

Appendix D

Transportation Assessment (Kittleson & Associates, Inc.)

Transportation Assessment

Hermiston Urban Growth Boundary Expansion

Hermiston, Oregon

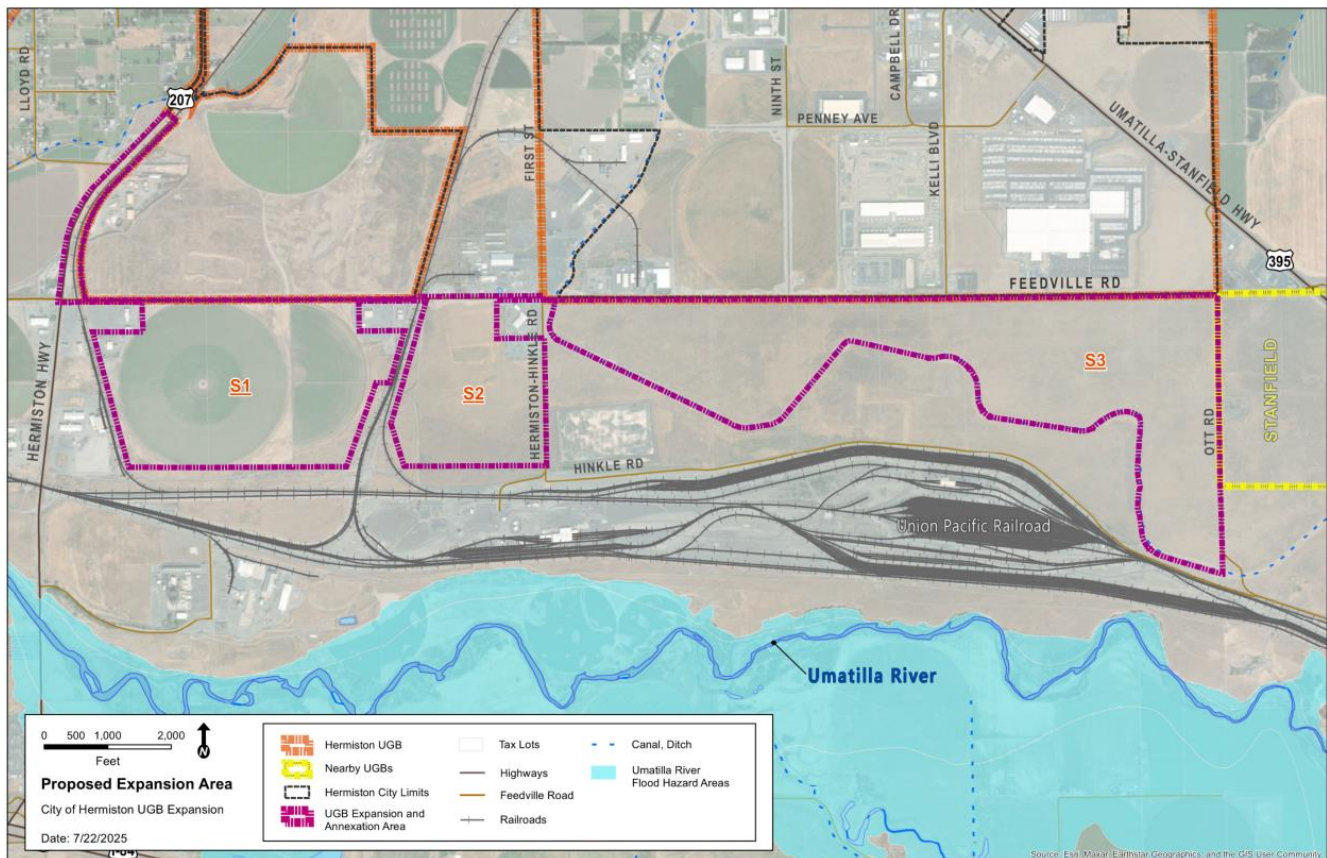


KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

OVERVIEW/EXECUTIVE SUMMARY

The City of Hermiston is proposing to expand its urban growth boundary (UGB) by approximately 765 acres on the south side of the city to allow for zoning that will support the exclusive development of hyper-scale data centers. The proposed UGB expansion areas are shown in Exhibit 1 and are all located south of the Feedville Road corridor from approximately OR 207 to US 395.

Exhibit 1. Study Area and UGB Expansion Map



(Map Source: Winterbrook Planning)

This report documents the following:

1. **Urban Growth Boundary (UGB) Amendment – Transportation Analysis.** The City of Hermiston is amending its UGB to meet its employment land needs. In compliance with OAR 660-012-0060 (Plan and Land Use Regulation Amendments section of the Transportation Planning Rule or TPR), this report examines the potential transportation impacts of the expansion. The City proposes to zone this land as Heavy Industrial, but will limit allowed uses with an overlay designation that restricts development to hyper-scale data centers. This Transportation Analysis focuses on the identification of significant transportation impacts associated with future urbanization of the expansion tracts as data centers.

This study address the applicable City of Hermiston, Oregon Department of Transportation (ODOT), and Umatilla County transportation-based standards for transportation operations. Potential mitigation measures are provided in this report.

It should be noted that the City of Hermiston is just beginning the process of updating its Transportation System Plan (TSP). The results of the UGB expansion and sub-area plan will be incorporated into the larger TSP update at the appropriate time.

URBAN GROWTH BOUNDARY AMENDMENT – TRANSPORTATION ANALYSIS

The long-term future transportation impacts of the proposed UGB expansion and subsequent comprehensive plan/zone change amendment were analyzed to demonstrate compliance with Oregon Administrative Rule 660-012-0060 (TPR). Fundamentally, the purpose of the TPR analysis is to determine what additional transportation infrastructure, if any, is required to support the urbanization and subsequent development potential associated with the UGB expansion.

The UGB Amendment Transportation Analysis focuses on the future year 2045 horizon year (in alignment with the expected planning year to be used in the upcoming Hermiston TSP update) and assumes:

- 1) Reasonable future land development along the Feedville Road corridor for those undeveloped and outright zoned parcels that exist within Hermiston's current UGB or an industrial zoned area by Umatilla County, and that are likely to develop over the next 20 years.
- 2) Under the existing land use scenario (no UGB expansion), all sites (except for the site herein referred to as S2) were assumed to experience no development or redevelopment considering their rural land use designation. Site S2 has an existing Umatilla County industrial zoning designation that currently allows for industrial development. Given this designation and a City of Hermiston expectation that it will redevelop on its own at some point in the next twenty years, the S2 parcel was assumed to experience some level of future industrial development.
- 3) Under the UGB expansion scenario, development of the three UGB expansion sites, assuming hyper-scale data centers.

Summary Findings

The remainder of this Executive Summary provides an overview of key analysis topics and findings arranged by study period.

Existing Transportation Conditions

- Traffic counts were collected in January 2025 at all study area intersections during the critical weekday AM and PM peak travel periods.
- Oregon Department of Transportation (ODOT) procedures were used to seasonally adjust the January counts and identify 30th Highest Hour Volumes (30HV) at applicable state highway intersections. Application of these procedures resulted in increasing the measured weekday AM and PM peak hour traffic volumes by 19% to account for peak seasonal conditions.
- Operational analyses found that all key study intersections currently operate within acceptable ODOT mobility targets and local operating standards during both the weekday AM and PM peak hours.

Urban Growth Boundary Amendment – Transportation Analysis

FUTURE YEAR 2045 TRANSPORTATION CONDITIONS

- Under the existing land use scenario (no change to the UGB), no development is assumed on the two rurally zoned (S1 and S3) expansion sites considering the existing rural farm-based zoning designation. Therefore, the 2045 existing land use traffic conditions only reflect anticipated growth on the regional transportation network and infill development-related traffic from parcels that are reasonably likely to develop within the planning horizon.
 - Accounting for this growth, Table A provides a summary of the detailed intersection operations for all key study intersections. As shown, the following intersections and corridors are forecast to experience operational deficiencies:
 - The stop-controlled westbound approach at the OR 207/Feedville Road intersection is forecast to operate over capacity.
 - The stop-controlled eastbound approach at the US 395/Feedville Road intersection is forecast to operate at a v/c of 0.78 which exceeds the applicable 0.75 mobility target.
 - The stop-controlled eastbound approach at the US 395/Kelli Boulevard intersection is forecast to operate over capacity.
 - As a key study corridor, Feedville Road is a rural unimproved Major Collector roadway. Corridor improvements would be needed to bring the roadway up to urban design standards to support the levels of projected traffic growth.
- Under the proposed UGB expansion scenario, planned Hyperscale Data Center (HDC) overlay zoning will limit future urbanization on the expansion sites to large-scale data center campuses. Based on conversations with the project team, this could result in up to 3,800,000 square feet of cumulative data center buildings spread over the three UGB expansion tracts. Therefore, 2045 traffic conditions include all the growth from the 2045 existing land use scenario plus estimated site-generated trips from the individual data center campuses.
 - Accounting for this growth, Table A provides a summary of the detailed intersection operations for all key study intersections. As shown, the following intersections and corridors are forecast to experience operational deficiencies:
 - The stop-controlled westbound approach at the OR 207/Feedville Road intersection is forecast to operate increasingly over capacity when compared to the existing land use scenario operations.

- The all-way stop-controlled Feedville Road/Hermiston-Hinkle Road intersection is forecast to operate at LOS C conditions, but with long vehicle queues on the single lane Feedville Road approaches.
- The stop-controlled northbound and southbound approaches at the Feedville Road/Kelli Boulevard intersection are forecast to operate at LOS E conditions.
- While the stop-controlled eastbound approach to the US 395/Feedville Road intersection will still have capacity, it is forecast to continue to exceed the 0.75 mobility target operating at a v/c of 0.90.
- The stop-controlled eastbound approach at the US 395/Kelli Boulevard intersection is forecast to operate increasingly over capacity when compared to the existing land use scenario operations.

INTERSECTION/ROADWAY MITIGATIONS

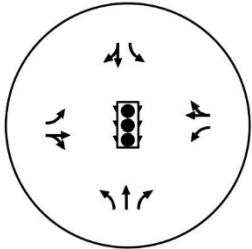
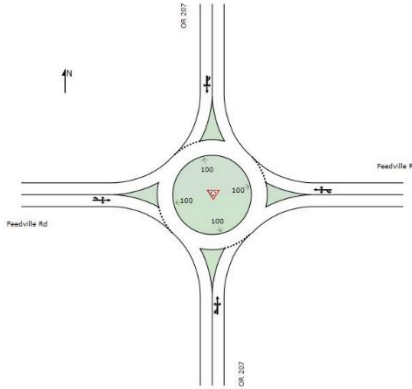
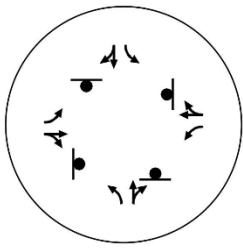
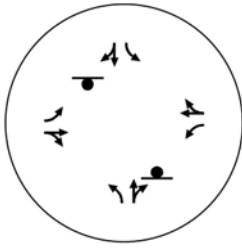
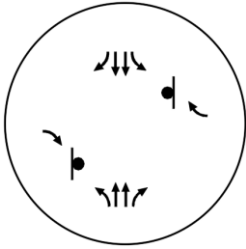
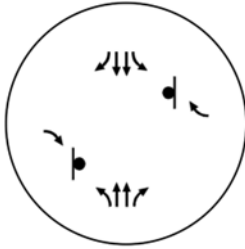
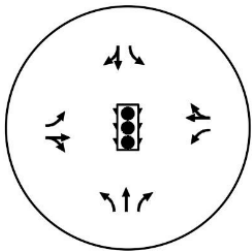
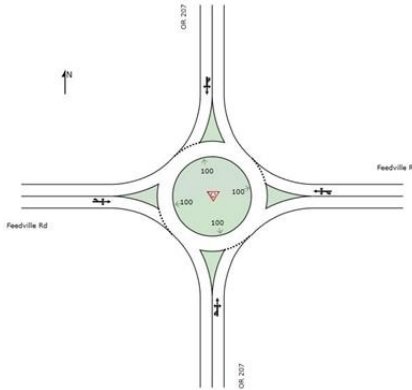
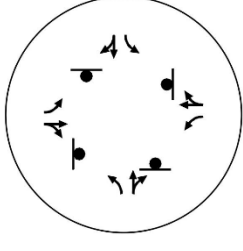
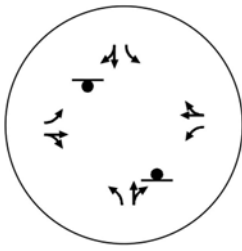
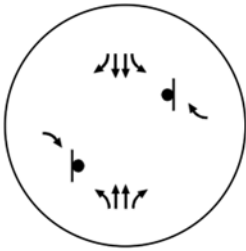
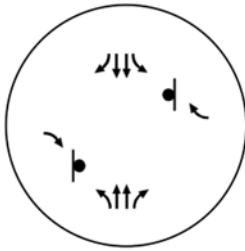
- The UGB amendment analysis identified operational deficiencies at OR 207/Feedville Road, Feedville Road/Kelli Boulevard, US 395/Feedville Road, and US 395/Kelli Boulevard intersections as well as the Feedville Road corridor itself. To address the noted deficiencies, mitigation scenarios were investigated as summarized in Table B. As shown in the table:
 - The capacity limitations at the OR 207/Feedville Road intersection can be mitigated with traffic control (such as a roundabout) and travel lane/geometric improvements. Since there are no identified mitigation plans, the City of Hermiston and Umatilla County will need to amend their respective TSPs to include a long-term mitigation project for this intersection. Costs for these improvements could fall in the \$3M-\$6M range depending upon right-of-way needs and the level of impact to the adjacent rail line.
 - The Feedville Road/Hermiston-Hinkle Road intersection can be mitigated with urban upgrades and widening that would include separate left and through/right-turn lanes on all intersection approaches. Costs for these improvements could fall in the \$1M-\$2M range depending upon right-of-way needs and utility conflicts.
 - The Feedville Road/Kelli Boulevard intersection can be mitigated with urban upgrades and widening that would include separate left and through-right-turn lanes on all intersection approaches. Costs for these improvements could fall in the \$1M-\$2M range depending upon right-of-way needs and utility conflicts.
 - The US 395/Feedville Road and US 395/Kelli Boulevard intersections can be improved with turning movement restrictions and indirect U-turn accommodations that are currently being investigated by ODOT. The City of Hermiston and Umatilla County will need to amend their respective TSPs to include such a long-term mitigation project for these intersections. Based on preliminary estimates from ODOT, an approximate cost for these improvements would be \$5M.
 - Corridor improvements would be needed to bring Feedville Road up to urban design standards. Planning level costs for a full urban upgrade would likely be \$27M or more depending upon right-of-way needs and utility conflicts.

Table A – Intersection Operations Findings Summary

Study Intersections	Mobility Target/ Operating Standard	2025 Existing Traffic Conditions		2045 Existing Land Use Traffic Conditions		2045 Proposed UGB Expansion Traffic Conditions	
		Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday AM Peak Hour	Weekday PM Peak Hour
1. OR 207/ Feedville Road	v/c ≤ 0.70 major approach v/c ≤ 0.75 minor approach	SB LT V/C = 0.01 WB V/C = 0.15	SB LT V/C = 0.01 WB V/C = 0.25	SB LT V/C = 0.09 WB V/C = 1.01	SB LT V/C=0.18 WB V/C=1.2	SB LT V/C=0.12 WB V/C=1.21	SB LT V/C=0.20 WB V/C=1.43
2. Hermiston-Hinkle Road/ Feedville Road	LOS D	LOS A	LOS A	LOS B	LOS C	LOS C	LOS C
3. Kelli Road/ Feedville Road/Assumed Future Access	LOS D	SB Approach = LOS A	SB Approach = LOS B	SB Approach = LOS B	SB Approach = LOS C	NB Approach = LOS C	NB Approach = LOS E
4. Ott Road/ Feedville Road	LOS D	SB Approach = LOS A	SB Approach = LOS A	SB Approach = LOS B	SB Approach = LOS B	SB Approach = LOS B	SB Approach = LOS B
5. US 395/ Feedville Road	v/c ≤ 0.70 major approach v/c ≤ 0.75 minor approach	NB LT V/C=0.04 WB V/C=0.12	SB LT V/C = 0.03 EB V/C = 0.26	NB LT V/C=0.09 WB V/C=0.31	NB LT V/C=0.05 EB V/C=0.78	NB LT V/C=0.12 WB V/C=0.39	NB LT V/C=0.08 EB V/C=0.90
6. US 395/ Kelli Boulevard	v/c ≤ 0.80 major approach v/c ≤ 0.90 minor approach	Not analyzed	NB LT V/C = 0.01 EB V/C = 0.86	Not analyzed	NB LT V/C = 0.02 EB V/C = 3.01	Not analyzed	NB LT V/C = 0.02 EB V/C = 3.63

¹ For the 2045 Expanded UGB, the OR 207/Feedville Road intersection would be inside the Hermiston UGB. Therefore, the mobility targets would change to v/c ≤ 0.85 major approach and v/c ≤ 0.90 minor approach

Table A - TPR Analysis Intersection Mitigation Operations Findings

2045 Forecast Traffic Conditions Under Existing Land Use Scenario						
	OR 207 / Feedville Road		Feedville Road / Hermiston-Hinkle Road	Feedville Road / Kelli Boulevard	US 395/Feedville Road	US 395/Kelli Boulevard
	(1) Signalized Intersection Option (for comparison)	(2) Conceptual Single Lane Roundabout Option	Intersection Approach Widening	Intersection Approach Widening	Restricted Crossing U-Turn (RCUT)	Restricted Crossing U-Turn (RCUT)
Assumed Lane Geometry/Traffic Control						
Weekday AM Peak Hour Operations	V/C = 0.49 ¹	Critical Approach: Eastbound V/C = 0.47	LOS A	LOS B (SB Approach)	Critical Approach: Eastbound V/C = 0.16	Not analyzed
Weekday PM Peak Hour Operations	V/C = 0.60 ¹	Critical Approach: Northbound V/C = 0.51	LOS B	LOS B (SB Approach)	Critical Approach: Eastbound V/C = 0.28	Critical Approach: Eastbound V/C = 0.67
2045 Forecast Traffic Conditions Under Proposed UGB Expansion Scenario						
	OR 207 / Feedville Road		Feedville Road / Hermiston-Hinkle Road	Feedville Road / Kelli Boulevard	US 395/Feedville Road	US 395/Kelli Boulevard
	(1) Signalized Intersection Option (for comparison)	(2) Conceptual Single Lane Roundabout Option	Intersection Approach Widening	Intersection Approach Widening	Restricted Crossing U-Turn (RCUT)	Restricted Crossing U-Turn (RCUT)
Assumed Lane Geometry/Traffic Control						
Weekday AM Peak Hour Operations	V/C = 0.52 ¹	Critical Approach: Westbound V/C = 0.53	LOS B	LOS C (NB Approach)	Critical Approach: Eastbound V/C = 0.21	Not analyzed
Weekday PM Peak Hour Operations	V/C = 0.63 ¹	Critical Approach: Northbound V/C = 0.53	LOS C	LOS D (NB Approach)	Critical Approach: Eastbound V/C = 0.35	Critical Approach: Eastbound V/C = 0.79

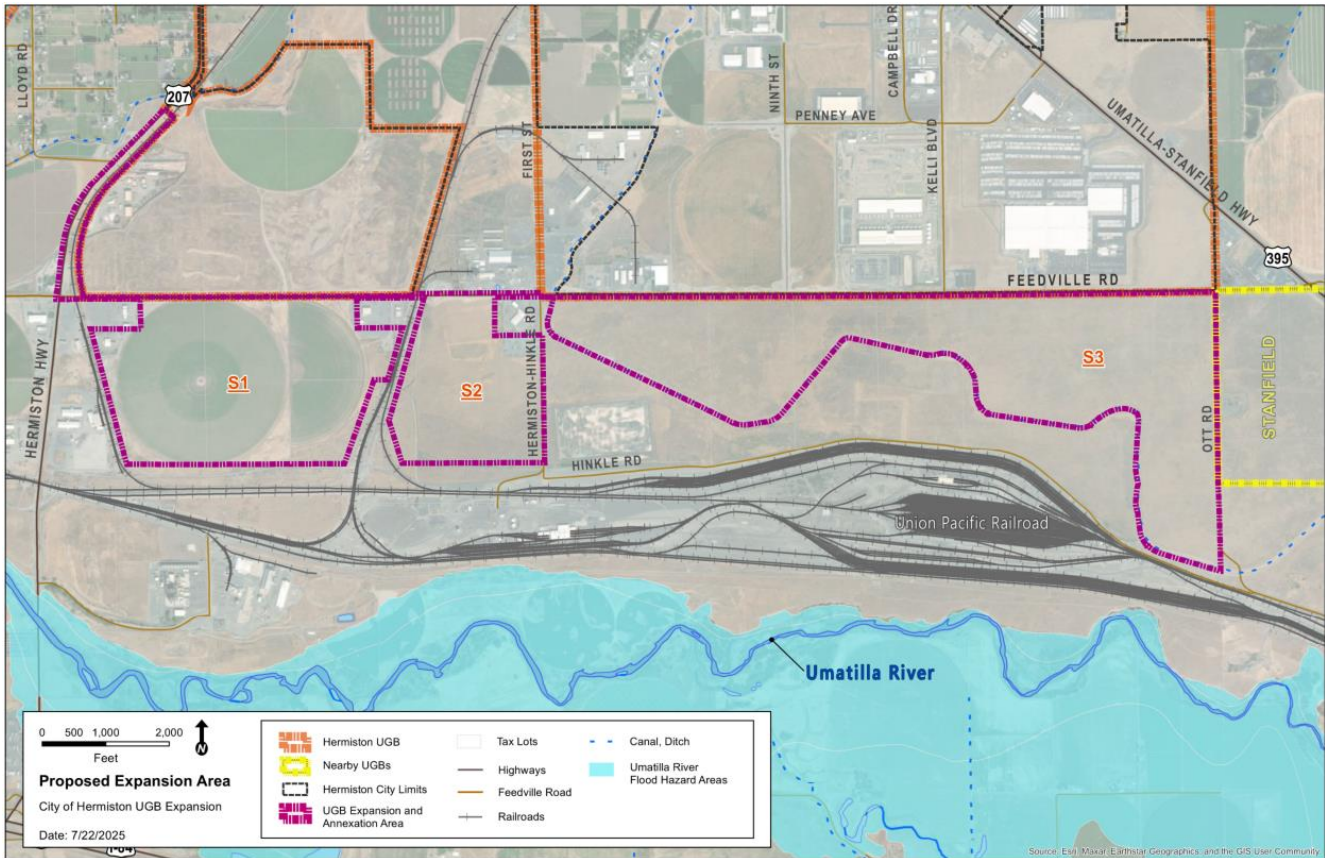
¹ The applicable Oregon Highway Plan mobility target is a v/c of 0.75. The applicable Highway Design Manual operating standard is a v/c of 0.70

PROJECT BACKGROUND

The City of Hermiston seeks to amend its urban growth boundary (UGB) to accommodate industrial opportunities identified in the 2023 Hermiston Economic Opportunities Analysis (EOA), in particular large parcels that would be suitable for the development of large-scale data centers.

The three tracts that make up the proposed UGB expansion are shown in Exhibit 2 and total 765 gross acres (of which 734 acres are suitable for development). All of the tracts currently accommodate farming/agricultural uses.

Exhibit 2. UGB Expansion Area Sites



EXISTING AND PROPOSED ZONING

As shown in Exhibit 2, the expansion areas are adjacent to Hermiston's southern UGB. All proposed expansion sites are about Feedville Road and consist of relatively low-quality agricultural land.

Table 1 summarizes the existing and proposed land use designations for the three proposed expansion areas. All areas are currently in Umatilla County's Exclusive Farm Use (EFU) with a Heavy Industrial (HI) overlay zone and the Heavy Industrial (HI) zone on S2. With the UGB expansion and annexation into the City of Hermiston, all expansion areas are proposed to be rezoned under the City of Hermiston Heavy Industrial (M-21) zone with a Hyperscale Data Center (HDC) overlay.

