotating regional basis to construct larger pedestrian and bicycle projects (or bundles of systemic improvements) needed to address priority needs identified in the Oregon Bicycle and Pedestrian Plan (OBPP) and Active Transportation Needs Inventory (ATNI).	Eligible for improvements on or along state highways. ATNI web map shows high prioritization scores (within the 95 th percentile) along OR 99 through Harrisburg
Statewide Transportation Improvement Fund (STIF) <i>Administrated by ODOT</i>	Funding amount varies. There is no match for STIF formula, STIF Discretionary match is generally 20%. STIF formula funds may be used as the local match for state and federal funds which also provide Public Transportation. STIF discretionary funding is used for new or pilot projects and for capital purchases.	STIF formula funds may be used for public transportation purposes that support the effective planning, deployment, operation, and administration of public transportation programs. The STIF Discretionary fund supports a wide variety of project types but cannot be used to fund ongoing operations. The Intercommunity Discretionary fund supports maintaining, expanding, and improving public transportation services between two or more communities. The Oregon Transportation Commission finalizes award decisions using criteria derived from statute and the Oregon Public Transportation Plan.	STIF formula funding is awarded through the Qualified Entity (QE) which is a County or Transit District, based on population and taxes paid within their geographic area. STIF Discretionary and Intercommunity Discretionary funds are awarded to Public Transportation Service Providers to improve public transportation through a competitive grant process. Though Harrisburg is not qualified to seek funds directly, the City could work with regional transit providers on an application for improvements to transit service in Harrisburg.

ODOT = Oregon Department of Transportation

OPRD = Oregon Parks and Recreation Department

Note: Inclusion of an improvement in this TSP does not represent a commitment by ODOT to fund, allow, or construct the Project.

Projects on the State of Oregon Transportation System that are contained in the TSP are not considered "planned" projects until they are programmed into the Statewide Transportation Improvement Program (STIP). As such, Projects proposed in the TSP that are located on a State system cannot be considered as mitigation for future development or land use actions until they are programmed into an adopted STIP or ODOT provides a letter indicating that the Project is "reasonably likely" to be funded in the STIP. State Highway Projects that are programmed to be constructed may have to be altered or canceled at a later time to meet changing budgets or unanticipated conditions such as environmental constraints.

Local Funding Sources

Table 4. Potential Local Funding Sources for TSP Projects

Source	Funding Available	Description	Considerations
Existing Sources			
General Fund	Harrisburg typically apportions \$150,000 annually towards the Street Fund	The general fund sources revenue through property taxes, franchise fees, licenses and permits, fines, and intergovernmental revenue such as liquor and cigarette taxes and state revenue sharing	A greater percentage of revenue from the General Fund could be used to fund transportation projects in Harrisburg.
Property Taxes	<i>Estimated Property Taxes for 2024-2025:</i> Assessed value: \$262,710,395 City permanent tax rate: 0.0031875 Taxes to be levied: \$837,389 Collection rate: 98% Taxes expected to collect: \$820,893	Property Tax revenue in Harrisburg is a major source of revenue for the City's General Fund.	Increasing property taxes is a potential source of additional revenue.
System Development Charges (SDC)	Funding is based on the amount of development occurring in the City. SDCs for standard residential construction is \$13,107, with approximately \$3,000 towards Transportation SDCs and approximately \$1,800 towards Parks and Recreation SDCs.	These are one-time fees assessed on new use or on an increase in use of a property. For example, SDCs may be collected when someone develops a vacant property into a residence. SDCs, per state law, must be spent only on projects that increase capacity of the system; maintenance or preservation projects generally are not eligible for SDC use.	The City already levies SDCs on new development. Transportation SDCs are generally used by city governments to fund capital improvements from their TSPs and/or capital improvement programs. SDC assessments and interest have fluctuated over the past 4 years, though they have increased from the 2023-2024 budget to 2024-2025 budget. The City is using a discounted rate, however, and could consider increasing the SDC.
Partnerships	Varies based on location	Harrisburg can leverage partnerships with ODOT and other public partners to fund projects that overlap with publicly owned facilities. Harrisburg can also explore public-private partnerships with developers to encourage or mandate the funding of transportation projects adjacent to new development.	OR 99 is owned by ODOT. The TSP will include improvements on OR 99 that may be eligible for ODOT funding. The City may consider collaborating with developers to fund improvements when developments are proposed. Requirements for development to fund transportation improvements are established by the City's Development Code.
Possible New Sources			
Local fuel tax	Of those cities that currently assess local gas taxes, most smaller	Dozens of Oregon communities levy local gas taxes, the revenues from	A local gas tax can be enacted through legislative action by the