Table 1. Expansion Tract Overview

Tract ID	Gross Acres	Developable Acres	Existing County Zoning	Proposed City Zoning
S1	240	235	EFU	M1/HDC
S2	120	120	HI	M1/HDC
S3	404	379	EFU	M1/HDC
Total	764	734		

UGB expansions and their subsequent potential for urbanization are classified as plan amendments in Oregon Administrative Rule (OAR) 660-012-0060, also known as the Transportation Planning Rule (TPR). This assessment focuses on the identification of significant transportation-impacts associated with future urbanization of the tracts as data centers. This analysis does not apply to an actual development plan. Rather, it provides a long-range transportation operations comparison at key intersections and roadway corridors that could be generated between the existing study area land uses and the proposed UGB expansion land uses.

The remainder of this report documents the TPR analysis scope, methodology, findings and recommendations.

STUDY SCOPE & ANALYSIS METHODOLOGY

This analysis identifies the transportation-related impacts associated with the proposed UGB expansion.

URBAN GROWTH BOUNDARY EXPANSION

- Existing land use and transportation system conditions within the site vicinity;
- Review of regional traffic growth, seasonal traffic patterns and planned transportation improvements identified in the Umatilla County and City of Hermiston *Transportation System Plans (TSP)*;
- Planning horizon year 2045 traffic operations under the existing land use conditions and the UGB expansion land use conditions;
- Identification of traffic system deficiencies and potential mitigation measures; and

STUDY INTERSECTIONS

The study intersections were identified in collaboration with City of Hermiston staff and a review of local and regional transportation infrastructure that could potentially be impacted by the UGB expansion and data center development. Figure 1 illustrates the location of the study intersections that are listed below. For ease of review, each intersection is referenced within this report using the same numerical ID.

1. OR 207/Feedville Road
2. Hermiston Hinkle Road/Feedville Road
3. Kelli Boulevard/Feedville Road
4. Ott Road/Feedville Road
5. US 395/Feedville Road

TRAFFIC ANALYSIS TIME PERIODS

Study intersection operations were analyzed during the weekday morning (intersection peak hour between 7:00-9:00 AM) and evening (intersection peak hour between 3:00-6:00 PM) peak hours.

ANALYSIS METHODOLOGY

The unsignalized and signalized intersection operational analyses presented in this report were prepared following *Highway Capacity Manual 7th Edition* analysis procedures using PTV Vistro software and Sidra software.

APPLICABLE MOBILITY STANDARDS

All study intersections are under the jurisdiction of ODOT except for Hermiston Hinkle Road/Feedville Road, Kelli Boulevard/Feedville Road, and Ott Road/Feedville Road intersections which are under either City of Hermiston or Umatilla County jurisdiction¹. The specific intersection operating targets/standards adopted by ODOT, City of Hermiston, and Umatilla County are summarized below.

¹ City of Hermiston anticipates jurisdictional transfer of Feedville Road from Umatilla County to the City of Hermiston in conjunction with the proposed UGB expansion.

ODOT MOBILITY TARGETS

ODOT uses volume-to-capacity (v/c) ratios to assess intersection operations. *Table 6* of the *Oregon Highway Plan* (OHP) provides maximum v/c ratio mobility targets for all signalized/roundabout and unsignalized intersections located outside the major metropolitan areas. Table 2 summarizes the v/c ratio that will be used to identify the existing and potential future operational issues at the ODOT owned/maintained intersections.

Table 2 – ODOT Mobility Targets

Intersection		OHP Mobility Target
1	OR 207 ¹ / Feedville Road	v/c ≤ 0.70 major approach v/c ≤ 0.75 minor approach
5	US 395 ² / Feedville Road	v/c ≤ 0.70 major approach v/c ≤ 0.75 minor approach
6	US 395 ³ / Kelli Boulevard	v/c ≤ 0.80 major approach v/c ≤ 0.90 minor approach
¹ Regional Highway (not a Freight Route), 45-50 mph ² Statewide Highway (Freight Route), 55 mph, outside Stanfield UGB ³ Statewide Highway (Freight Route), 55 mph, inside Hermiston UGB		

UMATILLA COUNTY OPERATING STANDARDS

Umatilla County currently maintains Feedville Road and Hermiston Hinkle Road. The acceptable county operating standard for intersections along these roadways is LOS D or better.

CITY OF HERMISTON OPERATING STANDARDS

The City of Hermiston currently maintains Kelli Boulevard. The acceptable standard for signalized and unsignalized intersections along this roadway is LOS D or better.

EXISTING CONDITIONS TRAFFIC ANALYSIS

The existing conditions analysis identifies field conditions and the current operational, traffic control, and geometric characteristics of the roadways and other transportation facilities within the study vicinity. These conditions will be compared with future year conditions later in this report. Kittelson used local knowledge combined with a desktop review of the study area and inventoried the existing transportation system to identify lane configurations, traffic control devices, bicycle and pedestrian facilities, and transit stops.

TRANSPORTATION FACILITIES

Table 3 summarizes the attributes of the key roadways in the site vicinity. Figure 1 illustrates the existing lane configurations and traffic control devices at the study intersections.

Table 3 – Existing Transportation Facilities

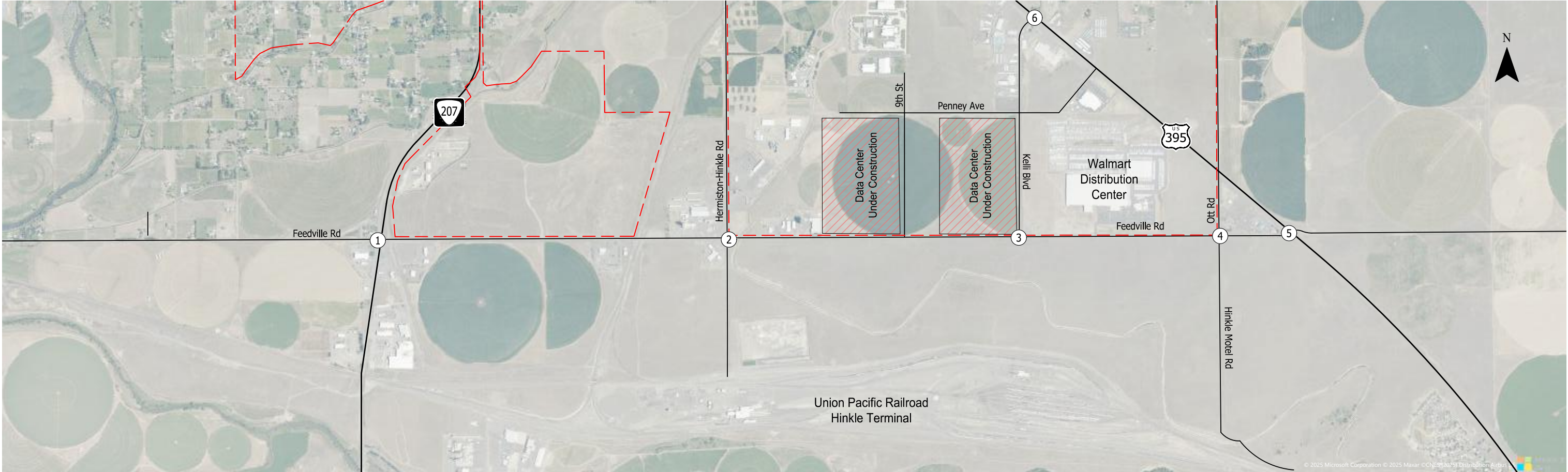
Roadway	Ownership	Functional Classification ¹ (ownership in bold)	Number of Auto Lanes	Posted Speed (mph)	Sidewalks Present?	Bike Lanes Present?
OR 207	ODOT	Regional Highway: ODOT Rural Arterial: City of Hermiston State Highway: Umatilla County	2-3	45-50	No	No
Feedville Road	Umatilla County	Rural Collector Street: City of Hermiston Major Collector: Umatilla County	2	35	No	No
Hermiston Hinkle Road	Umatilla County	Major Collector: Umatilla County Rural Collector Street: City of Hermiston	2	55	No	No
Kelli Boulevard	City of Hermiston	Rural Major Collector: City of Hermiston	2	35	No	No
Ott Road	City of Hermiston	Rural Collector Street: City of Hermiston	2	Not Posted	No	No
US 395	ODOT	Statewide Highway: ODOT Rural Arterial: City of Hermiston State Highway: Umatilla County	4-5	55	No	No

¹Source: Oregon Highway Plan, Hermiston TSP, Umatilla County TSP

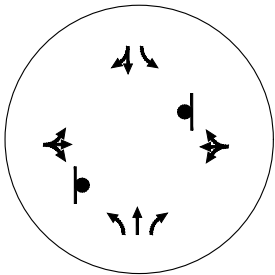
²It is expected that the sections of Feedville Road that reside within the City of Hermiston UGB will be transferred to City of Hermiston jurisdiction in the future.

INTERSECTION CRASH HISTORY

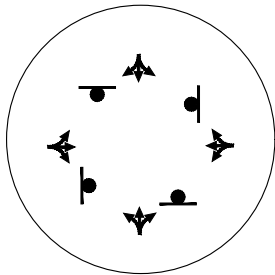
ODOT provided crash records for the study intersections for the five-year period from January 1, 2019 through December 31, 2023. Table 4 summarizes the ODOT crash data. *Appendix A contains the crash data summary sheets which provides more details on the reported crashes.*



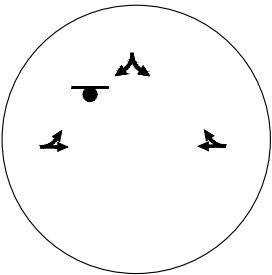
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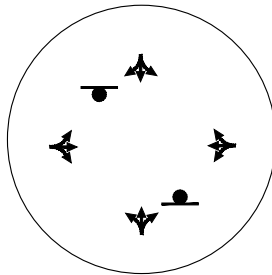
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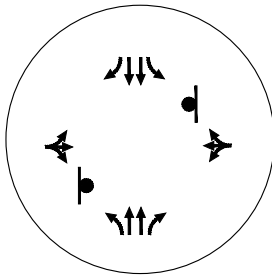
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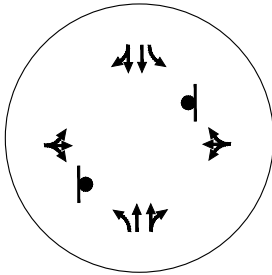
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- Existing Study Intersections --- Existing Urban Growth Boundary
↗ - Existing Lane Configuration
● - Stop Sign

Existing Lane Configurations and
Traffic Control Devices
Hermiston, Oregon

Figure
1

Table 4 – Reported Crash History (January 1, 2019 – December 31, 2023)

Study Intersection	Crash Type					Severity			Total
	Rear End	Turning	Angle	Fixed Object	Other	PDO	Injury	Fatal	
OR 207/ Feedville Road	0	4	2	0	0	2	4	0	6
Hermiston-Hinkle Road/ Feedville Road	1	0	0	0	0	0	1	0	1
Kelli Boulevard/ Feedville Road	0	0	0	0	0	0	0	0	0
Ott Road/ Feedville Road	0	0	0	0	0	0	0	0	0
US 395/ Feedville Road	1	1	2	1	0	1	4	0	5
US 395/ Kelli Boulevard	0	3	3	0	2	4	3	1	8

Intersection crash rates were calculated and compared to statewide crash rate performance thresholds following the analysis methodology presented in the ODOT *Analysis Procedures Manual (APM)*. Per the APM, intersections with crash rates that exceed the 90th percentile values shown in APM Exhibit 4-1 or with a crash rate that exceeds its critical crash rate should be flagged for further analysis. For this analysis, the observed crash rate was calculated and compared to the 90th percentile crash rates for the applicable (urban vs rural) intersections by traffic control and 3- versus 4-legged configurations (as appropriate). This is shown in Table 5.

Table 5 – Intersection Crash Rate Assessment

Study Intersection	Total Crashes	Observed Crash Rate	90 th Percentile Crash Rate by Lane Type and Traffic Control	Observed Crash Rate >90 th Percentile Crash Rate?
OR 207/ Feedville Road	6	0.55	0.41	Yes
Hermiston-Hinkle Road/ Feedville Road	1	0.19	0.41	No
Kelli Boulevard/ Feedville Road	0	0.00	0.29	No
Ott Road/ Feedville Road	0	0.00	0.29	No
US 395/ Feedville Road	5	0.27	0.41	No
US 395/ Kelli Boulevard	8	0.35	0.29	Yes

CRASH DATA CONSIDERATIONS

As shown in Table 5, the observed crash rate at the OR 207/Feedville Road and US 395/Kelli Boulevard intersections exceed the 90th percentile crash rate based on intersection type. A detailed review of the intersection crash data revealed the following:

- At OR 207/Feedville Road, the reported crashes involved two angle and four turn crashes. Of these crashes, they were mainly attributed to driver inattention, disregarding the intersection's traffic control, or failing to yield the right-of-way. With the exception of one crash, all involved westbound approaching vehicles on Feedville Road. As will be discussed later in this report, long-term improvement options are identified for this intersection.
- At US 395/Kelli Boulevard, the reported crashes involved multiple turning and angle type crashes from different combinations of directions. Of these crashes, all were the result of careless driving, driver inattention, or failing to yield the right-of-way. There was one fatality that involved an angle crash. As will be discussed later in this report, long-term improvement options are identified for this intersection.

ODOT SPIS LIST

ODOT also maintains a SPIS list to identify existing hazardous intersections for potential safety improvements. The SPIS lists consider the crash data for the 3 prior years. The 2023 ODOT SPIS list was reviewed to determine if any study intersections were identified as having a SPIS score in the top 15 percent and ranking amongst other projects. The SPIS score is calculated based on three factors:

- Frequency of crashes (25% of the SPIS score)
- Rate of crashes (25% of the SPIS score)
- Severity of crashes (50% of the SPIS score)

Of the study intersections, the US 395/Feedville Road intersection is listed in the Top 10% of the 2023 ODOT Region 5 SPIS list. As will be discussed later in this report, long-term improvement options are identified for this intersection.

EXISTING TRAFFIC CONDITIONS

Turning movement counts at the study intersections were conducted on a typical mid-week day in January 2025 when there were no adverse weather conditions². *Appendix B contains the intersection turning movement count sheets.*

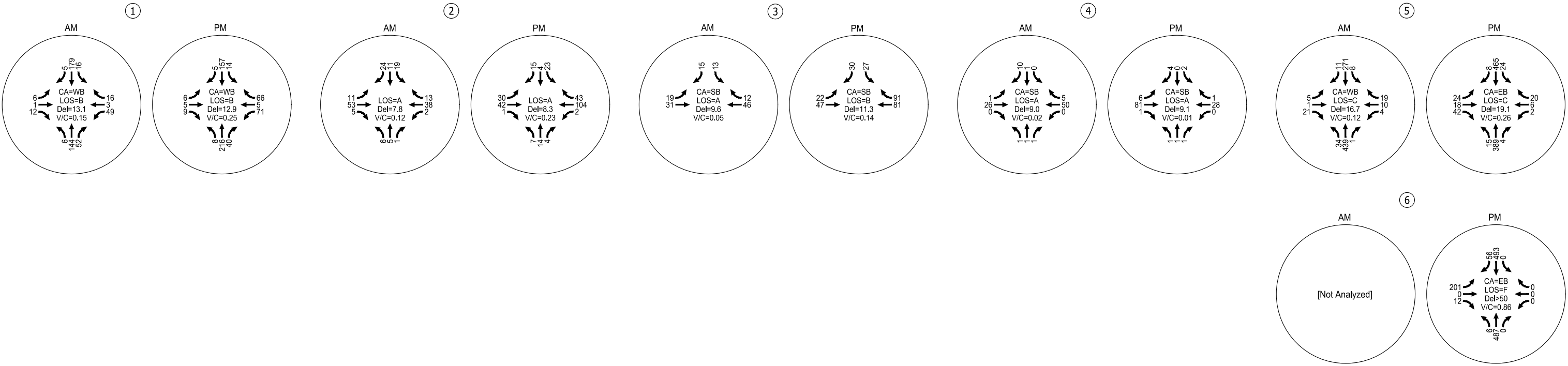
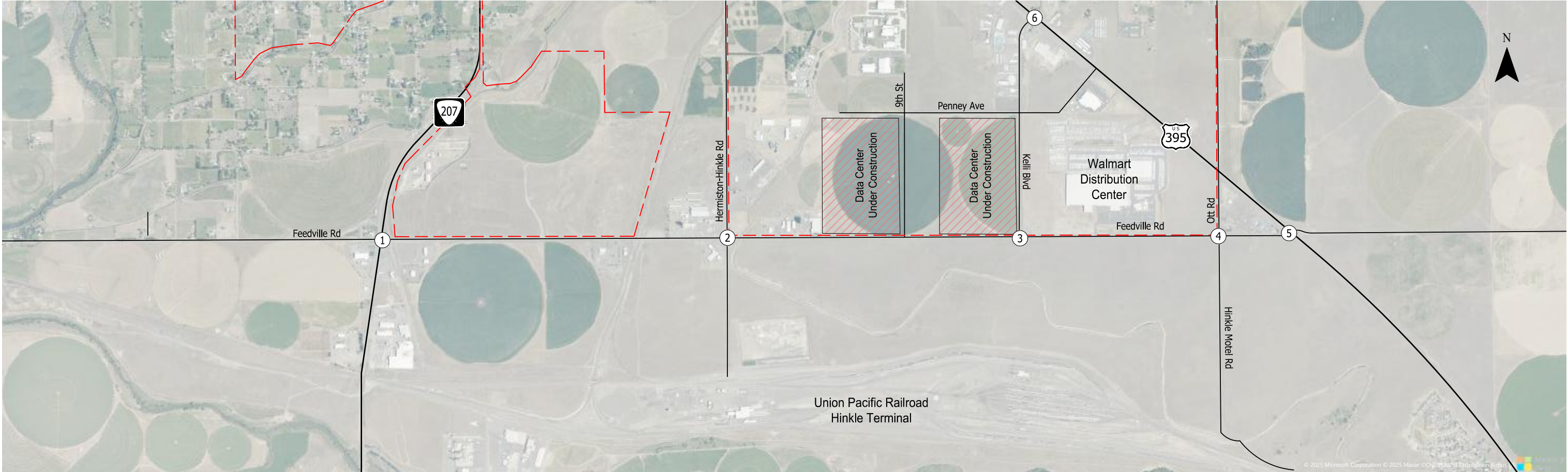
SEASONAL ADJUSTMENT

To determine an appropriate seasonal factor, the three seasonal adjustment calculation methodologies outlined in ODOT's *Analysis Procedures Manual (APM)* were investigated. *Appendix B* contains a detailed write up and summary of these methodologies. As summarized in the appendix, a seasonal adjustment factor of 1.19 was applied to the measured January traffic volumes at the US 395/Feedville Road and OR 207/Feedville Road study intersections to approximate 30th highest hour travel conditions. No seasonal adjustment calculations were applied to the Feedville Road intersections given the corridor's lack of regional through traffic accommodation, however traffic volumes were balanced from the OR 207 and US 395 intersections.

EXISTING INTERSECTION OPERATIONS

Figure 2 illustrates the seasonally adjusted 2025 existing traffic volumes and operations at the study intersections during the weekday AM and PM peak hours. As shown and detailed in *Appendix C* (which includes the existing conditions operations analysis worksheets), the study intersection operations currently satisfy the applicable ODOT mobility targets and City of Hermiston/Umatilla County LOS standards during the AM and PM peak hours.

² Following a preliminary review by ODOT, it was requested that the US 395/Kelli Boulevard intersection be added as a study intersection. In order to analyze this intersection, traffic volumes from the *Hermiston Data Centers Traffic Impact Analysis* report prepared by PBS in December 2023 were utilized. This study only assessed the weekday PM peak time period, so the intersection operations at US 395/Kelli Boulevard are limited to this time period.



- Existing Study Intersections
--- Existing Urban Growth Boundary

CA = Critical Approach
LOS = Level of Service
Del = Intersection Average Control Delay (AWSC) / Intersection Movement Control Delay (TWSC)
V/C = Intersection Volume-to-Capacity Ratio

Existing Traffic Conditions
Weekday AM & PM Peak Hours
Hermiston, Oregon

Figure
2

UGB EXPANSION – TRANSPORTATION ANALYSIS

This section of the report contains a detailed assessment of the long-term traffic impacts associated without and with the proposed UGB expansion. The analysis of long-term traffic conditions is required by the Transportation Planning Rule (TPR, OAR Section 660-12-0060), given that the proposed UGB expansion would require a Comprehensive Plan amendment and may have the potential to significantly affect a transportation facility.

To test for UGB amendment-related impacts, an analysis of traffic conditions was conducted under 2045 existing land use conditions (no UGB expansion) and the proposed UGB Expansion land use conditions with a Heavy Industrial (M-2) zone and Hyperscale Data Center (HDC) overlay. This was accomplished in the following steps:

- For the existing land use scenario (no change to the UGB), anticipated future traffic growth patterns were identified for the weekday AM and PM peak hour under the 2045 planning horizon year. The traffic growth patterns under this scenario assume regional growth along the OR 207 and US 395 corridors, development on outright zoned parcels within the study area that can and are likely to urbanize, but no development or redevelopment on two of the proposed UGB expansion parcels.
- For the proposed UGB expansion land use scenario, anticipated future traffic growth patterns assume regional growth along the OR 207 and US 395 corridors, development on outright zoned parcels within the study area that can and are likely to urbanize, and the inclusion of hyper-scale data center campuses on all of the proposed UGB expansion parcels.
 - Estimates of average daily, weekday AM, and weekday PM peak hour site trips were prepared for the proposed Light Industrial zone using data center land uses.
 - A site trip distribution pattern was derived through a review of existing traffic volumes and each site's proximity to the regional transportation network.
 - Weekday AM and PM peak hour site-generated trips from the proposed data center campuses were assigned to the surrounding roadway corridors and study intersections.
- Planning horizon year 2045 traffic volumes and operations were analyzed for the weekday AM and PM peak hour under the existing land use scenario and proposed UGB Expansion scenario.
- Operational deficiencies were identified and mitigation measures were evaluated.

YEAR 2045 BACKGROUND TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS

In long-range transportation assessments, future roadway or intersection improvement projects can be included in the future year analysis if they are in a local Capital Improvement Plan with secured funding, are on a "financially constrained" project list in a locally adopted TSP, or alternatively, are deemed by the local agency to be "reasonably likely to occur" within the planning horizon. After a review of the current Hermiston and Umatilla County TSPs, the following relevant long-term transportation improvements have been identified:

- Feedville Road from OR 207 to approximately US 395 has been identified in the Umatilla County TSP as needing to be upgraded to urban standards with alignment improvements, shoulders, and repaving.
- Hermiston-Hinkle Road from Feedville Rd to Highland Ave has been identified in the Umatilla County TSP as needing to be upgraded to urban standards with alignment improvements, shoulders, and repaving.
- The US 395/Feedville Road intersection has been identified in both the Umatilla County TSP and Hermiston TSP as needing alignment modifications and signalization.

While all noted improvements are listed in adopted TSPs, none are funded or have been deemed to be reasonably likely to be constructed within the 2045 planning horizon. Therefore, all future year analyses are assuming the existing transportation infrastructure remains.

YEAR 2045 EXISTING LAND USE SCENARIO TRAFFIC FORECAST

The 2045 existing land use scenario (no UGB expansion) traffic volumes are assumed to consist of the following:

- Forecast regional through traffic growth (2% per year) on the OR 207 and US 395 corridors. This growth rate is consistent with other recent traffic studies performed in the area.
- Trips from other in-process developments within the site vicinity³.
- Trips from other outright zoned vacant/underdeveloped properties in the study area that are deemed reasonably likely to develop over the next 20 years^{4 5}.

The resulting year 2045 existing land use scenario traffic volumes forecast for the weekday AM and PM peak hour are illustrated in Figure 3 for all study intersections.

Year 2045 Existing Land Use Scenario Intersection Operations

Operations of the study intersections under 2045 existing land use scenario were assessed to understand the base future year operations assuming no changes are made to the UGB and the individual parcels in question continue to be used for farming/agricultural purposes. Figure 3 also summarizes the forecast intersection operations. As shown, all study intersections are forecast to continue to operate acceptably during both the weekday AM and PM hours with the exception of the OR 207/Feedville Road, US 395/Feedville Road, and US 395/Kelli Boulevard intersections. *Appendix D includes the 2045 existing land use intersection operations analysis worksheets.*

OR 207/FEEDVILLE ROAD INTERSECTION

During both the weekday AM and PM peak hours, traffic demand to/from the Feedville Road corridor is forecast to increase significantly over existing conditions. This is primarily due to assumed/anticipated growth, particularly from the Southwest Urban Renewal Area housing growth assumptions and other assumed developments. This increased demand, coupled with forecast local and regional growth along the OR 207 corridor, is forecast to cause the critical WB Feedville Road approach to operate over capacity during the weekday PM peak hour. As such, traffic control measures have been investigated in the following section.

³ At the time this study was being completed, two data center campuses were under construction along the north side of Feedville Road and west of Kelli Boulevard. The traffic impact studies produced for these two development projects were reviewed and the applicable site-generated trips were extracted and added to the study intersections.

⁴ Based on conversations with City of Hermiston planning staff, it was determined that the 393-acre Southwest Hermiston Urban Renewal Area is likely to develop over the next 20 years. This area is located north of Feedville Road, roughly between the OR 207 and Hermiston-Hinkle Road corridors. While there is no active development proposal for the site, it has been assumed for the purposes of this analysis that future development will include up to 893 housing units consisting of single family detached, single family attached, and multi-family housing units. This mix of units is consistent with past development proposals for the site. Access to/from this development was assumed via multiple site access driveways along its Feedville Road frontage.

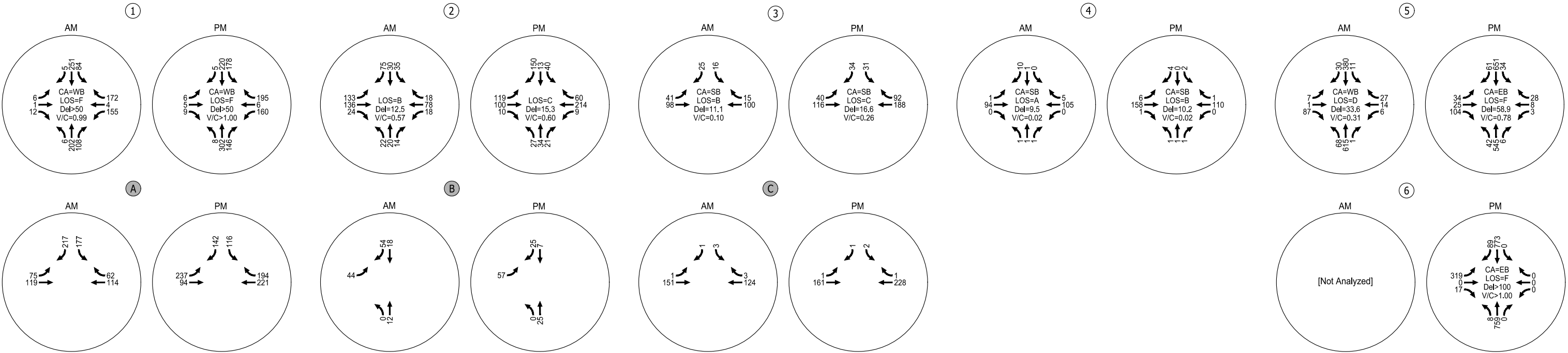
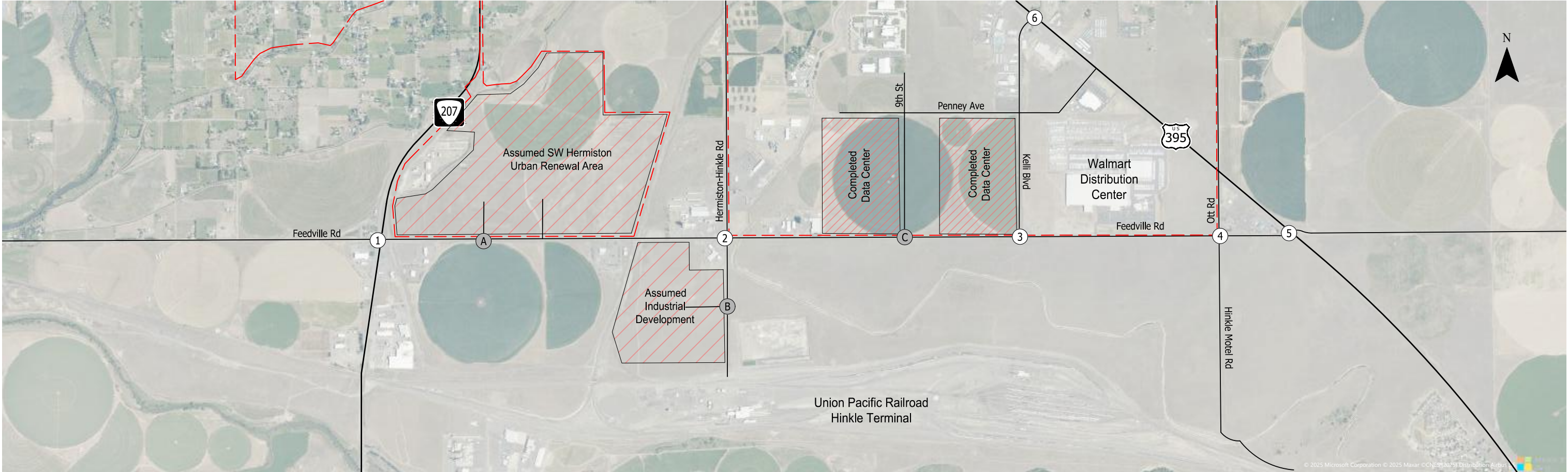
⁵ The S2 UGB expansion site is currently zoned Heavy Industrial (HI) by Umatilla County despite not being in the Hermiston UGB. As such, this parcel does not technically require that it be brought into the Hermiston UGB before it can accommodate more intensive development like the proposed data center campuses. Based on a conversation with City of Hermiston planning staff, it was determined that the site would reasonably develop on its own within the 20-year planning horizon and that a data center was a reasonable land use assumption. For ease of incorporation with the UGB expansion analysis, it was assumed that the site would develop as an 800,000 square foot data center campus under the existing land use scenario. Access to/from this development was assumed via a single site access driveway along its Hermiston-Hinkle Road frontage.

US 395/FEEDVILLE ROAD INTERSECTION

During the weekday PM peak hour, traffic demand to/from the Feedville Road corridor is forecast to increase over existing conditions. Like the future conditions at the OR 207/Feedville Road intersection, this growth is primarily due to assumed/anticipated development, particularly from the Southwest Urban Renewal Area housing growth assumptions and other developments. This increased demand is forecast to cause the critical EB Feedville Road approach to operate at a v/c of 0.78 which is above the 0.75 mobility target.

US 395/KELLI BOULEVARD

During the weekday PM peak hour, traffic demand to/from the Kelli Boulevard corridor is forecast to increase to levels that will cause the critical eastbound Kelli Boulevard approach to operate over capacity. As such, geometric and turning movement modifications have been investigated in the following section.



- Existing Study Intersections
--- Existing Urban Growth Boundary
- Assumed Site Access

CA = Critical Approach
LOS = Level of Service
Del = Intersection Average Control Delay (AWSC) /
Intersection Movement Control Delay (TWSC)
V/C = Intersection Volume-to-Capacity Ratio

2045 Existing Land Use Traffic Conditions
Weekday AM & PM Peak Hours
Hermiston, Oregon

Figure
3

YEAR 2045 UGB EXPANSION SCENARIO TRAFFIC FORECAST

Under the proposed UGB Expansion scenario, the intended Heavy Industrial (M-2) zone and Hyperscale Data Center (HDC) overlay will limit future development scenarios to large-scale data center campuses. Based on discussions with the project team, the anticipated size of the data center campuses (in square feet) for each of the three UGB expansion parcels are summarized in Table 6 along with their daily and peak hour trip generation estimates. As shown in the table, the UGB Expansion scenario has the potential to generate a significant number of new daily and peak hour trips on the surrounding transportation network.

Table 6 – UGB Expansion Trip Generation Estimate

Land Use	ITE Code	Size (Gross Floor Area)	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
S1 - Data Center	160	1,200,00	1,188	150	83	67	126	38	88
S2 - Data Center ¹	160	800,000	792	98	54	44	82	25	57
S3 - Data Center	160	1,800,000	1,782	228	125	103	192	58	134
Total Trips			3,762	476	262	214	400	120	280

Source: Trip Generation Manual, 11th Edition

¹ As previously noted, the S2 site was assumed to be developed in the 2045 Existing Land Use Scenario. For documentation purposes, the trips from this site are calculated for documentation purposes in Table 6, but they are included as part of the background growth volumes in the Existing Land Use scenario.

UGB Expansion Site Trip Distribution and Assignment

The distribution of data center campus trips onto the study area roadway system was estimated based on an examination of existing travel patterns, the surrounding roadway network, the available travel routes to local and regional destinations, and additional direction from City of Hermiston staff. The assumed trip distribution pattern and site trip assignments at the site access driveways⁶ and study intersections are illustrated in Figure 4.

Year 2045 UGB Expansion Scenario Intersection Operations

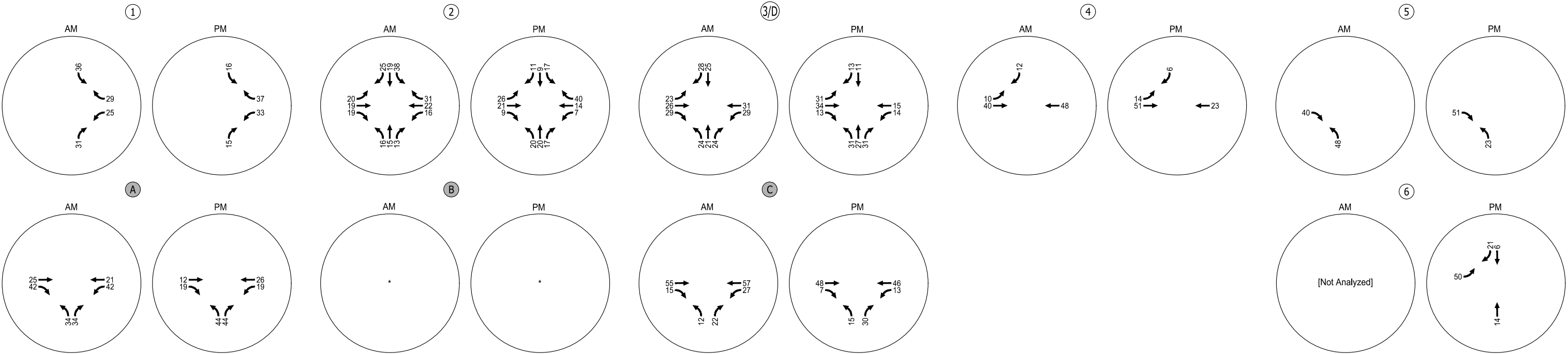
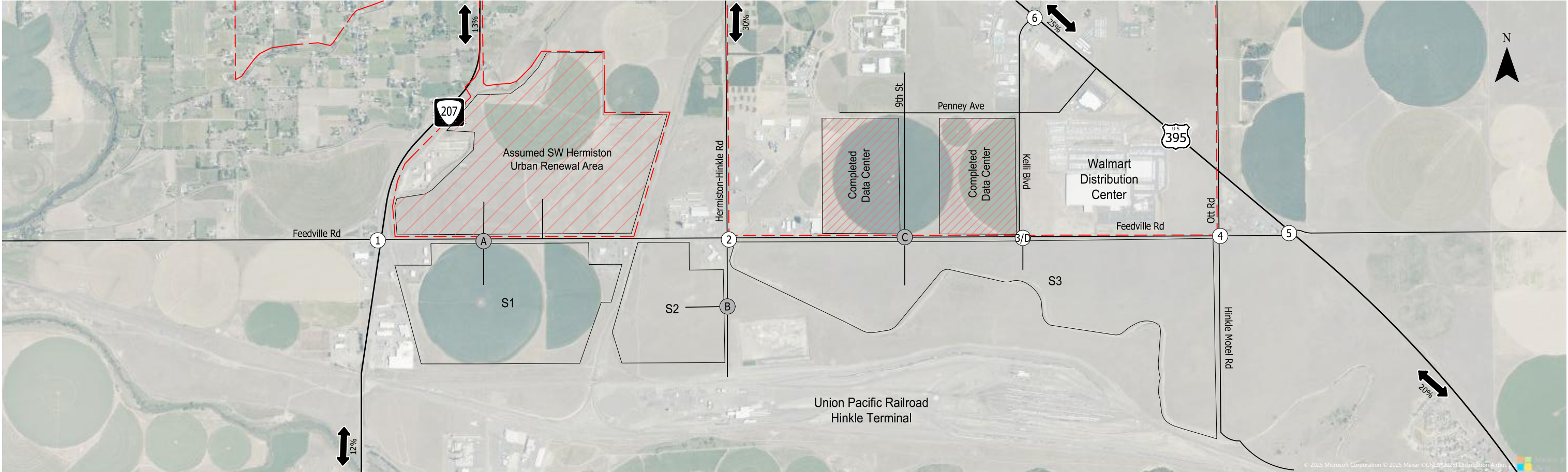
To reflect conditions anticipated under the UGB Expansion scenario, the weekday AM and PM peak hour site generated traffic volumes shown in Figure 4 were added to the existing land use scenario traffic volumes shown in Figure 3 to arrive at the cumulative 2045 traffic volumes shown in Figure 5.

Operations of the study intersections under 2045 UGB Expansion scenario (with the UGB expansion sites converted to data centers) are also summarized in Figure 5. *Appendix E includes the 2045 intersection operations analysis worksheets.* From this analysis, the following findings were generated:

- Similar to the findings under the existing land use scenario, the stop-controlled westbound Feedville Road approach to the OR 207/Feedville Road intersection is forecast to continue to operate over capacity. This is a further degradation of the intersection operations compared to the existing land use scenario.

⁶ Data center trips to/from the S1 UGB expansion area were assumed to access Feedville Road via a new site driveway that would be located opposite a future site driveway serving the assumed Southwest Hermiston Urban Renewal Area residential development. Data center trips to/from the S2 UGB expansion area were assumed to access Hermiston-Hinkle Road via a single site driveway. Data center trips to/from the S3 UGB expansion area were assumed via two separate site driveways along Feedville Road. One driveway was assumed to align opposite the 9th Street intersection and one driveway was assumed to align opposite the Kelli Boulevard intersection.

- The all-way stop-controlled Feedville Road/Hermiston-Hinkle Road intersection is forecast to operate at LOS C conditions, but the single lane approaches on Feedville Road are forecast to result in 150-200' vehicle queues on the eastbound and westbound approaches during the peak periods.
- The stop-controlled northbound and southbound approaches at the Feedville Road/Kelli Boulevard intersection are forecast to operate at LOS E conditions.
- The critical EB Feedville Road approach to US 395 is forecast to operate at a v/c of 0.90 which exceeds the 0.75 mobility target. This is a further degradation of the intersection operations compared to the existing land use scenario.
- Similar to the findings under the existing land use scenario, the stop-controlled eastbound Kelli Boulevard approach to the US 395/Kelli Boulevard intersection is forecast to continue to operate over capacity. This is a further degradation of the intersection operations compared to the existing land use scenario.
- As a key study corridor, Feedville Road is a rural unimproved Major Collector roadway. Corridor improvements would be needed to bring the roadway up to urban design standards given the levels of projected traffic growth

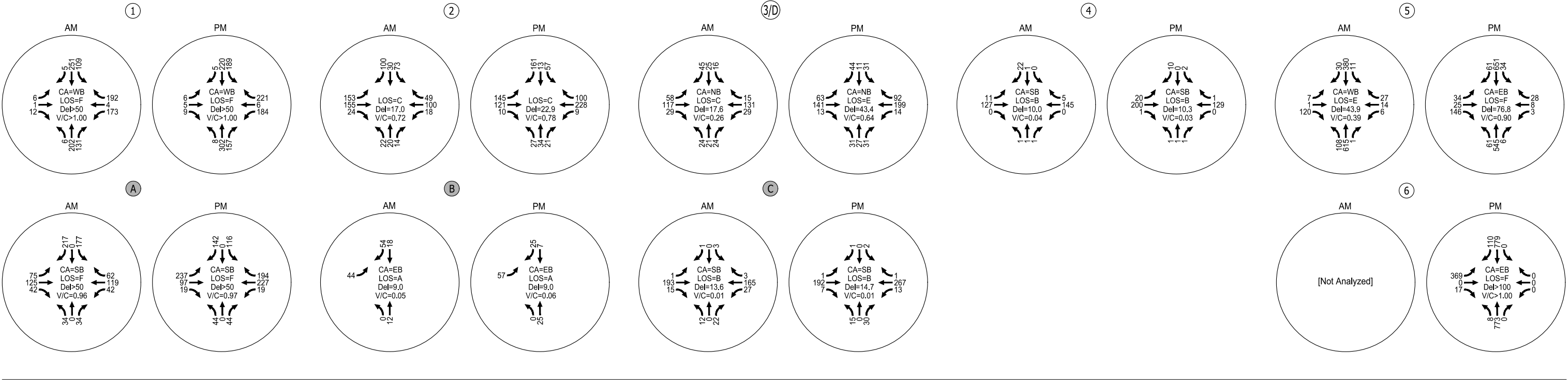
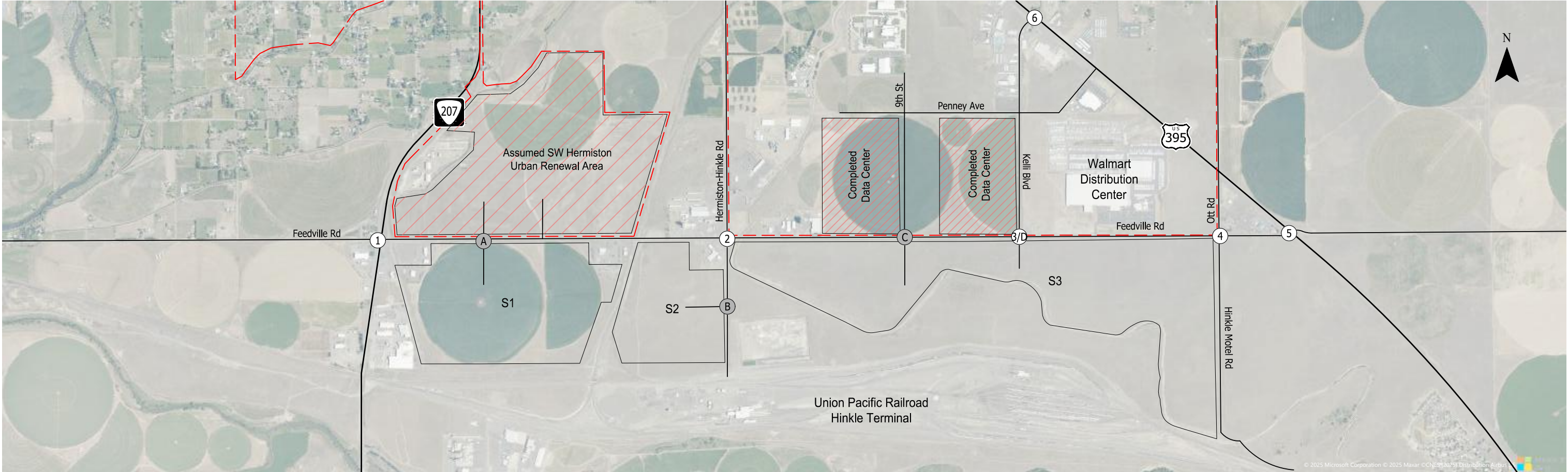


* Trips from S2 are captured in 2045 existing land use traffic conditions (see Figure 3)

- ## - Existing Study Intersections
- Existing Urban Growth Boundary
- ## - Assumed Site Access

2045 UGB Expansion Study Area Generated Trips and Trip Distribution
Weekday AM & PM Peak Hours
Hermiston, Oregon

Figure
4



- Existing Study Intersections
--- Existing Urban Growth Boundary
- Assumed Site Access

CA = Critical Approach
LOS = Level of Service
Del = Intersection Average Control Delay (AWSC) / Intersection Movement Control Delay (TWSC)
V/C = Intersection Volume-to-Capacity Ratio

2045 UGB Expansion Traffic Conditions
Weekday AM & PM Peak Hours
Hermiston, Oregon

Figure
5

OR 207 / FEEDVILLE ROAD INTERSECTION MITIGATION

The OR 207/Feedville Road intersection is forecast to operate over capacity under the existing land use scenario and the proposed UGB Expansion scenario. In recognition that there are no previously planned or adopted improvement projects for the intersection, the following investigations were performed:

- A planning-level signal warrant analysis was conducted at the intersection in accordance with ODOT's preliminary traffic signal warrant analysis procedures. From this analysis, it was found that the intersection is forecast to meet the volume-based planning warrants for a traffic signal primarily due to the use of 70% warrants (major street volume exceeding 40 mph in a rural area).
- Given the high levels of projected delay for the westbound approach, an operations analysis was performed assuming a standard single-lane roundabout. Table 7 presents a summary of the intersection performance, with the following conclusions:
 - A single lane roundabout at the OR 207/Feedville Road intersection will restore the intersection operations to acceptable levels under both the existing land use conditions and the UGB Expansion conditions. While operationally possible, there are right-of-way constraints and a nearby railroad crossing that would need to be accounted for in any potential design and implementation effort. For these reasons, overall intersection improvement costs could fall in the \$3M-\$6M range.
- It is recognized that the OR 207/Feedville Road intersection is located in a predominately rural area with high posted speeds (45-50 mph) along the OR 207 corridor. As such, signalization is not typically considered to be an appropriate form of traffic control under these conditions. Despite this, a signalization mitigation scenario was performed solely for comparison purposes given that it would most likely need to be included in any future intersection control evaluation (ICE) analysis.
 - Signalization⁷ of the OR 207/Feedville Road intersection would restore the intersection operations to acceptable capacity levels under both the existing land use conditions and the UGB Expansion conditions. However, as previously noted, signalization is not typically considered to be an acceptable form of mitigation for rural intersections located on a high-speed corridor like OR 207.

FEEDVILLE ROAD / HERMISTON-HINKLE ROAD MITIGATION

The all-way stop-controlled Feedville Road/Hermiston-Hinkle Road intersection is forecast to operate at LOS C conditions under the proposed UGB Expansion scenario. While this is an acceptable LOS, the single lane approaches on Feedville Road are forecast to result in 150-200' vehicle queues during the peak periods.

In recognition that there are previously identified urban upgrades in the Umatilla County TSP for both Feedville Road and Hermiston-Hinkle Road, improvements were investigated that included widening of the four intersection approaches with include separate left and through/right-turn lanes. These intersection improvements will restore the intersection operations to acceptable LOS standards as summarized in Table 7. While operationally possible, there are potential right-of-way and utility constraints that would need to be accounted for in any intersection widening/modernization effort. For these reasons, intersection improvement costs could fall in the \$1M-\$2M range.

FEEDVILLE ROAD / KELLI BOULEVARD MITIGATION

The critical northbound and southbound approaches at the Feedville Road/Kelli Boulevard intersection are forecast to operate at LOS E conditions. In recognition that there are previously identified urban upgrades in the Umatilla County TSP for Feedville Road, improvements were investigated that included widening of all intersection approaches with separate left and through/right-turn lanes. These intersection improvements will restore the

⁷ Signalization assumes protected-permissive phasing for the northbound and southbound left-turn movements on OR 207 and permissive phasing for east and west Feedville Road approaches. In addition, the signalized intersection operations assume widening on the east and west Feedville Road approaches that include separate left-turn and shared through/right-turn lanes.

intersection operations to acceptable LOS standards as summarized in Table 7. While operationally possible, there are potential right-of-way and utility constraints that would need to be accounted for in any intersection widening/modernization effort. For these reasons, intersection improvement costs could fall in the \$1M-\$2M range.