Source	Funding Available	Description	Considerations
	cities charge between \$0.01 and \$0.03 per gallon. It is difficult to estimate the potential revenue generated by a local gas tax without knowing annual gasoline sales.	which are entirely available for use locally.	city council or by putting the tax to a public vote. An advantage of gas taxes is that locals, tourists, and people driving through on OR 99 who purchase gas would contribute to funding Harrisburg's transportation system. However, with limited gas stations in Harrisburg, this may not be expected to raise significant funding.
Utility Fees	Varies based on rates set by the City	Utility taxes, franchise fees, and payments in lieu of taxes from city utilities can contribute to revenue for the City's General Fund.	Utility fees typically fund projects related to that utility, such as stormwater, but these fees can help defray the costs of transportation investments. For example, a road reconstruction project often is an opportunity to upgrade/update the utilities, and utility fees can contribute toward the cost of the transportation project. Harrisburg currently charges sewer fees but could consider charging other utility fees.
General Obligation (GO) Bonds	GO bonds can be issued for a wide variety of purposes within the bonding capacity of the City.	General obligation bonds can help finance construction of capital improvement projects by borrowing money and paying it back over time in smaller installments. Bonds are typically backed by new revenue, such as an additional property tax levy. Usually, a specific package of improvements is identified, and a levy is put to a local vote, then the revenue stream is bonded.	The City has previously passed GO Bonds for major infrastructure projects related to water and sewer. A GO Bond has not been used for transportation projects.
Transient Room Tax (Also known as Transient Occupancy or Lodging Taxes)	Transient Room Taxes vary based on levels of use of hotels, motels, and rentals. This fund has incrementally increased yearly, but is still a small funding amount, at \$10,000 in FY 24-25	A transient lodging tax is charged for people staying in hotels, motels, and other short-term rentals.	Harrisburg has a small Transient Room Tax, included as miscellaneous revenue within the General Fund.
Local Option Street Tax Fund	Local option street taxes are placed on the tax roll in the form of a rate per \$1,000 of assessed value.	Most taxing districts can ask voters for temporary taxing authority above the permanent rate limitation, known as "local option tax." Local option taxes are limited to five years for operation and 10 years for capital construction purposes. These funds can be used for the maintenance, repair and construction of street, drainage, and pedestrian facilities.	Harrisburg does not currently levy a local option street tax. This tax must be approved by voters.

Source	Funding Available	Description	Considerations
Public or Local Improvement Districts	Improvement Districts vary substantially in funding amounts Funding available can include any amount the LID agrees to for capital improvements.	An Improvement District is a method by which a group of property owners can share the cost of infrastructure improvements, most commonly for transportation and stormwater projects. Financing is offered for up to 10 years, with the first payment not due until after the project is complete.	The City could implement an improvement District and identify specific infrastructure improvement projects to create a district for, with clear funding sources. Harrisburg Municipal Code Chapter 12.25 outlines procedures and regulations for Improvement Districts.
Transportation Maintenance Fee (also known as a transportation utility fee, street user fee, or road user fee)	Fees vary significantly from city to city.	Based on use of the transportation system; collected from residences and businesses. These fees are typically assessed monthly to residents, businesses, and other non-residential uses. Some cities charge a flat fee regardless of the type of use. Other cities have different fees for residences versus other uses.	The City currently does not levy a transportation maintenance or utility fee; however, many Oregon jurisdictions levy such a fee to pay for maintenance and operations of city streets. Harrisburg may consider charging such a fee to fund a greater share of maintenance costs, thereby freeing resources for capital projects. Fees could be collected to help with transportation maintenance costs.
Leverage Utility Projects	N/A	There are opportunities to coordinate utility maintenance and replacement projects with street projects, including overlays and sidewalk construction. For example, combining a sewer main replacement with a desired overlay and sidewalk project would save the City money on construction costs.	

Funding Recommendations

Considering the identified existing and future transportation deficiencies within Harrisburg, the City should seek out external funds from county, state, or federal sources in order to substantially invest in transportation system improvements.