US 395 / FEEDVILLE ROAD INTERSECTION MITIGATION

The critical eastbound Feedville Road approach to the US 395/Feedville Road intersection is forecast to operate at a v/c of 0.90 which would exceed the 0.75 mobility target under the proposed UGB Expansion scenario. While the Umatilla County and Hermiston TSPs have identified the need for long-term signalization of the intersection, conversations with ODOT have revealed that they are currently investigating a potential near-term implementation of a restricted crossing U-turn (RCUT) mitigation scenario for the US 395/Feedville Road intersection and other upstream intersections along the US 395 corridor. Under this mitigation scenario, the eastbound and westbound left-turn and through movements would be restricted to right-turn only movements via specially designed channelized medians. These restricted left-turn and through movements are then accommodated via a downstream U-turn movement on US 395. Assuming a future implementation of this mitigation treatment, it was found that the critical eastbound Feedville Road approach would operate at an acceptable v/c of 0.35 as summarized in Table 7. Implementation of the RCUT improvements would most likely be completed at the corridor level and involve multiple intersections along the US 395 corridor. According to preliminary estimates provided by ODOT, the cost for the project along the US 395 corridor is approximately \$5M.

US 395 / KELLI BOULEVARD INTERSECTION MITIGATION

The critical eastbound Kelli Boulevard approach to the US 395/Kelli Boulevard intersection is forecast to operate well above capacity under the proposed UGB Expansion scenario. Similar to the US 395/Feedville Road intersection, ODOT is also investigating the potential implantation of an RCUT mitigation scenario for the US 395/Kelli Boulevard intersection. Assuming a future implementation of this mitigation treatment, it was found that the critical eastbound Feedville Road approach would operate at a more acceptable v/c of 0.79 as summarized in Table 7.

FEEDVILLE ROAD UPGRADE

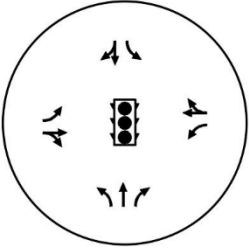
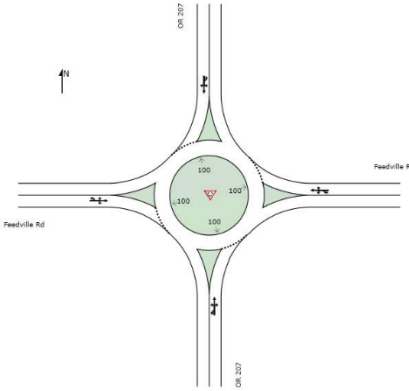
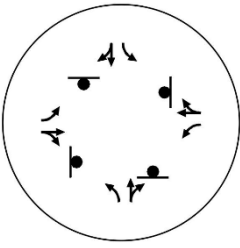
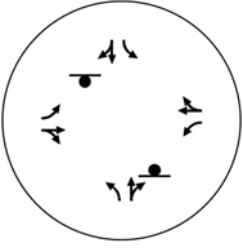
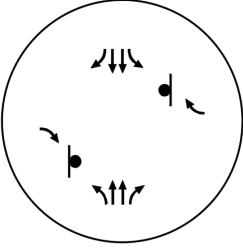
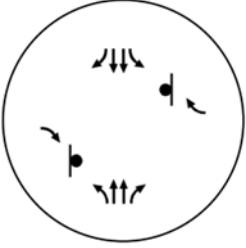
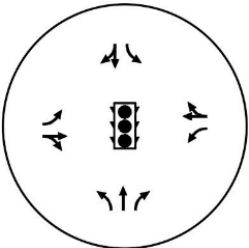
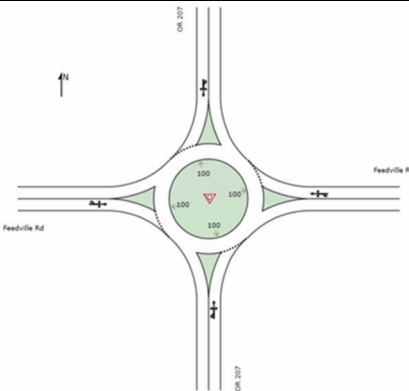
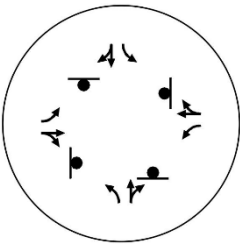
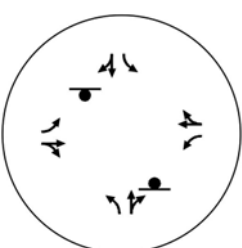
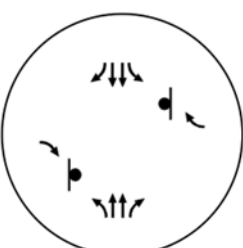
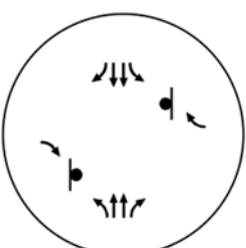
Feedville Road is a rural Umatilla County roadway that currently lacks urban amenities. To address this condition over time, the corridor should be reclassified by the City of Hermiston as an Urban Major Collector. As development occurs, this reclassification will allow for urban upgrades that include turn lanes at intersections, bike lanes, and pedestrian accommodations. Planning level costs for a full urban upgrade would likely be \$27M or more depending upon right-of-way needs and utility conflicts.

UGB Expansion TPR Compliance Recommendations

The UGB expansion analysis identifies the need for additional transportation infrastructure improvements. Consequently, this study recommends the following to comply with the TPR.

- The City of Hermiston and Umatilla County should amend their respective TSPs to include geometric and traffic control improvements (when warranted) at the OR 207/Feedville Road intersection. The final traffic control improvements will require close coordination with, and approval by ODOT.
- The City of Hermiston should amend its TSP to reclassify Feedville Road from OR 207 to US 395 as an Urban Major Collector. Such an upgrade would provide the ability to widen the Feedville Road approaches at the Hermiston-Hinkle and Kelli Road with separate left and shared through/right-turn lanes.
- The City of Hermiston and Umatilla County should amend their respective TSPs to include geometric and turning movement restrictions at the US 395/Feedville Road and US 395/Kelli Boulevard intersections consistent with ODOT planning efforts.

Table 7 – TPR Analysis Intersection Mitigation Operations Findings

2045 Forecast Traffic Conditions Under Existing Land Use Scenario						
	OR 207 / Feedville Road		Feedville Road / Hermiston-Hinkle Road	Feedville Road / Kelli Boulevard	US 395/Feedville Road	US 395/Kelli Boulevard
	(1) Signalized Intersection Option (for comparison)	(2) Conceptual Single Lane Roundabout Option	Intersection Approach Widening	Intersection Approach Widening	Restricted Crossing U-Turn (RCUT)	Restricted Crossing U-Turn (RCUT)
Assumed Lane Geometry/Traffic Control						
Weekday AM Peak Hour Operations	V/C = 0.49 ¹	Critical Approach: Eastbound V/C = 0.47	LOS A	LOS B (SB Approach)	Critical Approach: Eastbound V/C = 0.16	Not analyzed
Weekday PM Peak Hour Operations	V/C = 0.60 ¹	Critical Approach: Northbound V/C = 0.51	LOS B	LOS B (SB Approach)	Critical Approach: Eastbound V/C = 0.28	Critical Approach: Eastbound V/C = 0.67
2045 Forecast Traffic Conditions Under Proposed UGB Expansion Scenario						
	OR 207 / Feedville Road		Feedville Road / Hermiston-Hinkle Road	Feedville Road / Kelli Boulevard	US 395/Feedville Road	US 395/Kelli Boulevard
	(1) Signalized Intersection Option (for comparison)	(2) Conceptual Single Lane Roundabout Option	Intersection Approach Widening	Intersection Approach Widening	Restricted Crossing U-Turn (RCUT)	Restricted Crossing U-Turn (RCUT)
Assumed Lane Geometry/Traffic Control						
Weekday AM Peak Hour Operations	V/C = 0.52 ¹	Critical Approach: Westbound V/C = 0.53	LOS B	LOS C (NB Approach)	Critical Approach: Eastbound V/C = 0.21	Not analyzed
Weekday PM Peak Hour Operations	V/C = 0.63 ¹	Critical Approach: Northbound V/C = 0.53	LOS C	LOS D (NB Approach)	Critical Approach: Eastbound V/C = 0.35	Critical Approach: Eastbound V/C = 0.79

¹ The applicable *Oregon Highway Plan* mobility target is a v/c of 0.75. The applicable *Highway Design Manual* operating standard is a v/c of 0.70

TRANSPORTATION PLANNING RULE COMPLIANCE

OAR Section 660-12-0060 of the TPR sets forth the criteria for evaluating effects of plan and land use regulation amendments on the transportation system. The TPR requires local governments to determine whether a plan or zone change will have a "significant effect" on the transportation system. If a significant effect is identified, then the TPR establishes the means for achieving compliance. The relevant portions of the TPR are reproduced below in italics followed by the response for this project in standard text.

660-12-0060 Plan and Land Use Regulation Amendments

(1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

Response: It has been recommended in this UGB Expansion analysis that the functional classification of Feedville Road be changed to an Urban Minor Collector to better address the needs urban traffic demands expected by future growth in the local region and growth from future data center focused overlay zoning. Therefore, a significant affect occurs as defined in OAR 660-012-0060(1)(a).

(b) Change standards implementing a functional classification system; or

Response: There are no requests to change the standards implementing the functional classification systems identified in the *Hermiston TSP*. Therefore, no significant affect occurs as defined in OAR 660-012-0060(1)(b).

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection. If a local government is evaluating a performance standard based on projected levels of motor vehicle traffic, then the results must be based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Response: The proposed UGB Expansion was found to have a significant effect as described in subsection B because as shown in Table 7, the OR 207/Feedville Road, Feedville Road/Hermiston-Hinkle Road, Feedville Road/Kelli Boulevard, US 395/Feedville Road, and US 395/Kelli Boulevard intersections are projected to degrade below the acceptable mobility targets and/or local performance measures with the proposed UGB Expansion.

(2) If a local government determines that there would be a significant effect, then the local government must ensure that allowed land uses are consistent with the performance standards of the facility measured or projected at the end of the planning period identified in the adopted TSP through one or a combination of the remedies listed in subsections (a) through (e) below, unless the amendment meets the balancing test in subsection (e) or qualifies for partial mitigation in section (11) of this rule. A local government using subsection (e), section (3), section (10) or section (11) to approve an amendment recognizes that additional motor vehicle traffic congestion may result and that other facility providers would not be expected to provide additional capacity for motor vehicles in response to this congestion.

(a) Adopting measures that demonstrate allowed land uses are consistent with the performance standards of the transportation facility.

(b) Amending the TSP or comprehensive plan to provide transportation facilities, improvements, or services adequate to support the proposed land uses consistent with the requirements of this division. Such amendments shall include a funding plan or mechanism consistent with section (4) or include an amendment to the transportation finance plan so that the facility, improvement, or service will be provided by the end of the planning period.

(c) Amending the TSP to modify the performance standards of the transportation facility.

(d) Providing other measures as a condition of development or through a development agreement or similar funding method, including, but not limited to, transportation system management measures or minor transportation improvements. Local governments shall, as part of the amendment, specify when measures or improvements provided pursuant to this subsection will be provided.

Response: Section 2 can be addressed through the plan amendment option summarized under subsection (b). Based on the findings of the analysis in this report, the significant effects of the proposed UGB expansion can be mitigated to less than significant through the identification of new long-term traffic control improvement plans at the OR 207/Feedville Road intersection, corridor upgrades on Feedville Road, and turning movements restrictions at the US 395/Feedville Road and US 395/Kelli Boulevard intersections.

COLLISION TYPE	FATAL CRASHES	NON - FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF - ROAD
FINAL TOTAL														

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054: UMATILLA-STANFIELD

Highway 054 ALL ROAD TYPES, MP 8.78 to 8.88 01/01/2019 to 12/31/2023, Both Add and Non-Add mileage, ALL Crashes Severity, ALL Crashes Circumstance

333: HERMISTON

Highway 333 ALL ROAD TYPES, MP 10.82 to 10.85 01/01/2019 to 12/31/2023, Both Add and Non-Add mileage, ALL Crashes Severity, ALL Crashes Circumstance

333: HERMISTON

Highway 333 ALL ROAD TYPES, MP 10.82 to 10.85 01/01/2019 to 12/31/2023, Both Add and Non-Add mileage, ALL Crashes Severity, ALL Crashes Circumstance

5 - 7

of

7 Crash records shown.

SER#	P	R	J	S	W	DATE	COUNTY	RD#	FC	CONN#	RD	CHAR	INT-TYPE	INT-REL	OFFRD	WTHR	CRASH	SPCL	USE	OWNER	FROM	MOVE	A	S	LICNS	PED	ERROR	ACT	EVENT	CAUSE	
INVEST	E	A	U	I	C	O	CITY	COMPNT	FIRST	STREET	DIRECT	(MEDIAN)	LEGS	TRAF-	RNDBT	SURF	COLL	TRLR	QTY	TO	P#	TYPE	INJ	G	E	RES	LOC				
RD DPT	E	L	G	N	H	R	URBAN AREA	MLG	TYP	SECOND	STREET	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V#	TYPE	TO	P#	TYPE	SVRTY	E	X						
UNLOC?	D	C	S	V	L	K	LONG	MILEPNT	LRS																						
																		02	NONE	1	TURN-L										
																			PRVTE	E -S								000		00	
																			SEMI	TOW		01	DRVR	NONE	48	M	OR-Y		028	000	02
00019	N	N	N	N		01/10/2023	UMATILLA	1	06		INTER	CROSS	N		N	FOG	ANGL-OTH	01	NONE	9	TURN-R								124	10	
COUNTY						TU		MN	0		CN		STOP SIGN	N	N	ICE	TURN		N/A		S -E							006		00	
N						7A		10.82			02	0			N	DAY	PDO		PSNGR	CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N						45 48 22.58	-119 19 11.76			033300100S00																					
																		02	NONE	9	STOP										
																			N/A		E -W							011		00	
																			PSNGR	CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
00621	N	N	N	N	N	07/28/2022	UMATILLA	1	06		STRGHT		Y		N	CLR	S-STRGHT	01	NONE	9	STRGHT								092	07	
STATE						TH		MN	0		UN	(NONE)	UNKNOWN	N	N	DRY	REAR		N/A		S -N							000		00	
N						3P		10.85			04				N	DAY	PDO		PSNGR	CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N						45 48 21.05	-119 19 12.06			033300100S00			(02)																		
																		02	NONE	9	STRGHT										
																			N/A		S -N							006		00	
																			PSNGR	CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

333: HERMISTON Highway 333 ALL ROAD TYPES, MP 10.82 to 10.85 01/01/2019 to 12/31/2023, Both Add and Non-Add mileage, ALL Crashes Severity, ALL Crashes Circumstance

CITY OF HERMISTON, UMATILLA COUNTY

KELLI BLVD at UMATILLA-STANFLD HY, City of Hermiston, Umatilla County, ALL Crashes Severity, ALL Crashes Circumstance, 01/01/2019 to 12/31/2023

1 - 4 of 7 Crash records shown.

SER#	P	R	J	S	W	DATE	CLASS	CITY STREET	RD CHAR	INT-TYPE	INT-REL	OFFRD	WTHR	CRASH	SPCL USE	MOVE	A	S																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													</
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CITY OF HERMISTON, UMATILLA COUNTY

KELLI BLVD at UMATILLA-STANFLD HY, City of Hermiston, Umatilla County, ALL Crashes Severity, ALL Crashes Circumstance, 01/01/2019 to 12/31/2023

CITY OF HERMISTON, UMATILLA COUNTY

KELLI BLVD at UMATILLA-STANFLD HY, City of Hermiston, Umatilla County, ALL Crashes Severity, ALL Crashes Circumstance, 01/01/2019 to 12/31/2023

CITY OF HERMISTON, UMATILLA COUNTY

KELLI BLVD at FEEDVILLE RD, City of Hermiston, Umatilla County, ALL Crashes Severity, ALL Crashes Circumstance, 01/01/2019 to 12/31/2023

Appendix B Traffic Count Summary
Worksheets and Seasonal
Adjustment Factor
Calculations

Seasonal Adjustment

JANUARY TRAFFIC COUNTS

To determine an appropriate seasonal factor for the January counts along OR 207 and US 395, three methodologies were investigated as outlined in ODOT's Analysis Procedures Manual: On-Site ATR (Automatic Traffic Recorder) Method, ATR Characteristics Table Method, ATR Seasonal Trend Method.

ON-SITE ATR METHOD

The On-Site ATR Method is used when an Automatic Traffic Recorder (ATR) is within or near the project area. The closest ATR station is ATR #30-019 which is located on US 395 just north of the Feedville Road. Given this proximity, a seasonal factor was calculated the ATR station for comparison purposes to the other methodologies described herein. A January-based seasonal adjustment factor using this ATR station is shown in Table A. The resulting season factor was an adjustment factor of 1.19.

Table A Seasonal Adjustment Calculations for ATR 30-019

	2023	2022	2021	2019	2018	Avg.
ATR 30-009						
Count Month (January)	93	89	91	88	89	89.7
Peak Month (August)	107	106	108	108	107	107.3

■ The seasonal adjustment factor for March is $107.3\%/89.7\% = 1.19$ for count month of January

Appendix D

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

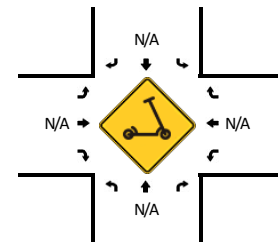
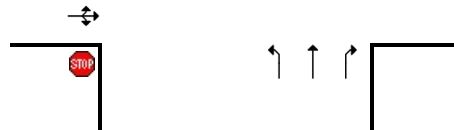
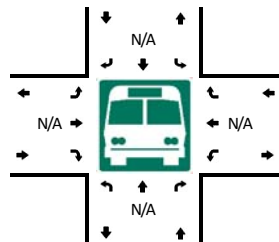
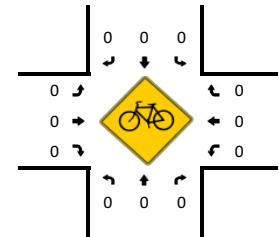
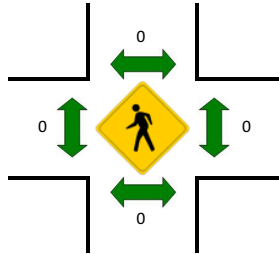
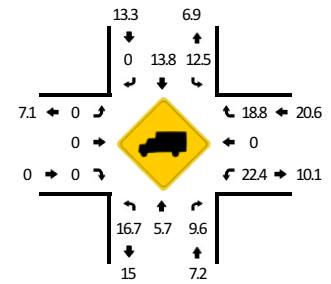
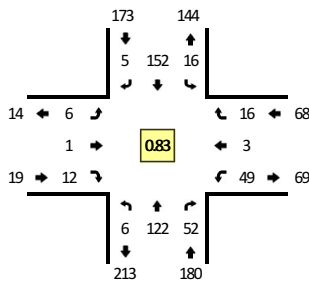
LOCATION: SR 207 -- Feedville Rd

CITY/STATE: Umatilla, OR

QC JOB #: 16883201

DATE: Tue, Jan 14 2025

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:35 AM -- 7:50 AM



5-Min Count Period Beginning At	SR 207 (Northbound)				SR 207 (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	5	5	0	2	16	2	0	1	1	2	0	1	1	4	0	41	
7:05 AM	0	5	2	0	2	14	0	0	0	1	1	0	2	0	2	0	29	
7:10 AM	3	8	3	0	1	10	2	0	0	0	0	0	2	0	0	0	29	
7:15 AM	1	5	3	0	3	8	4	0	0	1	1	0	3	1	1	0	31	
7:20 AM	0	5	2	0	2	17	1	0	0	0	4	0	4	1	1	0	37	
7:25 AM	0	9	3	0	1	13	0	0	0	0	1	0	3	0	0	0	30	
7:30 AM	0	13	3	0	2	16	1	0	1	1	2	0	2	0	0	0	41	
7:35 AM	2	9	4	0	0	16	0	0	1	0	0	0	6	0	2	0	40	
7:40 AM	1	13	7	0	5	11	0	0	0	0	2	0	1	0	1	0	41	
7:45 AM	0	13	8	0	0	15	0	0	2	0	1	0	8	1	3	0	51	
7:50 AM	0	13	4	0	1	6	0	0	1	0	0	0	5	0	4	0	34	
7:55 AM	0	12	6	0	0	16	0	0	1	0	0	0	3	0	0	0	38	442
8:00 AM	0	9	4	0	3	8	1	0	0	0	1	0	2	0	1	0	29	430
8:05 AM	1	7	3	0	1	13	1	0	0	0	1	0	1	0	1	0	29	430
8:10 AM	2	13	3	0	1	7	1	0	0	0	0	0	9	0	3	0	39	440
8:15 AM	0	6	5	0	0	14	0	0	0	0	0	0	5	1	0	0	31	440
8:20 AM	0	8	4	0	0	9	1	0	0	1	0	0	6	0	0	0	29	432
8:25 AM	1	9	4	0	1	4	0	0	0	0	0	0	2	1	2	0	24	426
8:30 AM	1	10	3	0	10	14	0	0	0	0	1	0	2	0	0	0	41	426
8:35 AM	0	8	9	0	1	13	0	0	0	0	1	0	3	0	2	0	37	423
8:40 AM	1	12	2	0	3	5	0	0	0	0	1	0	7	0	2	0	33	415
8:45 AM	0	10	2	0	1	9	1	0	1	0	0	0	2	1	0	0	27	391
8:50 AM	0	8	4	0	2	8	0	0	1	0	0	0	3	0	1	0	27	384
8:55 AM	0	11	2	0	1	5	2	0	1	0	0	0	1	0	1	0	24	370
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	12	140	76	0	20	168	0	0	12	0	12	0	60	4	24	0	528	
Heavy Trucks	4	16	4		4	8	0		0	0	0		24	0	8		68	
Buses																		
Pedestrians	0	0			0	0			0	0			0	0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

Report generated on 7/3/2025 11:19 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix D

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

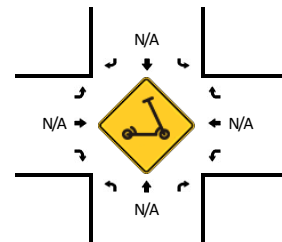
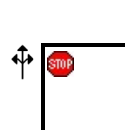
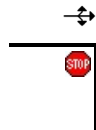
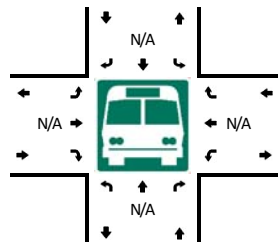
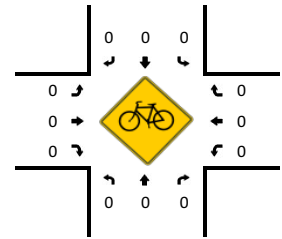
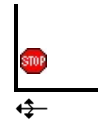
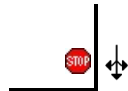
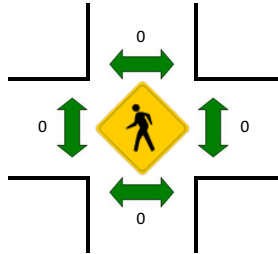
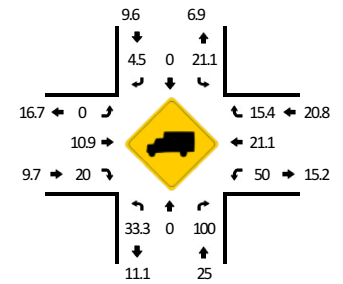
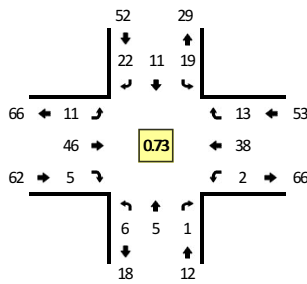
LOCATION: Hermiston-Hinkle Rd -- Feedville Rd

QC JOB #: 16883203

CITY/STATE: Umatilla, OR

DATE: Tue, Jan 14 2025

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:40 AM -- 7:55 AM



5-Min Count Period Beginning At	Hermiston-Hinkle Rd (Northbound)				Hermiston-Hinkle Rd (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	1	0	0	3	1	1	0	2	5	2	0	0	4	1	0	22	
7:05 AM	0	0	0	0	2	0	2	0	0	1	1	0	0	0	2	0	10	
7:10 AM	1	2	0	0	0	1	2	0	0	1	0	0	0	0	3	0	10	
7:15 AM	1	1	0	0	0	0	2	0	0	2	1	0	0	0	4	0	11	
7:20 AM	0	1	0	0	2	1	1	0	1	5	0	0	0	3	0	0	14	
7:25 AM	0	0	0	0	4	1	1	0	2	1	0	0	0	3	0	0	12	
7:30 AM	0	0	0	0	2	0	0	0	1	3	0	0	0	6	0	0	12	
7:35 AM	2	1	0	0	0	0	1	0	1	1	0	0	0	2	2	0	10	
7:40 AM	1	0	1	0	2	3	2	0	0	0	0	0	1	3	3	0	16	
7:45 AM	0	0	0	0	1	1	4	0	0	15	3	0	0	5	1	0	30	
7:50 AM	0	2	0	0	0	1	3	0	1	4	1	0	0	3	0	0	15	
7:55 AM	0	0	0	0	1	0	2	0	0	4	0	0	0	0	2	0	9	171
8:00 AM	0	0	0	0	2	1	2	0	3	7	1	0	0	0	2	0	18	167
8:05 AM	0	1	0	0	1	1	1	0	0	2	0	0	0	5	2	0	13	170
8:10 AM	2	0	0	0	2	2	1	0	1	2	0	0	0	4	0	0	14	174
8:15 AM	1	0	0	0	2	0	4	0	1	2	0	0	1	4	1	0	16	179
8:20 AM	0	2	0	0	1	0	1	0	2	5	0	0	1	2	0	0	14	179
8:25 AM	0	0	0	0	1	0	0	0	1	3	1	0	1	3	0	0	10	177
8:30 AM	0	0	0	0	2	0	0	0	0	12	0	0	1	3	0	0	18	183
8:35 AM	0	1	0	0	2	1	5	0	5	4	0	0	0	1	1	0	20	193
8:40 AM	0	2	0	0	1	1	3	0	2	3	0	0	0	7	0	0	19	196
8:45 AM	0	1	0	0	1	1	2	0	1	4	0	0	0	1	1	0	12	178
8:50 AM	0	1	0	0	1	2	0	0	1	3	0	0	0	3	1	0	12	175
8:55 AM	0	0	1	0	1	0	2	0	0	3	0	0	0	1	0	0	8	174
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	8	4	0	12	20	36	0	4	76	16	0	4	44	16	0	244	
Heavy Trucks	4	0	4		0	0	0		0	4	4		0	12	4		32	
Buses																		
Pedestrians	0	0			0				0				0				0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scooters																		

Comments:

Report generated on 7/3/2025 11:19 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix D

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

LOCATION: SE Kelli Blvd -- Feedville Rd

CITY/STATE: Hermiston, OR

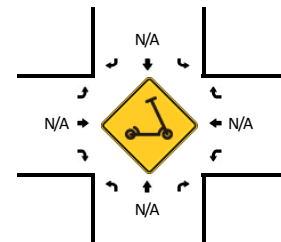
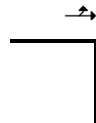
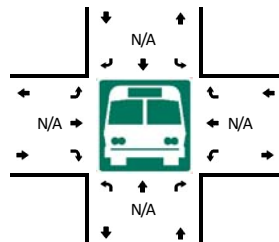
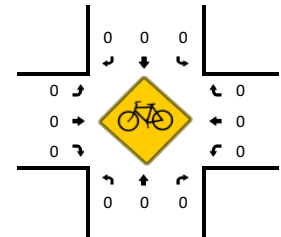
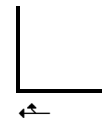
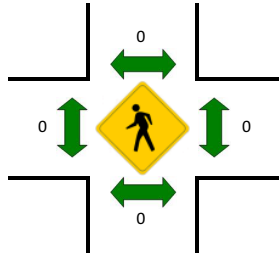
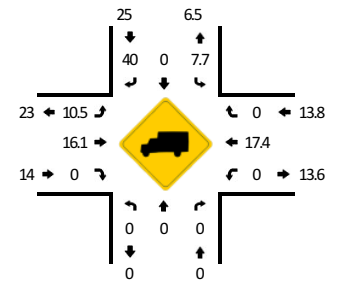
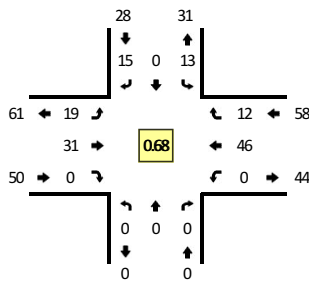
QC JOB #: 16883205

DATE: Tue, Jan 14 2025

Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:35 AM -- 7:50 AM



TRUE DATA TO IMPROVE MOBILITY



5-Min Count Period Beginning At	SE Kelli Blvd (Northbound)				SE Kelli Blvd (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	6	0	1	0	1	2	0	0	0	3	2	0	15	
7:05 AM	0	0	0	0	6	0	1	0	1	1	0	0	0	0	5	1	15	
7:10 AM	0	0	0	0	1	0	2	0	1	0	0	0	0	0	6	1	11	
7:15 AM	0	0	0	0	2	0	1	0	0	0	0	0	0	0	2	1	6	
7:20 AM	0	0	0	0	1	0	3	0	3	4	0	0	0	0	1	2	14	
7:25 AM	0	0	0	0	2	0	0	0	0	4	0	0	0	0	1	1	8	
7:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	7	0	9	
7:35 AM	0	0	0	0	0	0	1	0	1	5	0	0	0	0	7	0	14	
7:40 AM	0	0	0	0	1	0	1	0	1	2	0	0	0	0	10	0	15	
7:45 AM	0	0	0	0	1	0	3	0	5	3	0	0	0	0	7	2	21	
7:50 AM	0	0	0	0	5	0	1	0	1	2	0	0	0	0	2	1	12	
7:55 AM	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	142
8:00 AM	0	0	0	0	2	0	1	0	2	6	0	0	0	0	4	1	16	143
8:05 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	3	8	136
8:10 AM	0	0	0	0	0	0	2	0	1	2	0	0	0	0	3	2	10	135
8:15 AM	0	0	0	0	0	0	2	0	3	1	0	0	0	0	1	0	7	136
8:20 AM	0	0	0	0	1	0	1	0	3	0	0	0	0	0	3	0	8	130
8:25 AM	0	0	0	0	2	0	0	0	4	1	0	0	0	0	3	3	13	135
8:30 AM	0	0	0	0	0	0	3	0	1	2	0	0	0	0	1	1	8	134
8:35 AM	0	0	0	0	1	0	1	0	0	1	0	0	0	0	2	0	5	125
8:40 AM	0	0	0	0	1	0	2	0	2	0	0	0	0	0	2	2	9	119
8:45 AM	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	4	102
8:50 AM	0	0	0	0	1	0	1	0	2	2	0	0	0	0	3	1	10	100
8:55 AM	0	0	0	0	2	0	0	0	3	1	0	0	0	0	1	0	7	105
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	8	0	20	0	28	40	0	0	0	96	8	0	200	
Heavy Trucks	0	0	0	0	0	0	12	0	0	8	0	0	0	8	0	0	28	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scooters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

Report generated on 7/3/2025 11:19 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

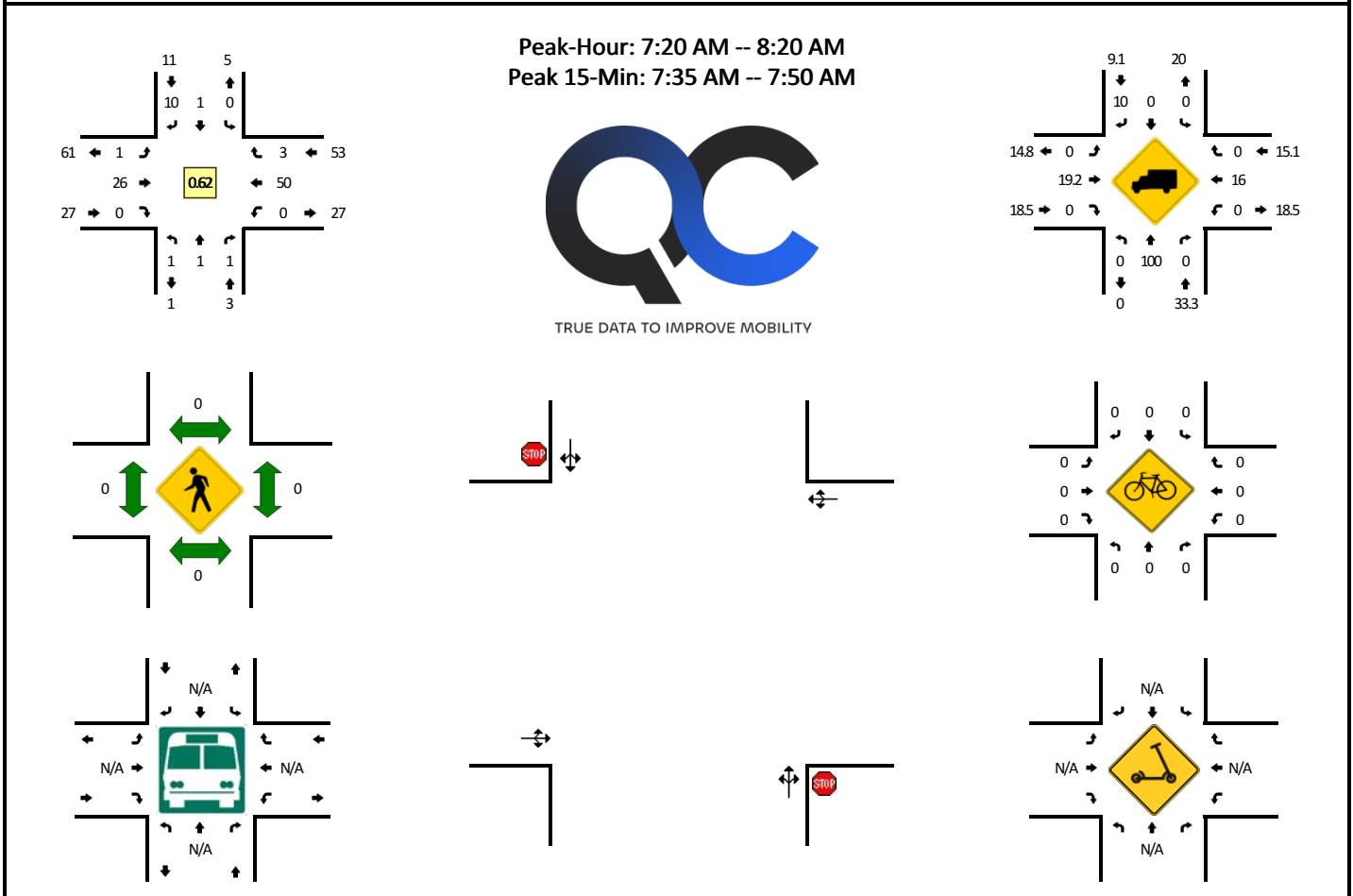
Appendix D

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

LOCATION: S Ott Rd/Hinkle Motel Rd -- Feedville Rd
CITY/STATE: Umatilla, OR

QC JOB #: 16883207
DATE: Tue, Jan 14 2025



5-Min Count Period Beginning At	S Ott Rd/Hinkle Motel Rd (Northbound)				S Ott Rd/Hinkle Motel Rd (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	2	0	0	3	0	0	0	6	0	0	11	
7:05 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	5	0	0	7	
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	7	0	0	9	
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	4	
7:20 AM	0	0	0	0	0	1	0	0	0	4	0	0	0	3	0	0	8	
7:25 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	
7:30 AM	0	0	0	0	0	0	5	0	0	1	0	0	0	5	0	0	11	
7:35 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	6	1	0	10	
7:40 AM	0	0	0	0	0	0	2	0	0	3	0	0	0	11	0	0	16	
7:45 AM	0	0	0	0	0	0	2	0	0	3	0	0	0	7	0	0	12	
7:50 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	3	1	0	7	
7:55 AM	0	1	1	0	0	0	0	0	0	2	0	0	0	2	0	0	6	104
8:00 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	1	0	7	100
8:05 AM	1	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	7	100
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	93
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	5	94
8:20 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3	89
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	89
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	81
8:35 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4	75
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	61
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	4	53
8:50 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	4	0	0	7	53
8:55 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	1	0	0	4	51
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	16	0	0	36	0	0	0	96	4	0	152	
Heavy Trucks	0	0	0	0	0	0	4	0	0	8	0	0	0	8	0	0	20	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scooters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

Report generated on 7/3/2025 11:19 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix D

Type of peak hour being reported: User-Defined

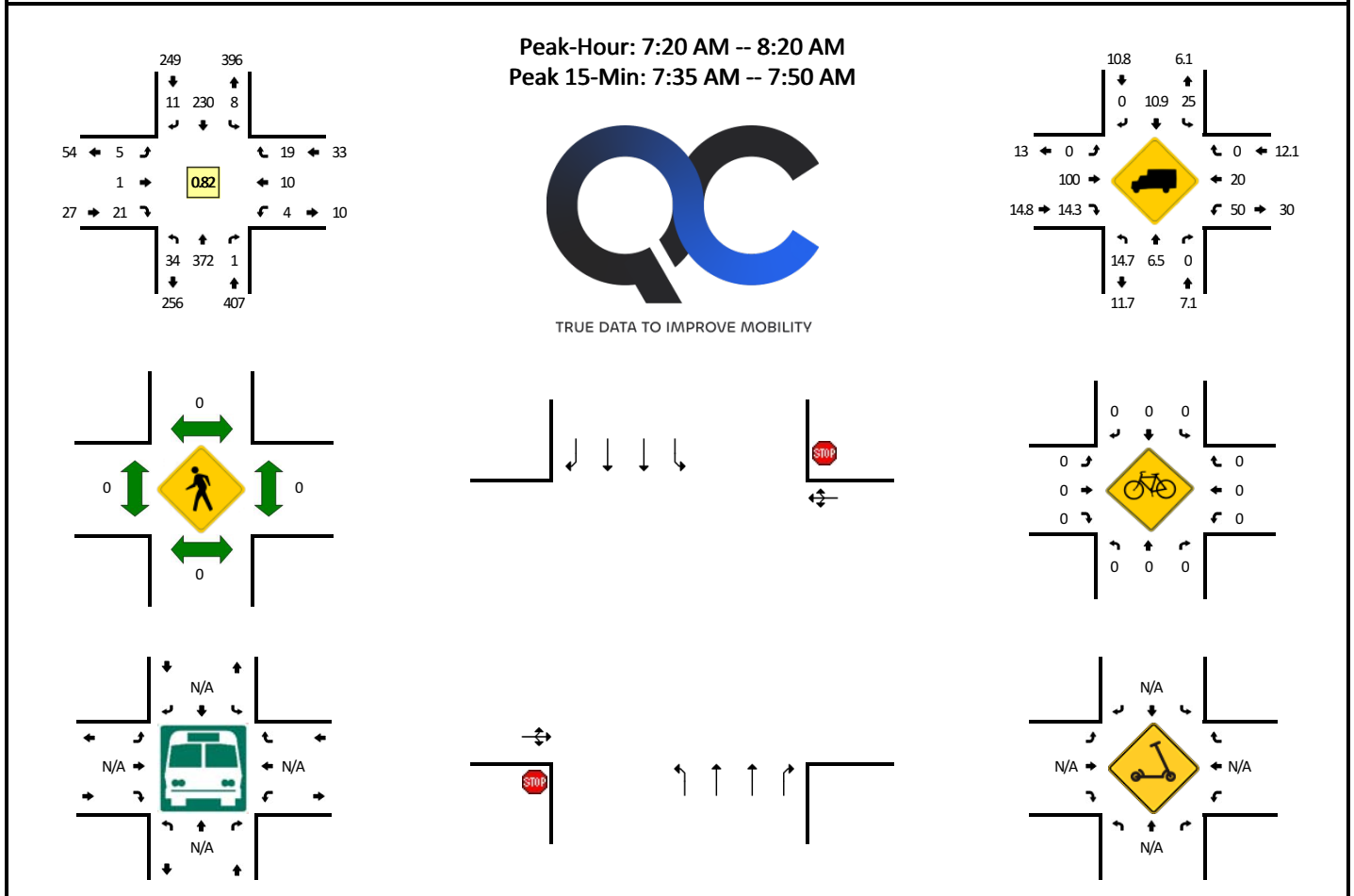
Method for determining peak hour: Total Entering Volume

LOCATION: US 395 -- Feedville Rd

CITY/STATE: Umatilla, OR

QC JOB #: 16883209

DATE: Tue, Jan 14 2025



5-Min Count Period Beginning At	US 395 (Northbound)				US 395 (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	3	12	0	0	0	17	3	0	1	1	4	0	0	1	1	0	43	
7:05 AM	4	14	1	0	0	12	2	0	1	0	0	0	1	3	1	0	39	
7:10 AM	2	25	0	0	0	23	2	0	0	0	0	0	0	5	2	0	59	
7:15 AM	1	18	1	0	0	18	2	0	0	0	0	0	0	1	2	0	43	
7:20 AM	1	20	0	0	0	36	1	0	0	0	3	0	0	1	1	0	63	
7:25 AM	2	23	0	0	0	24	0	0	0	0	1	0	2	1	1	0	54	
7:30 AM	1	26	0	0	3	26	0	0	0	0	2	0	0	2	1	0	61	
7:35 AM	4	35	0	0	1	17	3	0	0	0	3	0	0	2	4	0	69	
7:40 AM	8	41	0	0	0	26	2	0	0	0	3	0	1	1	0	0	82	
7:45 AM	5	41	0	0	1	16	0	0	0	0	3	0	0	1	0	0	67	
7:50 AM	3	37	1	0	0	15	1	0	0	0	2	0	0	0	5	0	64	700
7:55 AM	0	34	0	0	2	16	2	0	1	0	0	0	1	0	0	0	56	706
8:00 AM	2	28	0	1	0	10	1	0	2	1	3	0	0	0	1	0	49	725
8:05 AM	2	33	0	0	1	16	0	0	2	0	1	0	0	2	1	0	58	705
8:10 AM	3	20	0	0	0	14	0	0	0	0	0	0	0	0	2	0	39	716
8:15 AM	2	34	0	0	0	14	1	0	0	0	0	0	0	0	3	0	54	
8:20 AM	2	19	0	0	3	16	1	0	1	0	0	0	0	2	1	0	45	698
8:25 AM	0	15	0	0	1	20	1	0	0	0	0	0	1	0	1	0	39	683
8:30 AM	1	16	0	0	3	12	0	0	0	1	1	0	0	0	1	0	35	657
8:35 AM	1	14	0	0	0	15	1	0	0	0	1	0	0	1	1	0	34	622
8:40 AM	0	28	0	0	1	19	1	0	0	0	0	0	0	0	1	0	50	590
8:45 AM	2	16	0	0	3	5	1	0	1	0	0	0	0	0	3	0	31	554
8:50 AM	4	14	0	0	3	19	1	0	0	0	2	0	0	0	2	0	45	535
8:55 AM	0	25	1	0	0	19	0	0	0	1	1	0	0	0	1	0	48	527
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	68	468	0	0	8	236	20	0	0	0	36	0	4	16	16	0	872	
Heavy Trucks	4	16	0	0	4	16	0	0	0	0	8	0	4	4	0	0	56	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scooters																		

Comments:

Report generated on 7/3/2025 11:19 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix D

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

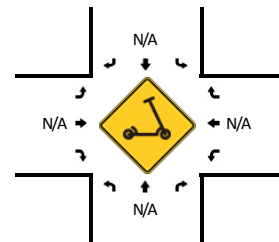
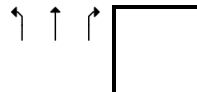
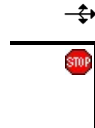
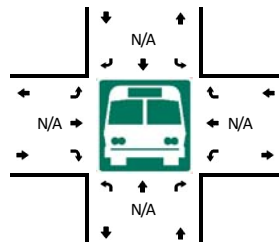
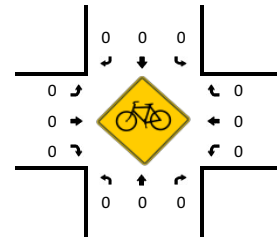
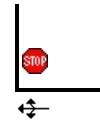
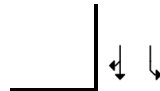
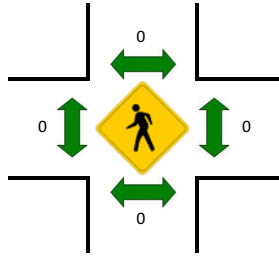
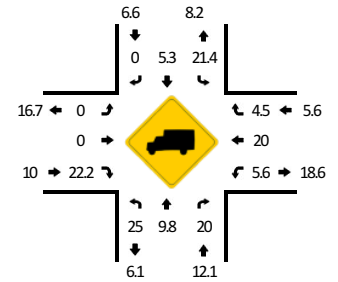
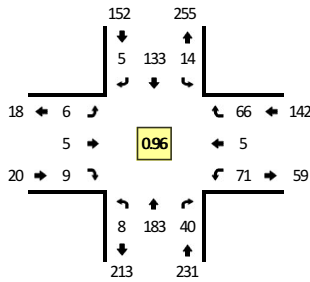
LOCATION: SR 207 -- Feedville Rd

CITY/STATE: Umatilla, OR

QC JOB #: 16883202

DATE: Tue, Jan 14 2025

Peak-Hour: 3:25 PM -- 4:25 PM
Peak 15-Min: 3:40 PM -- 3:55 PM



5-Min Count Period Beginning At	SR 207 (Northbound)				SR 207 (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	11	2	0	1	13	0	0	0	0	0	0	3	0	3	0	33	
3:05 PM	0	18	6	0	2	14	0	0	1	0	0	0	3	0	2	0	46	
3:10 PM	0	11	2	0	4	15	0	0	0	0	0	0	2	0	0	0	34	
3:15 PM	0	16	4	0	3	10	0	0	0	0	0	0	2	0	2	0	37	
3:20 PM	1	14	6	0	2	14	0	0	0	0	0	0	8	0	3	0	48	
3:25 PM	0	15	6	0	1	14	1	0	1	1	0	0	3	0	5	0	47	
3:30 PM	0	14	2	0	0	6	0	0	0	0	1	0	9	2	5	0	39	
3:35 PM	1	13	4	0	0	13	0	0	0	0	0	0	6	0	11	0	48	
3:40 PM	0	20	4	0	0	8	0	0	0	0	0	0	8	0	10	0	50	
3:45 PM	1	10	2	0	1	16	1	0	0	0	0	0	5	0	6	0	42	
3:50 PM	1	19	0	0	4	11	1	0	0	0	2	0	5	1	6	0	50	
3:55 PM	1	25	3	0	0	10	1	0	0	0	0	0	3	0	3	0	46	520
4:00 PM	1	8	1	0	0	13	0	0	1	1	2	0	4	0	2	0	33	520
4:05 PM	2	21	1	0	3	17	0	0	1	2	1	0	4	1	7	0	60	534
4:10 PM	0	12	8	0	1	9	1	0	1	0	1	0	6	1	5	0	45	545
4:15 PM	1	10	4	0	3	7	0	0	2	1	2	0	5	0	2	0	37	545
4:20 PM	0	16	5	0	1	9	0	0	0	0	0	0	13	0	4	0	48	545
4:25 PM	1	18	4	0	0	13	0	0	0	0	0	0	11	2	6	0	55	553
4:30 PM	1	25	4	0	0	3	1	0	2	1	1	0	16	0	4	0	58	572
4:35 PM	2	22	5	0	1	11	0	0	0	0	0	0	9	1	1	0	52	576
4:40 PM	1	25	6	0	1	14	1	0	0	1	1	0	8	3	3	0	64	590
4:45 PM	1	14	2	0	0	13	1	0	0	3	1	0	2	0	2	0	39	587
4:50 PM	0	20	2	0	1	11	1	0	0	0	0	0	6	1	2	0	44	581
4:55 PM	0	14	2	0	1	8	1	0	1	0	0	0	2	0	5	0	34	569
5:00 PM	5	19	1	0	1	11	1	0	0	0	0	0	7	0	1	0	46	582
5:05 PM	1	17	1	0	1	10	0	0	0	0	2	0	7	1	1	0	41	563
5:10 PM	0	12	1	0	0	14	2	0	2	0	0	0	3	0	1	0	35	553
5:15 PM	0	16	1	0	1	13	0	0	0	0	0	0	3	0	0	0	34	550
5:20 PM	0	23	2	0	1	10	0	0	1	0	1	0	6	1	2	0	47	549
5:25 PM	0	21	5	0	0	11	1	0	1	0	0	0	1	0	1	0	41	535
5:30 PM	1	21	4	0	2	10	2	0	1	1	1	0	3	0	2	0	48	525
5:35 PM	1	10	3	0	2	8	0	0	3	0	1	0	6	0	0	0	34	507
5:40 PM	0	22	1	0	1	11	1	0	0	0	0	0	2	0	5	0	43	486
5:45 PM	0	22	4	0	1	10	0	0	0	1	0	0	1	0	0	0	39	486
5:50 PM	1	8	1	0	1	8	2	0	1	0	0	0	1	0	4	0	27	469
5:55 PM	4	6	3	0	1	10	0	0	0	0	0	0	3	0	0	0	27	462