- **Grants:** The City could generate new sources of local transportation revenue and/or securing grants to close the funding gap.
 - The City's population will continue to be within the qualifying population threshold for Small City Allotment (SCA) grants, such that the City would be eligible to receive up to \$250,000 every other year. This grant will be applied for again.
 - The SRTS (Safe Routes to School) grant will be applied for again. Because the Harrisburg TSP is likely to include projects that would have a direct impact on cycling and walking to school, SRTS is likely a promising source of funding for projects.
 - The City should pursue other funding grants such as the Oregon Community Paths, as projects in the TSP will likely be eligible for these programs.
- **SDCs:** SDC assessments and interest have fluctuated over the past 4 years, though they have increased from the 2023-2024 budget to 2024-2025 budget. Construction activity in

2024 is starting to increase, with several larger development projects on the horizon. The City could generate additional funding over the life of the TSP through raising SDC rates.

- **Local Gas Tax:** Harrisburg does not currently levy a local gas tax. It is difficult to estimate the potential revenue generated by a local gas tax without knowing annual gasoline sales. Harrisburg has only two gas station locations within the city limits, so a local gas tax may be limited for potential revenue. Based on similar Oregon communities' experiences, a \$0.02 local gas tax could generate thousands of dollars per year. For example, North Plains, Oregon, which has a similar population as Harrisburg (3,378) and approximately 3 gas stations, had a revenue of \$64,437 from local fuel tax in 2020-2021. A local gas tax can be enacted through legislative action by the city council or by putting the tax to a public vote.
- **Tax Rates:** According to Harrisburg's Annual Budget, property tax collections continue to increase, due to the high cost of housing. Harrisburg could consider raising the tax rate to raise additional funding for capital improvements, though the City has increased the collection rate in 2024 to 2% higher than the previous year.

Table 5 provides a high-level overview of the proposed improvements and summarizes potential funding opportunities. Projects may be eligible for funding depending on the type of project, land ownership (local, state, or federal), and project cost. Project costs reported here are planning-level estimates based on construction costs for the proposed facilities.

Table 5. Improvements and Potential Funding

Map ID	Location	Description	Potential Funding Source	Improvement Time Frame	Cost Estimate
C-1	Install enhanced crosswalks, which may include high visibility crosswalk markings, lighting, signage, and an RRFB, at: <ul style="list-style-type: none"> OR 99E/3rd Street and Kesling Street OR 99E/3rd Street and Smith Street OR 99E/3rd Street and LaSalle Street 	Enhanced Crossing	Sidewalk Improvement Program (SWIP) - ATNI web map shows prioritization scores within the 95th percentile along OR 99 through Harrisburg.	Near	\$174,000 per crossing
C-2	Install enhanced crosswalks, which may include high visibility crosswalk markings, lighting, signage, and an RRFB, at: <ul style="list-style-type: none"> Smith Street and S 6th Street Smith Street and N 7th Street N 7th Street and Territorial Street N 9th Street and Territorial Drive 	Enhanced Crossing	Safe Routes to School (SRTS) Grant - Projects are within a one-mile radius of a school, within a local roadway, and would improve visibility at crossing locations.	Near	\$288,000 per crossing
C-3	Install standard crosswalks, including parallel crosswalk markings, at: <ul style="list-style-type: none"> 2nd Street and Smith Street 4th Street and Smith Street S 2nd Street and Kesling Street S 9th Street and Smith Street 	Standard Crossing	SRTS Grant - Projects are within a one-mile radius of a school and within a local roadway and improve connectivity for people walking.	Near	\$174,000 per crossing
PB-2	New alignment between 6th Street and Eagle Park Access Road: Construct a shared-use pathway, including new standard crosswalk at Sommerville Loop and S 6th Street.	Pedestrian and Bicycle (Shared-Use Path)	Recreational Trails Program (RTP) - Funding is intended for recreational trail projects.	Aspiration	\$1,000,000
PB-3	3rd Street from 2nd Street to LaSalle Street	Pedestrian and Bicycle (Shared-Use Path)	Oregon Community Paths - This project could qualify as a Critical Link: Provides walking and biking connections where no connections exist, and project will address safety concerns.	Medium	\$255,000
P-4	Sommerville Loop from S 6th Street to Cramer Ave	Pedestrian (Lane/Walkway)	SRTS Grant - Project is within a one-mile radius of a school, within a local roadway, and would enhance connectivity to nearby	Medium	\$349,000