Appendix D

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	196	24	0	20	140	8	0	0	0	8	0	72	4	88	0	568
Heavy Trucks	0	20	0		4	4	0		0	0	4		0	4	0		36
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 7/3/2025 11:22 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix D

Type of peak hour being reported: User-Defined

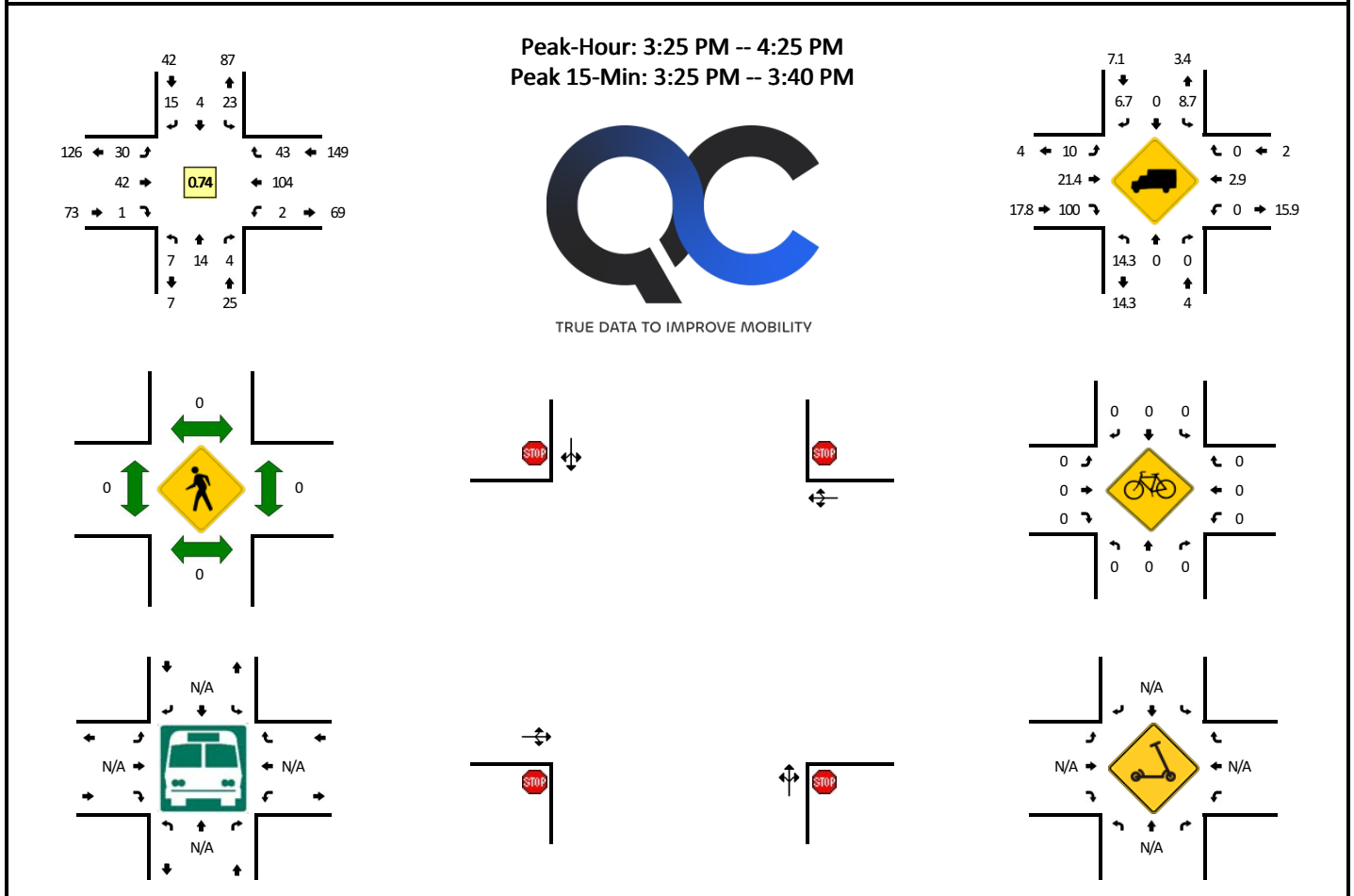
Method for determining peak hour: Total Entering Volume

LOCATION: Hermiston-Hinkle Rd -- Feedville Rd

QC JOB #: 16883204

CITY/STATE: Umatilla, OR

DATE: Tue, Jan 14 2025



5-Min Count Period Beginning At	Hermiston-Hinkle Rd (Northbound)				Hermiston-Hinkle Rd (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	1	7	0	0	5	1	0	0	2	3	0	0	1	1	2	0	23	
3:05 PM	0	1	1	0	2	2	0	0	2	5	0	0	0	3	3	0	19	
3:10 PM	0	1	0	0	5	0	3	0	2	6	1	0	0	1	1	0	20	
3:15 PM	0	2	0	0	2	0	1	0	2	6	0	0	0	3	2	0	18	
3:20 PM	0	3	0	0	2	0	4	0	1	4	0	0	1	8	2	0	25	
3:25 PM	2	2	0	0	7	1	0	0	4	5	0	0	1	6	4	0	32	
3:30 PM	2	1	2	0	1	0	4	0	2	4	0	0	0	9	8	0	33	
3:35 PM	0	1	0	0	1	0	2	0	2	3	1	0	0	17	5	0	32	
3:40 PM	0	3	0	0	2	1	1	0	1	2	0	0	0	10	9	0	29	
3:45 PM	0	0	0	0	1	0	0	0	1	4	0	0	0	9	2	0	17	
3:50 PM	2	2	0	0	2	0	0	0	0	4	0	0	0	10	4	0	24	
3:55 PM	1	1	0	0	4	0	2	0	0	2	0	0	0	4	1	0	15	287
4:00 PM	0	2	0	0	2	0	0	0	1	0	0	0	0	3	1	0	9	273
4:05 PM	0	0	0	0	1	0	1	0	7	3	0	0	0	9	2	0	23	277
4:10 PM	0	1	0	0	0	1	0	0	5	4	0	0	0	8	5	0	24	281
4:15 PM	0	1	0	0	1	0	2	0	4	5	0	0	0	6	0	0	19	282
4:20 PM	0	0	2	0	1	1	3	0	3	6	0	0	1	13	2	0	32	289
4:25 PM	0	1	0	0	3	0	1	0	2	2	1	0	0	14	2	0	26	283
4:30 PM	0	2	1	0	0	0	2	0	3	3	0	0	0	8	2	0	21	271
4:35 PM	0	0	0	0	1	0	2	0	2	6	0	0	0	14	5	0	30	269
4:40 PM	0	1	0	0	0	0	1	0	6	2	0	0	0	6	4	0	20	260
4:45 PM	0	0	0	0	2	0	2	0	3	4	0	0	0	3	4	0	18	261
4:50 PM	1	0	1	0	0	1	3	0	3	2	0	0	0	6	2	0	19	256
4:55 PM	0	0	0	0	1	0	1	0	1	1	0	0	0	6	1	0	11	252
5:00 PM	1	0	0	0	3	0	2	0	1	2	0	0	0	3	3	0	15	258
5:05 PM	0	1	0	0	1	0	2	0	1	3	0	0	0	6	2	0	16	251
5:10 PM	0	0	0	0	1	0	2	0	1	0	0	0	0	2	3	0	9	236
5:15 PM	1	0	1	0	2	0	2	0	0	2	0	0	0	0	1	0	9	226
5:20 PM	0	0	0	0	2	0	2	0	1	3	0	0	0	4	0	0	12	206
5:25 PM	0	0	0	0	1	0	0	0	1	2	0	0	0	1	0	0	5	185
5:30 PM	0	1	0	0	3	0	1	0	5	4	1	0	0	5	2	0	22	186
5:35 PM	0	0	0	0	0	0	5	0	1	4	1	0	0	2	2	0	15	171
5:40 PM	0	0	0	0	0	3	0	0	0	3	0	0	0	1	0	0	7	158
5:45 PM	0	1	0	0	0	1	0	0	2	0	0	0	0	0	1	0	5	145
5:50 PM	0	0	0	0	0	0	2	0	2	4	1	0	1	2	2	0	14	140
5:55 PM	0	0	0	0	0	0	1	0	0	2	0	0	0	0	2	0	5	134

Appendix D

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	16	16	8	0	36	4	24	0	32	48	4	0	4	128	68	0	388
Heavy Trucks	0	0	0		4	0	0		4	12	4		0	8	0		32
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	
<i>Comments:</i>																	

Report generated on 7/3/2025 11:22 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix D

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

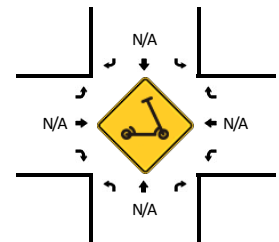
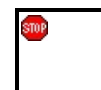
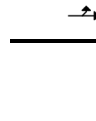
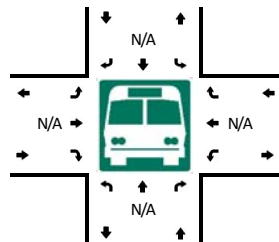
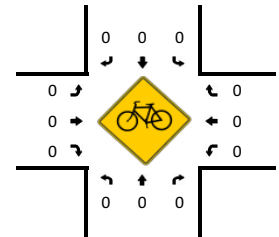
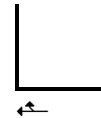
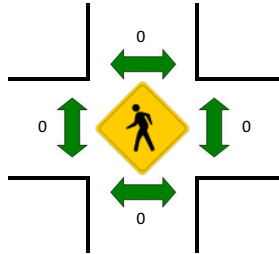
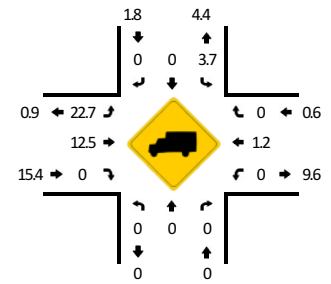
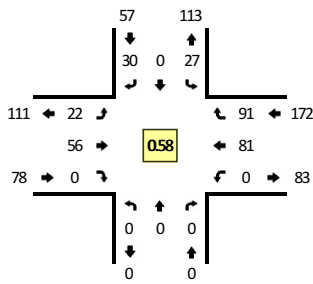
LOCATION: SE Kelli Blvd -- Feedville Rd

QC JOB #: 16883206

CITY/STATE: Hermiston, OR

DATE: Tue, Jan 14 2025

Peak-Hour: 3:25 PM -- 4:25 PM
Peak 15-Min: 3:25 PM -- 3:40 PM



5-Min Count Period Beginning At	SE Kelli Blvd (Northbound)				SE Kelli Blvd (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	0	0	0	4	0	1	0	0	8	0	0	0	2	6	0	21	
3:05 PM	0	0	0	0	7	0	0	0	3	6	0	0	0	2	5	0	23	
3:10 PM	0	0	0	0	8	0	1	0	1	6	0	0	0	1	3	0	20	
3:15 PM	0	0	0	0	15	0	1	0	0	8	0	0	0	4	5	0	33	
3:20 PM	0	0	0	0	10	0	1	0	2	4	0	0	0	6	5	0	28	
3:25 PM	0	0	0	0	13	0	1	0	3	7	0	0	0	10	7	0	41	
3:30 PM	0	0	0	0	5	0	1	0	2	8	0	0	0	14	19	0	49	
3:35 PM	0	0	0	0	3	0	3	0	1	3	0	0	0	17	16	0	43	
3:40 PM	0	0	0	0	1	0	2	0	1	5	0	0	0	12	19	0	40	
3:45 PM	0	0	0	0	1	0	0	0	3	4	0	0	0	10	9	0	27	
3:50 PM	0	0	0	0	0	0	2	0	2	4	0	0	0	4	4	0	16	
3:55 PM	0	0	0	0	0	0	1	0	0	4	0	0	0	2	3	0	10	351
4:00 PM	0	0	0	0	0	0	1	0	2	4	0	0	0	2	2	0	11	341
4:05 PM	0	0	0	0	1	0	3	0	2	5	0	0	0	4	1	0	16	334
4:10 PM	0	0	0	0	1	0	1	0	0	2	0	0	0	3	1	0	8	322
4:15 PM	0	0	0	0	1	0	5	0	3	4	0	0	0	1	8	0	22	311
4:20 PM	0	0	0	0	1	0	10	0	3	6	0	0	0	2	2	0	24	307
4:25 PM	0	0	0	0	1	0	2	0	4	5	0	0	0	2	4	0	18	284
4:30 PM	0	0	0	0	1	0	1	0	1	3	0	0	0	6	1	0	13	248
4:35 PM	0	0	0	0	1	0	3	0	3	8	0	0	0	6	9	0	30	235
4:40 PM	0	0	0	0	0	0	0	0	5	1	0	0	0	5	1	0	12	207
4:45 PM	0	0	0	0	0	0	2	0	2	2	0	0	0	3	2	0	11	191
4:50 PM	0	0	0	0	1	0	0	0	1	2	0	0	0	5	0	0	9	184
4:55 PM	0	0	0	0	0	0	1	0	0	2	0	0	0	3	13	0	19	193
5:00 PM	0	0	0	0	0	0	1	0	2	1	0	0	0	4	5	0	13	195
5:05 PM	0	0	0	0	3	0	3	0	1	2	0	0	0	2	4	0	15	194
5:10 PM	0	0	0	0	0	0	0	0	1	3	0	0	0	2	2	0	8	194
5:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	1	0	8	180
5:20 PM	0	0	0	0	0	0	1	0	3	5	0	0	0	1	3	0	13	169
5:25 PM	0	0	0	0	2	0	0	0	1	2	0	0	0	2	3	0	10	161
5:30 PM	0	0	0	0	2	0	0	0	4	1	0	0	0	4	3	0	14	162
5:35 PM	0	0	0	0	2	0	0	0	1	2	0	0	0	3	0	0	8	140
5:40 PM	0	0	0	0	1	0	1	0	2	2	0	0	0	0	1	0	7	135
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	4	0	9	133
5:50 PM	0	0	0	0	1	0	0	0	1	3	0	0	0	3	5	0	13	137
5:55 PM	0	0	0	0	1	0	0	0	1	0	0	0	0	2	2	0	6	124

Appendix D

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	84	0	20	0	24	72	0	0	0	164	168	0	532
Heavy Trucks	0	0	0		4	0	0		4	16	0		0	4	0		28
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 7/3/2025 11:22 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix D

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

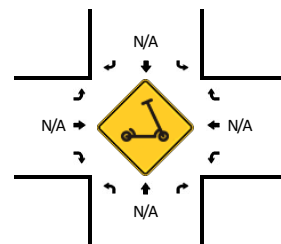
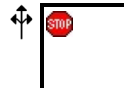
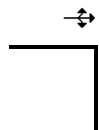
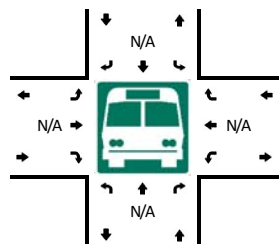
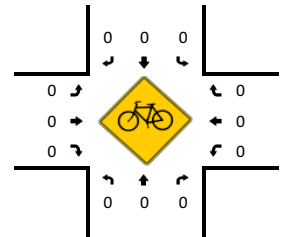
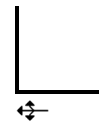
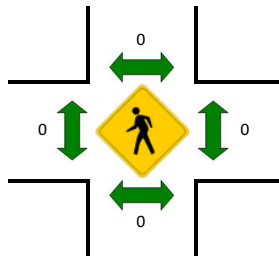
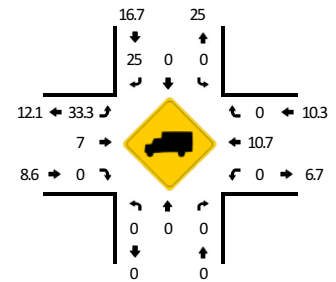
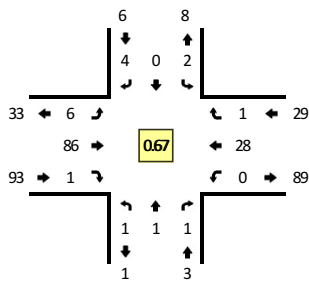
LOCATION: S Ott Rd/Hinkle Motel Rd -- Feedville Rd

QC JOB #: 16883208

CITY/STATE: Umatilla, OR

DATE: Tue, Jan 14 2025

Peak-Hour: 3:25 PM -- 4:25 PM
Peak 15-Min: 3:30 PM -- 3:45 PM



5-Min Count Period Beginning At	S Ott Rd/Hinkle Motel Rd (Northbound)				S Ott Rd/Hinkle Motel Rd (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	0	0	0	1	0	0	0	0	9	0	0	1	4	1	0	16	
3:05 PM	0	0	0	0	0	0	0	0	0	7	0	0	0	6	0	0	13	
3:10 PM	0	0	0	0	1	0	0	0	1	4	0	0	1	4	0	0	11	
3:15 PM	0	0	0	0	0	0	1	0	1	3	0	0	0	8	0	0	13	
3:20 PM	0	0	0	0	0	0	0	0	1	7	0	0	0	4	0	0	12	
3:25 PM	0	0	0	0	0	0	1	0	0	7	0	0	0	6	1	0	15	
3:30 PM	0	0	0	0	0	0	1	0	1	10	0	0	0	3	0	0	15	
3:35 PM	0	0	0	0	1	0	0	0	0	13	0	0	0	4	0	0	18	
3:40 PM	0	0	0	0	0	0	0	0	1	9	0	0	0	6	0	0	16	
3:45 PM	0	0	1	0	0	0	0	0	0	6	0	0	0	1	0	0	8	
3:50 PM	0	0	0	0	0	0	0	0	0	3	1	0	0	2	0	0	6	
3:55 PM	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	7	150
4:00 PM	0	1	0	0	0	0	0	0	0	8	0	0	0	2	0	0	11	145
4:05 PM	1	0	0	0	0	0	1	0	0	4	0	0	0	0	0	0	6	138
4:10 PM	0	0	0	0	1	0	0	0	0	7	0	0	0	2	0	0	10	137
4:15 PM	0	0	0	0	0	0	0	0	3	7	0	0	0	0	0	0	10	134
4:20 PM	0	0	0	0	0	0	1	0	1	6	0	0	0	1	0	0	9	131
4:25 PM	0	0	0	0	0	0	1	0	0	10	0	0	0	3	0	0	14	130
4:30 PM	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	123
4:35 PM	0	0	0	0	0	0	0	0	1	7	0	0	0	5	0	0	13	118
4:40 PM	0	0	0	0	0	0	1	0	0	4	0	0	0	0	0	0	5	107
4:45 PM	0	0	0	0	1	0	1	0	0	6	0	0	0	2	0	0	10	109
4:50 PM	0	0	0	0	0	0	1	0	1	3	0	0	0	2	0	0	7	110
4:55 PM	0	0	0	0	0	0	1	0	1	5	0	0	0	2	0	0	9	112
5:00 PM	0	0	0	0	1	0	0	0	0	3	0	0	0	2	0	0	6	107
5:05 PM	0	0	0	0	1	0	0	0	0	4	0	0	0	2	0	0	7	108
5:10 PM	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	7	105
5:15 PM	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	0	10	105
5:20 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	101
5:25 PM	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	4	91
5:30 PM	1	0	0	0	0	0	1	0	1	2	0	0	0	1	0	0	6	89
5:35 PM	0	0	0	0	0	0	0	0	0	4	1	0	0	1	0	0	6	82
5:40 PM	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	3	80
5:45 PM	0	0	0	0	0	0	1	0	0	6	0	0	0	0	0	0	7	77
5:50 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	72
5:55 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4	67

Appendix D

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	4	0	4	0	8	128	0	0	0	52	0	0	196
Heavy Trucks	0	0	0		0	0	0		8	8	0		0	0	0		16
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 7/3/2025 11:22 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix D

Type of peak hour being reported: User-Defined

Method for determining peak hour: Total Entering Volume

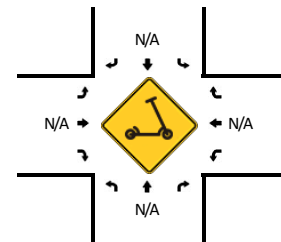
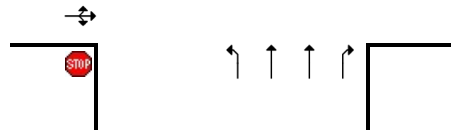
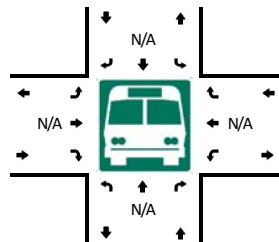
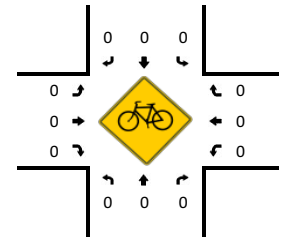
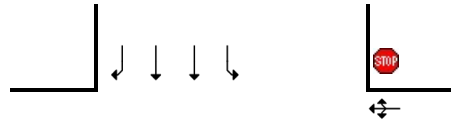
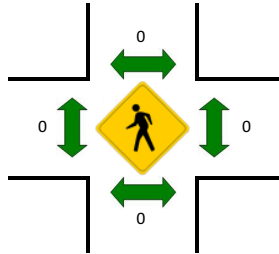
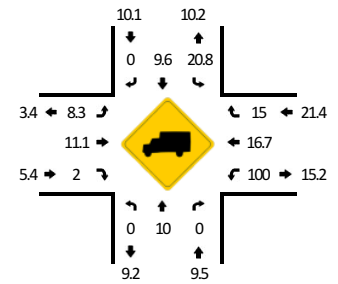
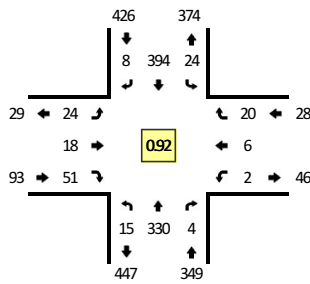
LOCATION: US 395 -- Feedville Rd