Map ID	Location	Description	Potential Funding Source	Improvement Time Frame	Cost Estimate
			destinations, including Harrisburg High School and Priceboro Park.		
P-5	N 9th Street between Diamond Hill Drive and Territorial Drive	Pedestrian (Sidewalk)	SRTS Grant - Project is within a one-mile radius of a school, within a local roadway, and would improve connectivity between residential areas and Harrisburg High School.	Near	\$ \$636,693
P-6	S 2nd Street between LaSalle Street and S 3rd St/OR 99E	Pedestrian (Lane/Walkway or Sidewalk)	SCA Grant – Preference given to projects that remedy safety or capacity issues on city streets. Project would increase connectivity to residential areas and other destinations near S 2nd Street and OR 99E.	Medium	\$174,000
P-7	S 4th Street between LaSalle Street and Smith Street	Pedestrian (Lane/Walkway or Sidewalk)	SCA Grant – Preference given to projects that remedy safety or capacity issues on city streets. Project would improve pedestrian north-south connectivity, accessibility, and safer definition of space adjacent to rail corridor.	Near	N/A
PB-8	1st Street between Territorial and Schooling	Pedestrian and Bicycle (Shared-Use Path)	RTP - Funding is intended for recreational trail projects.	Aspirational	\$702,000
R-1A	OR 99E/S 3rd Street and LaSalle Street	Traffic Operations (Roundabout)	Statewide Transportation Improvement Program (STIP) - Major projects on OR 99 are most likely eligible for funding.	N/A	N/A
R-1B	OR 99E/S 3rd Street and LaSalle Street	Traffic Operations (Signalization)	Statewide Transportation Improvement Program (STIP) - Major projects on OR 99 are most likely eligible for funding.	Medium	\$5,000,000
R-2	Riley Way between N 6th Street and N 7th Street	New Roadway Connection	<i>Complete with development.</i>	Medium	\$877,000
R-3	S 9th Street, between Sommerville Loop and S 9th Street	New Roadway Connection	<i>Complete with development.</i>	Medium	\$2,277,000
R-4	Cramer Street extension	New Roadway Connection	<i>Complete with development.</i>	Aspirational/ With Development	\$12,702,000
R-5	LaSalle Street, east of 9th Street	New Roadway Connection	<i>Complete with development.</i>	Aspirational/ With Development	\$1,497,000

Map ID	Location	Description	Potential Funding Source	Improvement Time Frame	Cost Estimate
R-6	Smith Street, east of 9th Street	New Roadway Connection	<i>Complete with development.</i>	Aspirational/ With Development	\$1,087,000
R-7	10th Street	New Roadway Connection	<i>Complete with development.</i>	Aspirational/ With Development	\$7,606,000
R-8	Sommerville Loop, west of S 6th Street	Roadway – Reduce roadway standard/vacate alignment		Medium	N/A
R-9	Diamond Hill Drive and N 7th Street	Safety	SCA Grant – Preference given to projects that remedy safety or capacity issues on city streets. This area was highlighted as a major focus for safety improvements.	Long	N/A
B-1A	OR 99E/S 3rd Street	Bicycle Facility	SCA Grant – Preference given to projects that remedy safety or capacity issues on city streets. Project would provide dedicated facility for bicycle travel through Harrisburg.	N/A	N/A
B-1B	OR 99E/2nd and 4th Street	Bicycle Markings and Wayfinding	SCA Grant – Preference given to projects that remedy safety or capacity issues on city streets. Project would provide low-stress north-south connection, improving bicycle connectivity in Harrisburg.	Near	\$50,000
B-2	LaSalle Street between S 2nd Street and S 3rd Street	Bicycle Markings and Wayfinding	SCA Grant – Preference given to projects that remedy safety or capacity issues on city streets. Project would increase network connectivity across S 3rd Street by enhancing connections between S 2nd Street and existing bike lane on LaSalle Street.	Medium	\$6,000
B-3	LaSalle Street between S 6th Street and S 9th Street	Bicycle Markings and Wayfinding	SRTS Grant - Project is within a one-mile radius of a school, within a local roadway, and would improve connectivity to residential areas east of S 6th Street and Harrisburg High School.	Medium	\$17,000
B-4	Smith Street between 1st Street and 9th Street	Bicycle Markings and Wayfinding	SRTS Grant - Project is within a one-mile radius of a school and within a local	Medium	\$41,000