CITY/STATE: Umatilla, OR

QC JOB #: 16883210

DATE: Tue, Jan 14 2025

Peak-Hour: 3:25 PM -- 4:25 PM
Peak 15-Min: 4:10 PM -- 4:25 PM



5-Min Count Period Beginning At	US 395 (Northbound)				US 395 (Southbound)				Feedville Rd (Eastbound)				Feedville Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	2	20	0	1	3	34	2	0	6	2	4	0	0	1	2	0	77	
3:05 PM	4	22	0	0	0	29	2	0	2	0	2	0	0	0	0	0	61	
3:10 PM	2	19	0	0	2	32	3	0	1	2	5	0	0	1	2	0	69	
3:15 PM	2	16	0	0	2	27	6	0	0	0	3	0	0	0	4	0	60	
3:20 PM	2	22	0	0	0	35	1	0	5	0	4	0	1	0	1	0	71	
3:25 PM	4	16	0	0	3	43	0	0	1	0	5	0	0	2	1	0	75	
3:30 PM	2	21	0	0	2	25	2	0	2	3	4	0	0	0	0	0	61	
3:35 PM	3	27	0	0	0	31	0	0	5	3	8	0	1	0	5	0	83	
3:40 PM	5	31	1	0	2	20	1	0	1	2	6	0	0	0	2	0	71	
3:45 PM	0	27	0	0	2	25	1	0	4	1	3	0	0	0	2	0	65	
3:50 PM	1	38	0	0	2	39	1	0	1	0	1	0	0	0	2	0	85	
3:55 PM	0	29	0	0	0	21	0	0	4	1	5	0	0	1	1	0	62	840
4:00 PM	0	28	0	0	2	32	1	0	2	2	5	0	0	2	2	0	76	839
4:05 PM	0	31	2	0	5	33	0	0	0	1	1	0	0	0	2	0	75	853
4:10 PM	0	32	1	0	2	38	2	0	0	1	5	0	1	0	0	0	82	866
4:15 PM	0	25	0	0	2	38	0	0	3	2	3	0	0	0	2	0	75	881
4:20 PM	0	25	0	0	2	49	0	0	1	2	5	0	0	1	1	0	86	896
4:25 PM	0	17	0	0	2	33	3	0	3	0	7	0	0	0	1	0	66	887
4:30 PM	0	26	0	0	5	35	1	0	1	0	5	0	0	1	1	0	75	901
4:35 PM	2	23	1	0	5	41	1	0	3	2	4	0	0	2	0	0	84	902
4:40 PM	0	27	0	0	3	41	0	0	1	0	3	0	0	0	1	0	76	907
4:45 PM	2	18	0	0	8	39	1	0	1	1	3	0	0	0	3	0	76	918
4:50 PM	1	22	0	0	1	25	2	0	0	1	3	0	0	1	2	0	58	891
4:55 PM	0	12	0	0	3	17	2	0	2	0	2	0	0	1	0	0	39	868
5:00 PM	0	17	0	0	2	24	0	0	1	1	5	0	0	3	3	0	56	848
5:05 PM	2	21	0	0	1	24	1	0	0	1	3	0	0	0	1	0	54	827
5:10 PM	2	29	0	0	2	52	1	0	0	2	5	0	0	0	1	0	94	839
5:15 PM	0	21	0	0	3	33	1	0	0	2	3	0	0	1	0	0	64	828
5:20 PM	0	24	0	0	3	30	1	0	2	2	4	0	0	0	3	0	69	811
5:25 PM	1	19	0	0	2	27	0	0	0	0	5	0	0	0	2	0	56	801
5:30 PM	1	25	1	0	2	35	0	0	0	2	2	0	0	0	1	0	69	795
5:35 PM	1	28	0	0	1	17	2	0	1	0	3	0	0	0	1	0	54	765
5:40 PM	0	30	0	0	1	26	0	0	1	2	0	0	0	1	2	0	63	752
5:45 PM	0	18	0	0	0	28	1	0	4	0	4	0	1	0	1	0	57	733
5:50 PM	2	11	0	0	1	25	0	0	0	2	2	0	0	0	0	0	43	718
5:55 PM	0	23	1	0	0	14	2	0	0	1	1	0	0	0	0	0	42	721

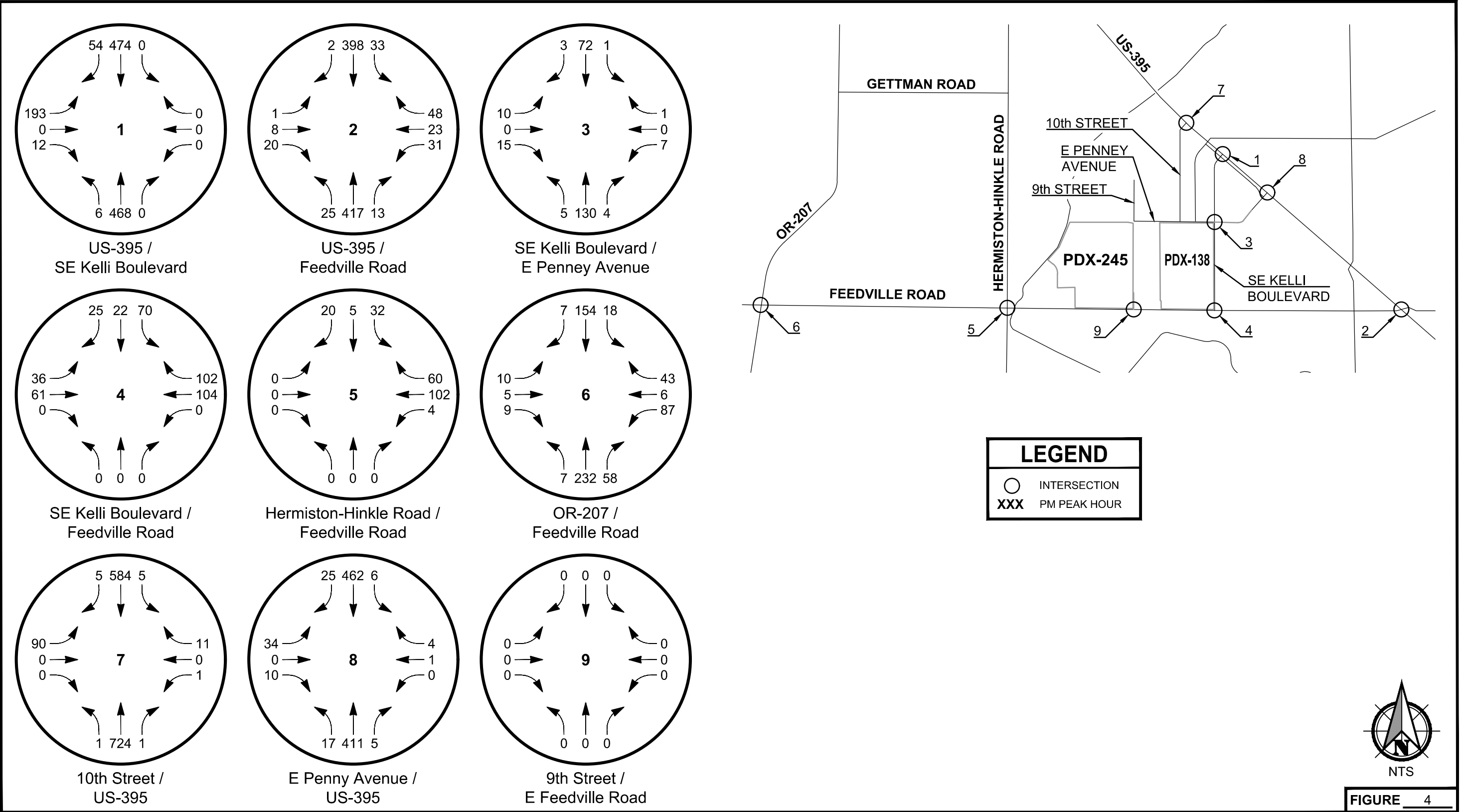
Appendix D

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	328	4	0	24	500	8	0	16	20	52	0	4	4	12	0	972
Heavy Trucks	0	32	0		8	28	0		4	0	0		4	0	0		76
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 7/3/2025 11:22 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212



2023 Existing Volumes
AWS PDX-138 and PDX-245 Campus Data Center

Appendix D



(303) 216-2439

www.alltrafficdata.net

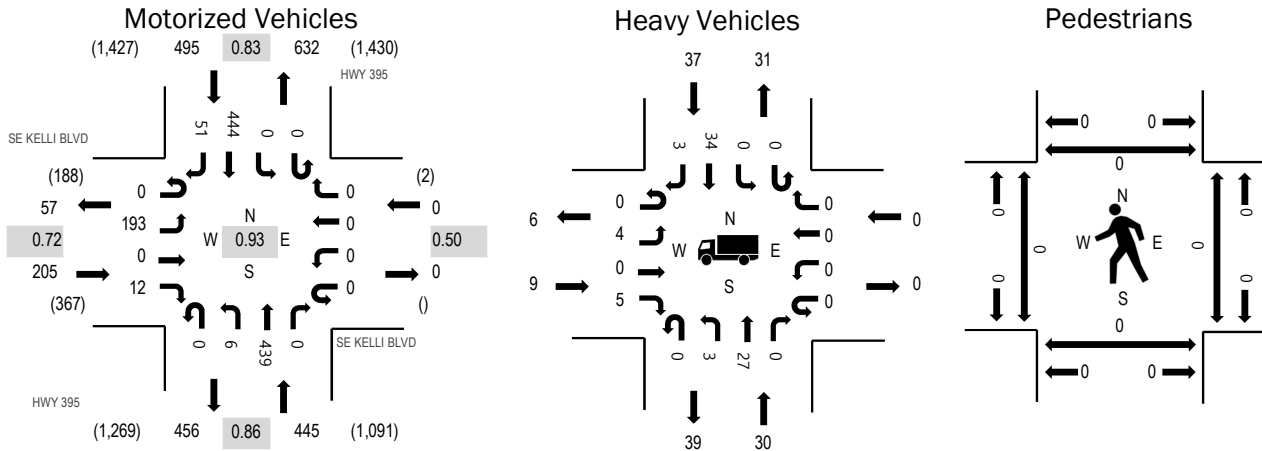
Location: 1 HWY 395 & SE KELLI BLVD PM

Date: Tuesday, November 14, 2023

Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	4.4%	0.72
WB	0.0%	0.50
NB	6.7%	0.86
SB	7.5%	0.83
All	6.6%	0.93

Traffic Counts - Motorized Vehicles

Interval Start Time	SE KELLI BLVD Eastbound				SE KELLI BLVD Westbound				HWY 395 Northbound				HWY 395 Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
3:00 PM	0	6	0	1	0	0	0	0	0	0	24	0	0	0	30	6	67	796
3:05 PM	0	5	0	0	0	0	0	0	0	0	22	0	0	0	22	5	54	793
3:10 PM	0	2	0	0	0	0	0	0	0	0	33	0	0	0	21	4	60	818
3:15 PM	0	3	0	1	0	0	0	0	0	0	26	0	0	0	23	4	57	846
3:20 PM	0	3	0	0	0	0	0	0	0	0	27	0	0	0	24	2	56	871
3:25 PM	0	1	0	1	0	0	0	0	0	0	34	0	0	0	35	2	73	902
3:30 PM	0	8	0	0	0	0	0	0	0	0	32	0	0	0	32	2	74	926
3:35 PM	0	10	0	1	0	0	0	0	0	0	28	0	0	0	22	6	67	958
3:40 PM	0	10	0	2	0	0	0	0	0	0	24	0	0	0	25	4	65	989
3:45 PM	0	6	0	0	0	0	0	1	0	1	24	0	0	0	34	3	69	1,019
3:50 PM	0	4	0	0	0	0	0	0	0	0	27	0	0	0	38	8	77	1,038
3:55 PM	0	8	0	1	0	0	0	0	0	0	29	0	0	0	29	10	77	1,054
4:00 PM	0	6	0	0	0	0	0	0	0	0	25	0	0	0	30	3	64	1,061
4:05 PM	0	2	0	0	0	0	0	0	0	0	27	0	0	0	46	4	79	1,101
4:10 PM	0	8	0	0	0	0	0	0	0	0	20	0	0	0	39	21	88	1,110
4:15 PM	0	4	0	0	0	0	0	0	0	1	19	0	0	0	42	16	82	1,138
4:20 PM	0	8	0	1	0	0	0	0	0	0	29	0	0	0	40	9	87	1,137
4:25 PM	0	9	0	0	0	0	0	1	0	0	35	0	0	0	46	6	97	1,122
4:30 PM	0	24	0	5	0	0	0	0	0	0	28	0	0	0	42	7	106	1,145
4:35 PM	0	27	0	0	0	0	0	0	0	0	29	0	0	0	30	12	98	1,132
4:40 PM	0	14	0	1	0	0	0	0	0	0	43	0	0	0	31	6	95	1,105
4:45 PM	0	11	0	2	0	0	0	0	0	1	37	0	0	0	31	6	88	1,068
4:50 PM	0	10	0	0	0	0	0	0	0	0	33	0	0	0	44	6	93	1,061
4:55 PM	0	15	0	0	0	0	0	0	0	0	36	0	0	0	33	0	84	1,043
5:00 PM	0	21	0	0	0	0	0	0	0	2	50	0	0	0	30	1	104	1,030
5:05 PM	0	9	0	0	0	0	0	0	0	1	38	0	0	0	38	2	88	
5:10 PM	0	12	0	0	0	0	0	0	0	0	39	0	0	0	62	3	116	
5:15 PM	0	10	0	2	0	0	0	0	0	0	29	0	0	0	37	3	81	

Appendix D

5:20 PM	0	15	0	0	0	0	0	0	0	0	25	0	0	0	29	3	72
5:25 PM	0	25	0	2	0	0	0	0	0	2	52	0	0	0	37	2	120
5:30 PM	0	17	0	0	0	0	0	0	0	0	29	0	0	0	43	4	93
5:35 PM	0	4	0	0	0	0	0	0	0	0	30	0	0	0	36	1	71
5:40 PM	0	7	0	0	0	0	0	0	0	0	14	0	0	0	35	2	58
5:45 PM	0	11	0	0	0	0	0	0	0	0	26	0	0	0	41	3	81
5:50 PM	0	4	0	2	0	0	0	0	0	0	30	0	0	0	38	1	75
5:55 PM	0	6	0	0	0	0	0	0	0	0	30	0	0	0	32	3	71
Count Total	0	345	0	22	0	0	0	2	0	8	1,083	0	0	0	1,247	180	2,887
Peak Hour	0	193	0	12	0	0	0	0	0	6	439	0	0	0	444	51	1,145

Appendix C Existing Traffic Operations
Worksheets

Appendix D

Generated with **PTV VISTRO**
Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 6: 6 Existing AM

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro
Report File: H:\...\Existing AM.pdf

Scenario 6 Existing AM
8/6/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Two-way stop	HCM 7th Edition	WB Left	0.123	13.9	B
2	Hermiston-Hinkle Rd & Feedville Rd	All-way stop	HCM 7th Edition	NB Left	0.115	7.8	A
3	Kelli Rd & Feedville Rd & Site Driveway	Two-way stop	HCM 7th Edition	SB Left	0.025	10.0	B
4	Hinkle Motel Rd & Ott Rd & Feedville Rd	Two-way stop	HCM 7th Edition	NB Thru	0.003	11.0	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	EB Thru	0.008	33.8	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Appendix D

Generated with **PTV VISTRO**

UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 6: 6 Existing AM

Intersection Level Of Service Report Intersection 1: OR-207 & Feedville Rd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 13.9
Level Of Service: B
Volume to Capacity (v/c): 0.123

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	6	144	52	16	179	5	6	1	12	49	3	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	17.00	6.00	10.00	12.00	14.00	0.00	0.00	0.00	0.00	22.00	0.00	19.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	144	52	16	179	5	6	1	12	49	3	16
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	43	15	5	53	1	2	0	4	15	1	5
Total Analysis Volume [veh/h]	7	171	62	19	213	6	7	1	14	58	4	19
Pedestrian Volume [ped/h]	0			0			0			0		

Appendix D

Generated with **PTV VISTRO**

UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 6: 6 Existing AM

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.02	0.12	0.01	0.02
d_M, Delay for Movement [s/veh]	7.86	0.00	0.00	7.86	0.00	0.00	12.80	12.93	9.54	13.89	13.41	10.58
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.05	0.00	0.00	0.10	0.10	0.10	0.54	0.54	0.54
95th-Percentile Queue Length [ft/ln]	0.42	0.00	0.00	1.13	0.00	0.00	2.62	2.62	2.62	13.53	13.53	13.53
d_A, Approach Delay [s/veh]	0.23			0.63			10.73			13.09		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.58											
Intersection LOS	B											

Appendix D

Generated with **PTV VISTRO**

UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 6: 6 Existing AM

Intersection Level Of Service Report

Intersection 2: Hermiston-Hinkle Rd & Feedville Rd

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.115

Intersection Setup

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Base Volume Input [veh/h]	6	5	1	19	11	24	11	53	5	2	38	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	33.00	0.00	100.00	21.00	0.00	5.00	0.00	11.00	20.00	50.00	21.00	15.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	5	1	19	11	24	11	53	5	2	38	13
Peak Hour Factor	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	2	0	7	4	8	4	18	2	1	13	4
Total Analysis Volume [veh/h]	8	7	1	26	15	33	15	73	7	3	52	18
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings				
Lanes				
Capacity per Entry Lane [veh/h]	747	842	829	813
Degree of Utilization, x	0.02	0.09	0.11	0.09
Movement, Approach, & Intersection Results				
95th-Percentile Queue Length [veh]	0.07	0.29	0.39	0.29
95th-Percentile Queue Length [ft]	1.64	7.20	9.67	7.37
Approach Delay [s/veh]	7.93	7.69	7.91	7.86
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.83			
Intersection LOS	A			

Appendix D

Generated with **PTV VISTRO**
Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 6: 6 Existing AM

Intersection Level Of Service Report Intersection 3: Kelli Rd & Feedville Rd & Site Driveway

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	0	0	0	13	0	15	19	31	0	0	46	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	8.00	0.00	40.00	11.00	16.00	0.00	0.00	17.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	13	0	15	19	31	0	0	46	12
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	5	0	6	7	11	0	0	17	4
Total Analysis Volume [veh/h]	0	0	0	19	0	22	28	46	0	0	68	18
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 6: 6 Existing AM

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.86	10.17	8.50	10.00	10.34	9.28	7.51	0.00	0.00	7.29	0.00	0.00
Movement LOS	A	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.16	0.16	0.16	0.05	0.05	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	3.94	3.94	3.94	1.18	1.18	1.18	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.51			9.62			2.84			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.01											
Intersection LOS	B											

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 6: 6 Existing AM

Intersection Level Of Service Report Intersection 4: Hinkle Motel Rd & Ott Rd & Feedville Rd

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	1	1	1	0	1	10	1	26	0	0	50	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	100.00	0.00	0.00	0.00	10.00	0.00	19.00	0.00	0.00	16.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	1	0	1	10	1	26	0	0	50	5
Peak Hour Factor	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	4	0	10	0	0	20	2
Total Analysis Volume [veh/h]	2	2	2	0	2	16	2	42	0	0	81	8
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 6: 6 Existing AM

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.44	10.97	8.52	9.37	9.80	8.86	7.37	0.00	0.00	7.28	0.00	0.00
Movement LOS	A	B	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.06	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.58	0.58	0.58	1.48	1.48	1.48	0.08	0.08	0.08	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.64			8.96			0.34			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.49											
Intersection LOS	B											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 6: 6 Existing AM

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 33.8
Level Of Service: D
Volume to Capacity (v/c): 0.008

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	34	439	1	8	271	11	5	1	21	4	10	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	15.00	6.00	0.00	25.00	11.00	0.00	0.00	100.00	14.00	50.00	20.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	439	1	8	271	11	5	1	21	4	10	19
Peak Hour Factor	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	134	0	2	83	3	2	0	6	1	3	6
Total Analysis Volume [veh/h]	41	535	1	10	330	13	6	1	26	5	12	23
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 6: 6 Existing AM

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.01	0.00	0.01	0.00	0.00	0.02	0.01	0.03	0.03	0.06	0.03
d_M, Delay for Movement [s/veh]	8.32	0.00	0.00	9.12	0.00	0.00	18.05	33.80	9.85	25.58	23.53	11.23
Movement LOS	A	A	A	A	A	A	C	D	A	D	C	B
95th-Percentile Queue Length [veh/ln]	0.11	0.00	0.00	0.03	0.00	0.00	0.19	0.19	0.19	0.39	0.39	0.39
95th-Percentile Queue Length [ft/ln]	2.84	0.00	0.00	0.86	0.00	0.00	4.85	4.85	4.85	9.67	9.67	9.67
d_A, Approach Delay [s/veh]	0.59			0.26			12.07			16.72		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.49											
Intersection LOS	D											

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 7: 7 Existing PM

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro
Report File: H:\...\Existing PM.pdf

Scenario 7 Existing PM
7/30/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Two-way stop	HCM 7th Edition	WB Thru	0.011	14.5	B
2	Hermiston-Hinkle Rd & Feedville Rd	All-way stop	HCM 7th Edition	EB Thru	0.230	8.3	A
3	Kelli Rd & Feedville Rd & Site Driveway	Two-way stop	HCM 7th Edition	SB Left	0.084	12.4	B
4	Hinkle Motel Rd & Ott Rd & Feedville Rd	Two-way stop	HCM 7th Edition	NB Thru	0.001	10.1	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	WB Left	0.015	32.7	D
6	US 395 & SE Kelli Blvd	Two-way stop	HCM 7th Edition	EB Left	0.835	65.8	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 7: 7 Existing PM

Intersection Level Of Service Report Intersection 1: OR-207 & Feedville Rd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 14.5
Level Of Service: B
Volume to Capacity (v/c): 0.011

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	8	216	40	14	157	5	6	5	9	71	5	66
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	25.00	10.00	20.00	21.00	5.00	0.00	0.00	0.00	22.00	6.00	20.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	216	40	14	157	5	6	5	9	71	5	66
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	56	10	4	41	1	2	1	2	18	1	17
Total Analysis Volume [veh/h]	8	225	42	15	164	5	6	5	9	74	5	69
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.15	0.01	0.09
d_M, Delay for Movement [s/veh]	7.83	0.00	0.00	8.05	0.00	0.00	13.54	12.74	9.58	14.17	14.49	11.38
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.04	0.00	0.00	0.11	0.11	0.11	0.96	0.96	0.96
95th-Percentile Queue Length [ft/ln]	0.47	0.00	0.00	0.95	0.00	0.00	2.73	2.73	2.73	23.94	23.94	23.94
d_A, Approach Delay [s/veh]	0.23			0.66			11.56			12.88		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	3.70											
Intersection LOS	B											

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 7: 7 Existing PM

Intersection Level Of Service Report Intersection 2: Hermiston-Hinkle Rd & Feedville Rd

Control Type:	All-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.230

Intersection Setup

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Base Volume Input [veh/h]	7	14	4	23	4	15	30	42	1	2	104	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	14.00	0.00	0.00	9.00	0.00	7.00	10.00	21.00	100.00	0.00	3.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	14	4	23	4	15	30	42	1	2	104	43
Peak Hour Factor	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	5	1	8	1	5	10	14	0	1	35	15
Total Analysis Volume [veh/h]	9	19	5	31	5	20	41	57	1	3	141	58
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings				
Lanes				
Capacity per Entry Lane [veh/h]	770	776	767	878
Degree of Utilization, x	0.04	0.07	0.13	0.23
Movement, Approach, & Intersection Results				
95th-Percentile Queue Length [veh]	0.13	0.23	0.44	0.89
95th-Percentile Queue Length [ft]	3.35	5.82	11.05	22.17
Approach Delay [s/veh]	7.89	8.00	8.39	8.32
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.25			
Intersection LOS	A			

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Level Of Service Report Intersection 3: Kelli Rd & Feedville Rd & Site Driveway

Control Type:	Two-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.084

Intersection Setup

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	0	0	0	27	0	30	22	47	0	0	81	91
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	4.00	0.00	0.00	23.00	12.00	0.00	0.00	1.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	27	0	30	22	47	0	0	81	91
Peak Hour Factor	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	13	9	20	0	0	35	39
Total Analysis Volume [veh/h]	0	0	0	47	0	52	38	81	0	0	140	157
Pedestrian Volume [ped/h]	0			0			0			0		

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Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.08	0.00	0.06	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.07	12.39	8.66	12.37	12.59	10.28	8.16	0.00	0.00	7.35	0.00	0.00
Movement LOS	B	B	A	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.51	0.51	0.51	0.06	0.06	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	12.85	12.85	12.85	1.62	1.62	1.62	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.04			11.27			2.61			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.77											
Intersection LOS	B											

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HCM 7th Edition

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Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Level Of Service Report Intersection 4: Hinkle Motel Rd & Ott Rd & Feedville Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	1	1	1	2	0	4	6	81	1	0	28	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	25.00	33.00	7.00	0.00	0.00	11.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	1	2	0	4	6	81	1	0	28	1
Peak Hour Factor	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	1	2	30	0	0	10	0
Total Analysis Volume [veh/h]	1	1	1	3	0	6	9	121	1	0	42	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.69	10.09	8.87	9.68	10.11	8.77	7.60	0.00	0.00	7.44	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.03	0.03	0.03	0.02	0.02	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.28	0.28	0.28	0.76	0.76	0.76	0.38	0.38	0.38	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.55			9.07			0.52			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.96											
Intersection LOS	B											