Map ID	Location	Description	Potential Funding Source	Improvement Time Frame	Cost Estimate
			roadway. Project would create a low-stress east-west connection between downtown Harrisburg, Harrisburg Elementary and Middle Schools, and residential areas in the east of the city.		
B-5	Kesling Street between 1st Street and S 5th Street	Bicycle Markings and Wayfinding	SRTS Grant - Project is within a one-mile radius of a school and within a local roadway. Project would create a low-stress east-west connection between downtown Harrisburg, residential areas in the western portion of the city, and Harrisburg Elementary and Middle Schools.	Medium	\$15,000
B-7	6th Street, Dempsey Street, and 7th Street between Territorial and City Limits	Bicycle Markings and Wayfinding	SRTS Grant - Project is within a one-mile radius of a school, within a local roadway, and would improve connectivity to Arrowleaf Park and Harrisburg schools.	Long	\$28,000
B-8	N 7th Street between Smith Street and Territorial Street	Bicycle Markings and Wayfinding	SRTS Grant - Project is within a one-mile radius of a school, within a local roadway, and would improve connectivity between neighborhoods in northern areas of Harrisburg with schools and downtown destinations.	Medium	\$8,000
B-9	9th Street between Diamond Hill Drive and Sommerville Loop	Bicycle Markings and Wayfinding	SRTS Grant - Project is within a one-mile radius of a school, within a local roadway, and would improve comfort and safety for students traveling to Harrisburg schools from residences in east and north areas of Harrisburg.	Medium	\$41,000
B-10	Connection between N 2nd Street/ Territorial and OR 99E	Bicycle Markings and Wayfinding	SCA Grant – Preference given to projects that remedy safety or capacity issues on city streets. Project would expand bicycle network connection into Harrisburg to meet guidance identified in the Highway Design Manual.	Medium/Long	\$26,000
B-11	Territorial Street between N 1st Street and N 4th Street	Buffered Bike Lane	SCA Grant – Preference given to projects that remedy safety or capacity issues on city streets. Project would expand bicycle network connection into Harrisburg to	Medium	\$28,000

Map ID	Location	Description	Potential Funding Source	Improvement Time Frame	Cost Estimate
			meet guidance identified in the Highway Design Manual.		
B-12	Territorial Street between 6th Street and 7th Street	Buffered Bike Lane	SRTS Grant - Project is within a one-mile radius of a school, within a local roadway, and would improve connectivity between neighborhoods in northern areas of Harrisburg with schools and downtown destinations.	Medium	\$17,000

Resources

Budget Message 2024-2025:

https://www.ci.harrisburg.or.us/sites/default/files/fileattachments/finance/page/7970/budget_message_fiscal_year_2024-25_final.pdf

Proposed Budget 2024-2025:

https://www.ci.harrisburg.or.us/sites/default/files/fileattachments/finance/page/7970/proposed_city_budget_fy_2024-2025_ytd_balance_june_2024.pdf

Adopted Budget 2023-2024:

https://www.ci.harrisburg.or.us/sites/default/files/fileattachments/finance/page/7970/adopted_city_budget_fy_2023-2024_ytd_balance_june_2023.pdf

Adopted Budget 2022-2023

https://www.ci.harrisburg.or.us/sites/default/files/fileattachments/finance/page/7948/adopted_city_budget_fy_2022-2023_ytd_balance_june_2022.pdf

Adopted Budget 2021-2022

https://www.ci.harrisburg.or.us/sites/default/files/fileattachments/finance/page/7242/adopted_city_budget_fy_2021-2022.pdf

Harrisburg Budget Documents, Reports, and Presentations:

https://www.ci.harrisburg.or.us/documents?field_microsite_tid=32

Harrisburg Parks Master Plan:

https://www.ci.harrisburg.or.us/sites/default/files/fileattachments/public_works/page/7873/harrisburg_parks_master_plan_psp_20221025.pdf

Residential SDCs:

https://www.ci.harrisburg.or.us/sites/default/files/fileattachments/planning/page/328/sdc_estimate_for_general_residential_construction.pdf