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Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 32.7
Level Of Service: D
Volume to Capacity (v/c): 0.015

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	15	389	4	24	465	8	24	18	42	2	6	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	10.00	0.00	21.00	10.00	0.00	8.00	11.00	2.00	100.00	17.00	15.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	389	4	24	465	8	24	18	42	2	6	20
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	106	1	7	126	2	7	5	11	1	2	5
Total Analysis Volume [veh/h]	16	423	4	26	505	9	26	20	46	2	7	22
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2024 (SP 0-1)

Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.03	0.01	0.00	0.11	0.09	0.06	0.01	0.03	0.03
d_M, Delay for Movement [s/veh]	8.44	0.00	0.00	8.68	0.00	0.00	23.83	25.58	13.51	32.66	23.51	10.54
Movement LOS	A	A	A	A	A	A	C	D	B	D	C	B
95th-Percentile Queue Length [veh/ln]	0.05	0.00	0.00	0.08	0.00	0.00	1.05	1.05	1.05	0.25	0.25	0.25
95th-Percentile Queue Length [ft/ln]	1.15	0.00	0.00	1.99	0.00	0.00	26.15	26.15	26.15	6.36	6.36	6.36
d_A, Approach Delay [s/veh]	0.30			0.42			19.05			14.90		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	2.33											
Intersection LOS	D											

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Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Level Of Service Report Intersection 6: US 395 & SE Kelli Blvd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 65.8
Level Of Service: F
Volume to Capacity (v/c): 0.835

Intersection Setup

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	450.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Base Volume Input [veh/h]	6	487	0	0	493	56	201	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	52.00	6.00	0.00	0.00	7.00	6.00	2.00	0.00	43.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	487	0	0	493	56	201	0	12	0	0	0
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	131	0	0	133	15	54	0	3	0	0	0
Total Analysis Volume [veh/h]	6	524	0	0	530	60	216	0	13	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 7: 7 Existing PM

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.01	0.00	0.84	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.14	0.00	0.00	8.42	0.00	0.00	65.75	68.71	57.90	18.30	22.58	9.85
Movement LOS	B	A	A	A	A	A	F	F	F	C	C	A
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.00	0.00	0.00	7.19	7.19	7.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.64	0.00	0.00	0.00	0.00	0.00	179.66	179.66	179.66	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.11			0.00			65.31			16.91		
Approach LOS	A			A			F			C		
d_I, Intersection Delay [s/veh]	11.13											
Intersection LOS	F											

Appendix D 2045 Background Conditions
Worksheets

Appendix D

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 10: 10 Background AM 2045

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro

Scenario 10 Background AM 2045

Report File: H:\...\Background AM 2045.pdf

8/6/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Two-way stop	HCM 7th Edition	WB Left	0.702	79.4	F
2	Hermiston-Hinkle Rd & Feedville Rd	All-way stop	HCM 7th Edition	EB Thru	0.569	12.5	B
3	Kelli Rd & Feedville Rd & Site Driveway	Two-way stop	HCM 7th Edition	SB Left	0.047	12.7	B
4	Hinkle Motel Rd & Ott Rd & Feedville Rd	Two-way stop	HCM 7th Edition	NB Thru	0.004	13.0	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	EB Thru	0.019	74.7	F
102	Feedville Rd & Driveway	Two-way stop	HCM 7th Edition	EB Left	0.055	7.3	A
103	Hermiston-Hinkle Rd / Driveway	Two-way stop	HCM 7th Edition	EB Left	0.046	9.0	A
104	Feedville Rd & Driveway	Two-way stop	HCM 7th Edition	SB Left	0.007	11.5	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Level Of Service Report Intersection 1: OR-207 & Feedville Rd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 79.4
Level Of Service: F
Volume to Capacity (v/c): 0.702

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	6	202	108	84	251	5	6	1	12	155	4	172
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	17.00	6.00	10.00	12.00	14.00	0.00	0.00	0.00	0.00	22.00	0.00	19.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	202	108	84	251	5	6	1	12	155	4	172
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	60	32	25	75	1	2	0	4	46	1	51
Total Analysis Volume [veh/h]	7	240	129	100	299	6	7	1	14	185	5	205
Pedestrian Volume [ped/h]	0			0			0			0		

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HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.09	0.00	0.00	0.04	0.00	0.02	0.70	0.02	0.27
d_M, Delay for Movement [s/veh]	8.08	0.00	0.00	8.47	0.00	0.00	27.72	19.63	10.60	79.36	77.44	70.45
Movement LOS	A	A	A	A	A	A	D	C	B	F	F	F
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.29	0.00	0.00	0.21	0.21	0.21	11.88	11.88	11.88
95th-Percentile Queue Length [ft/ln]	0.45	0.00	0.00	7.22	0.00	0.00	5.22	5.22	5.22	297.02	297.02	297.02
d_A, Approach Delay [s/veh]	0.15			2.09			16.45			74.71		
Approach LOS	A			A			C			F		
d_I, Intersection Delay [s/veh]	25.69											
Intersection LOS	F											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Level Of Service Report

Intersection 2: Hermiston-Hinkle Rd & Feedville Rd

Control Type:	All-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.569

Intersection Setup

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Base Volume Input [veh/h]	22	20	14	35	30	75	133	136	24	18	78	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	33.00	0.00	100.00	21.00	0.00	5.00	0.00	11.00	20.00	50.00	21.00	15.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	20	14	35	30	75	133	136	24	18	78	18
Peak Hour Factor	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	7	5	12	10	26	46	47	8	6	27	6
Total Analysis Volume [veh/h]	30	27	19	48	41	103	182	186	33	25	107	25
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings				
Lanes				
Capacity per Entry Lane [veh/h]	567	665	705	637
Degree of Utilization, x	0.13	0.29	0.57	0.25
Movement, Approach, & Intersection Results				
95th-Percentile Queue Length [veh]	0.46	1.19	3.61	0.96
95th-Percentile Queue Length [ft]	11.51	29.87	90.26	24.11
Approach Delay [s/veh]	10.32	10.60	14.61	10.48
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	12.50			
Intersection LOS	B			

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HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Level Of Service Report Intersection 3: Kelli Rd & Feedville Rd & Site Driveway

Control Type:	Two-way stop	Delay (sec / veh):	12.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.047

Intersection Setup

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	0	0	0	16	0	25	41	98	0	0	100	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	8.00	0.00	40.00	11.00	16.00	0.00	0.00	17.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	16	0	25	41	98	0	0	100	15
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	6	0	9	15	36	0	0	37	6
Total Analysis Volume [veh/h]	0	0	0	24	0	37	60	144	0	0	147	22
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.05	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.48	12.29	8.96	12.69	12.76	10.09	7.72	0.00	0.00	7.48	0.00	0.00
Movement LOS	B	B	A	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.31	0.31	0.31	0.10	0.10	0.10	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	7.74	7.74	7.74	2.58	2.58	2.58	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.24			11.11			2.27			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.63											
Intersection LOS	B											

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Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Level Of Service Report Intersection 4: Hinkle Motel Rd & Ott Rd & Feedville Rd

Control Type:	Two-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	1	1	1	0	1	10	1	94	0	0	105	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	100.00	0.00	0.00	0.00	10.00	0.00	19.00	0.00	0.00	16.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	1	0	1	10	1	94	0	0	105	5
Peak Hour Factor	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	4	0	38	0	0	42	2
Total Analysis Volume [veh/h]	2	2	2	0	2	16	2	152	0	0	169	8
Pedestrian Volume [ped/h]	0			0			0			0		

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HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.01	12.96	9.06	10.90	11.18	9.34	7.55	0.00	0.00	7.50	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.75	0.75	0.75	1.70	1.70	1.70	0.08	0.08	0.08	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.01			9.54			0.10			0.00		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	0.71											
Intersection LOS	B											

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 74.7
Level Of Service: F
Volume to Capacity (v/c): 0.019

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	68	615	1	11	380	30	7	1	87	6	14	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	15.00	6.00	0.00	25.00	11.00	0.00	0.00	100.00	14.00	50.00	20.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	68	615	1	11	380	30	7	1	87	6	14	27
Peak Hour Factor	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	188	0	3	116	9	2	0	27	2	4	8
Total Analysis Volume [veh/h]	83	750	1	13	463	37	9	1	106	7	17	33
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.01	0.00	0.02	0.00	0.00	0.07	0.02	0.14	0.09	0.17	0.05
d_M, Delay for Movement [s/veh]	9.04	0.00	0.00	10.10	0.00	0.00	33.77	74.75	12.01	61.09	49.70	19.55
Movement LOS	A	A	A	B	A	A	D	F	B	F	E	C
95th-Percentile Queue Length [veh/ln]	0.28	0.00	0.00	0.06	0.00	0.00	0.88	0.88	0.88	1.27	1.27	1.27
95th-Percentile Queue Length [ft/ln]	6.97	0.00	0.00	1.38	0.00	0.00	21.96	21.96	21.96	31.73	31.73	31.73
d_A, Approach Delay [s/veh]	0.90			0.26			14.24			33.64		
Approach LOS	A			A			B			D		
d_I, Intersection Delay [s/veh]	2.93											
Intersection LOS	F											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Level Of Service Report Intersection 102: Feedville Rd & Driveway

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 7.3
Level Of Service: A
Volume to Capacity (v/c): 0.055

Intersection Setup

Name	Driveway				Residential Access				Feedville Rd			
Approach	Northbound				Southbound				Eastbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name	Driveway				Residential Access				Feedville Rd			
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	75	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	75	0	0	0
Peak Hour Factor	0.8300	1.0000	0.8300	1.0000	1.0000	1.0000	1.0000	1.0000	0.8300	1.0000	1.0000	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	23	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	90	0	0	0
Pedestrian Volume [ped/h]	0				0				0			

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free
Flared Lane	No	No	
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.29	5.42	8.49	8.32	9.87	9.85	10.34	8.32	7.33	7.35	0.00	0.00
Movement LOS	B	A	A	A	A	A	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.17	0.17	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.36	4.36	4.36	4.36
d_A, Approach Delay [s/veh]	8.63				9.59				7.33			
Approach LOS	A				A				A			
d_I, Intersection Delay [s/veh]	5.74											
Intersection LOS	A											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Setup

Name	Feedville Road							
Approach	Westbound				Southwestbound			
Lane Configuration								
Turning Movement	Left	Thru	Right	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name	Feedville Road							
Base Volume Input [veh/h]	0	0	0	0	0	0	0	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	217
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.8300	1.0000	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	65
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	261
Pedestrian Volume [ped/h]	0				0			

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Settings

Priority Scheme	Free	Stop
Flared Lane		No
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	7.22	0.00	0.00	0.00	9.85	10.31	8.49	5.19
Movement LOS	A	A	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.06	1.06	1.06	1.06
d_A, Approach Delay [s/veh]	1.80				5.19			
Approach LOS	A				A			
d_I, Intersection Delay [s/veh]	5.74							
Intersection LOS	A							

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Level Of Service Report Intersection 103: Hermiston-Hinkle Rd / Driveway

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.046

Intersection Setup

Name	Hermiston-Hinkle Road		Hermiston-Hinkle Road		S2 Driveway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hermiston-Hinkle Road		Hermiston-Hinkle Road		S2 Driveway	
Base Volume Input [veh/h]	0	12	18	54	44	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	12	18	54	44	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	5	14	11	0
Total Analysis Volume [veh/h]	0	12	18	54	44	0
Pedestrian Volume [ped/h]	0		0		0	

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	0.00	0.00	8.97	8.70
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.15	0.15
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.64	3.64
d_A, Approach Delay [s/veh]	0.00		0.00		8.97	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.08					
Intersection LOS	A					

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Level Of Service Report Intersection 104: Feedville Rd & Driveway

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 11.5
Level Of Service: B
Volume to Capacity (v/c): 0.007

Intersection Setup

Name							Feedville Road			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Feedville Road			Feedville Rd		
Base Volume Input [veh/h]	0	0	0	3	0	1	1	155	0	0	128	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	3	0	1	1	155	0	0	128	3
Peak Hour Factor	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	55	0	0	45	1
Total Analysis Volume [veh/h]	0	0	0	4	0	1	1	218	0	0	180	4
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 10: 10 Background AM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.42	11.69	9.35	11.46	11.72	9.21	7.57	0.00	0.00	7.64	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.63	0.63	0.63	0.04	0.04	0.04	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.82			11.01			0.03			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.15											
Intersection LOS	B											

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 11: 11 Background PM 2045

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro

Scenario 11 Background PM 2045

Report File: H:\...\Background PM 2045.pdf

7/30/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Two-way stop	HCM 7th Edition	WB Left	0.890	161.0	F
2	Hermiston-Hinkle Rd & Feedville Rd	All-way stop	HCM 7th Edition	WB Thru	0.601	15.3	C
3	Kelli Rd & Feedville Rd & Site Driveway	Two-way stop	HCM 7th Edition	SB Left	0.175	19.9	C
4	Hinkle Motel Rd & Ott Rd & Feedville Rd	Two-way stop	HCM 7th Edition	NB Thru	0.002	11.9	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	WB Left	0.069	92.9	F
6	US 395 & SE Kelli Blvd	Two-way stop	HCM 7th Edition	EB Left	2.969	983.2	F
102	Feedville Rd & Driveway	Two-way stop	HCM 7th Edition	EB Left	0.151	7.6	A
103	Hermiston-Hinkle Rd / Driveway	Two-way stop	HCM 7th Edition	EB Left	0.059	9.0	A
104	Feedville Rd & Driveway	Two-way stop	HCM 7th Edition	SB Left	0.007	13.7	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 1: OR-207 & Feedville Rd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 161.0
Level Of Service: F
Volume to Capacity (v/c): 0.890

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	8	302	146	178	220	5	6	5	9	160	6	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	25.00	10.00	20.00	21.00	5.00	0.00	0.00	0.00	22.00	6.00	20.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	302	146	178	220	5	6	5	9	160	6	195
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	79	38	46	57	1	2	1	2	42	2	51
Total Analysis Volume [veh/h]	8	315	152	185	229	5	6	5	9	167	6	203
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.18	0.00	0.00	0.06	0.03	0.01	0.89	0.03	0.28
d_M, Delay for Movement [s/veh]	8.00	0.00	0.00	9.41	0.00	0.00	40.72	27.19	11.58	160.96	159.71	146.78
Movement LOS	A	A	A	A	A	A	E	D	B	F	F	F
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.67	0.00	0.00	0.32	0.32	0.32	16.48	16.48	16.48
95th-Percentile Queue Length [ft/ln]	0.50	0.00	0.00	16.87	0.00	0.00	7.91	7.91	7.91	411.94	411.94	411.94
d_A, Approach Delay [s/veh]	0.13			4.15			24.22			153.29		
Approach LOS	A			A			C			F		
d_I, Intersection Delay [s/veh]	46.45											
Intersection LOS	F											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 2: Hermiston-Hinkle Rd & Feedville Rd

Control Type:	All-way stop	Delay (sec / veh):	15.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.601

Intersection Setup

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Base Volume Input [veh/h]	27	34	21	40	13	150	119	100	10	9	214	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	14.00	0.00	0.00	9.00	0.00	7.00	10.00	21.00	100.00	0.00	3.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	34	21	40	13	150	119	100	10	9	214	60
Peak Hour Factor	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	11	7	14	4	51	40	34	3	3	72	20
Total Analysis Volume [veh/h]	36	46	28	54	18	203	161	135	14	12	289	81
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings				
Lanes				
Capacity per Entry Lane [veh/h]	544	608	578	636
Degree of Utilization, x	0.20	0.45	0.54	0.60
Movement, Approach, & Intersection Results				
95th-Percentile Queue Length [veh]	0.75	2.34	3.17	4.01
95th-Percentile Queue Length [ft]	18.73	58.62	79.21	100.18
Approach Delay [s/veh]	11.28	13.71	16.19	16.81
Approach LOS	B	B	C	C
Intersection Delay [s/veh]	15.28			
Intersection LOS	C			

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 3: Kelli Rd & Feedville Rd & Site Driveway

Control Type:	Two-way stop	Delay (sec / veh):	19.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.175

Intersection Setup

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	0	0	0	31	0	34	40	116	0	0	188	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	4.00	0.00	0.00	23.00	12.00	0.00	0.00	1.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	31	0	34	40	116	0	0	188	92
Peak Hour Factor	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	13	0	15	17	50	0	0	81	40
Total Analysis Volume [veh/h]	0	0	0	53	0	59	69	200	0	0	324	159
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.17	0.00	0.09	0.07	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.46	17.55	9.26	19.92	19.34	13.58	8.76	0.00	0.00	7.60	0.00	0.00
Movement LOS	C	C	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.05	1.05	1.05	0.12	0.12	0.12	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	26.37	26.37	26.37	2.99	2.99	2.99	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.09			16.58			2.25			0.00		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	2.85											
Intersection LOS	C											

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Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 4: Hinkle Motel Rd & Ott Rd & Feedville Rd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 11.9
Level Of Service: B
Volume to Capacity (v/c): 0.002

Intersection Setup

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	1	1	1	2	0	4	6	158	1	0	110	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	25.00	33.00	7.00	0.00	0.00	11.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	1	2	0	4	6	158	1	0	110	1
Peak Hour Factor	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	1	2	59	0	0	41	0
Total Analysis Volume [veh/h]	1	1	1	3	0	6	9	236	1	0	164	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.73	11.91	9.49	11.72	11.94	9.44	7.90	0.00	0.00	7.68	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.04	0.04	0.04	0.02	0.02	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.38	0.38	0.38	0.97	0.97	0.97	0.38	0.38	0.38	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.04			10.20			0.29			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.46											
Intersection LOS	B											

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HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 92.9
Level Of Service: F
Volume to Capacity (v/c): 0.069

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	42	545	6	34	651	61	34	25	104	3	8	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	10.00	0.00	21.00	10.00	0.00	8.00	11.00	2.00	100.00	17.00	15.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	545	6	34	651	61	34	25	104	3	8	28
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	148	2	9	177	17	9	7	28	1	2	8
Total Analysis Volume [veh/h]	46	592	7	37	708	66	37	27	113	3	9	30
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.01	0.00	0.04	0.01	0.00	0.34	0.26	0.18	0.07	0.10	0.05
d_M, Delay for Movement [s/veh]	9.47	0.00	0.00	9.40	0.00	0.00	75.96	77.63	48.86	92.87	49.51	15.33
Movement LOS	A	A	A	A	A	A	F	F	E	F	E	C
95th-Percentile Queue Length [veh/ln]	0.17	0.00	0.00	0.14	0.00	0.00	5.49	5.49	5.49	0.78	0.78	0.78
95th-Percentile Queue Length [ft/ln]	4.28	0.00	0.00	3.39	0.00	0.00	137.15	137.15	137.15	19.56	19.56	19.56
d_A, Approach Delay [s/veh]	0.68			0.43			58.91			28.19		
Approach LOS	A			A			F			D		
d_I, Intersection Delay [s/veh]	7.40											
Intersection LOS	F											

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HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 6: US 395 & SE Kelli Blvd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 983.2
Level Of Service: F
Volume to Capacity (v/c): 2.969

Intersection Setup

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	450.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Base Volume Input [veh/h]	8	759	0	0	773	89	319	0	17	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	52.00	6.00	0.00	0.00	7.00	6.00	2.00	0.00	43.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	759	0	0	773	89	319	0	17	0	0	0
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	204	0	0	208	24	86	0	5	0	0	0
Total Analysis Volume [veh/h]	9	816	0	0	831	96	343	0	18	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

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HCM 7th Edition

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Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00	2.97	0.00	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.48	0.00	0.00	9.39	0.00	0.00	983.23	992.22	960.12	34.04	47.98	11.02
Movement LOS	B	A	A	A	A	A	F	F	F	D	E	B
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.00	0.00	0.00	0.00	34.10	34.10	34.10	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.40	0.00	0.00	0.00	0.00	0.00	852.49	852.49	852.49	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.14			0.00			982.08			31.02		
Approach LOS	A			A			F			D		
d_I, Intersection Delay [s/veh]	167.84											
Intersection LOS	F											

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HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 102: Feedville Rd & Driveway

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 7.6
Level Of Service: A
Volume to Capacity (v/c): 0.151

Intersection Setup

Name	Driveway				Residential Access				Feedville Rd			
Approach	Northbound				Southbound				Eastbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name	Driveway				Residential Access				Feedville Rd			
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	237	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	237	0	0	0
Peak Hour Factor	0.9600	1.0000	0.9600	1.0000	1.0000	1.0000	1.0000	1.0000	0.9600	1.0000	1.0000	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	62	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	247	0	0	0
Pedestrian Volume [ped/h]	0				0				0			

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Intersection Settings			
Priority Scheme	Stop	Stop	Free
Flared Lane	No	No	
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results												
V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	16.15	6.67	8.89	8.32	13.73	13.67	13.90	8.32	7.59	7.61	0.00	0.00
Movement LOS	C	A	A	A	B	B	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.53	0.53	0.53
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.29	13.29	13.29	13.29
d_A, Approach Delay [s/veh]	10.01				12.41				7.59			
Approach LOS	B				B				A			
d_I, Intersection Delay [s/veh]	6.85											
Intersection LOS	A											

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Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Setup

Name	Feedville Road							
Approach	Westbound				Southwestbound			
Lane Configuration								
Turning Movement	Left	Thru	Right	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name	Feedville Road							
Base Volume Input [veh/h]	0	0	0	0	0	0	0	142
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	142
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	0.9600	1.0000	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	37
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	148
Pedestrian Volume [ped/h]	0				0			

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Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Settings

Priority Scheme	Free	Stop
Flared Lane		No
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	7.22	0.00	0.00	0.00	13.69	13.86	8.90	5.60
Movement LOS	A	A	A	A	B	B	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.07
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.85	1.85	1.85	1.85
d_A, Approach Delay [s/veh]	1.80				5.60			
Approach LOS	A				A			
d_I, Intersection Delay [s/veh]	6.85							
Intersection LOS	A							

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Hermiston, OR

Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 103: Hermiston-Hinkle Rd / Driveway

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.059

Intersection Setup

Name	Hermiston-Hinkle Road		Hermiston-Hinkle Road		S2 Driveway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hermiston-Hinkle Road		Hermiston-Hinkle Road		S2 Driveway	
Base Volume Input [veh/h]	0	25	7	25	57	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	25	7	25	57	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	2	6	14	0
Total Analysis Volume [veh/h]	0	25	7	25	57	0
Pedestrian Volume [ped/h]	0		0		0	

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Scenario 11: 11 Background PM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.06	0.00
d_M, Delay for Movement [s/veh]	7.28	0.00	0.00	0.00	8.96	8.63
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.19	0.19
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.70	4.70
d_A, Approach Delay [s/veh]	0.00		0.00		8.96	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.48					
Intersection LOS	A					

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Scenario 11: 11 Background PM 2045

Intersection Level Of Service Report Intersection 104: Feedville Rd & Driveway

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 13.7
Level Of Service: B
Volume to Capacity (v/c): 0.007

Intersection Setup

Name							Feedville Road			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Feedville Road			Feedville Rd		
Base Volume Input [veh/h]	0	0	0	2	0	1	1	161	0	0	228	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	1.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	2	0	1	1	161	0	0	228	1
Peak Hour Factor	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	61	0	0	86	0
Total Analysis Volume [veh/h]	0	0	0	3	0	2	2	244	0	0	345	2
Pedestrian Volume [ped/h]	0			0			0			0		

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Scenario 11: 11 Background PM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.63	13.59	9.50	13.67	13.65	10.20	7.95	0.00	0.00	7.70	0.00	0.00
Movement LOS	B	B	A	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.76	0.76	0.76	0.08	0.08	0.08	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.24			12.28			0.06			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.13											
Intersection LOS	B											

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Hermiston, OR

Scenario 14: 14 Background AM 2045 Mitigations

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro

Scenario 14 Background AM 2045 Mitigations

Report File: H:\...\Background AM 2045 Mitigations.pdf

8/6/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Signalized	HCM 7th Edition	NB Thru	0.491	14.9	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	WB Right	0.097	11.8	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

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Intersection Level Of Service Report Intersection 1: OR-207 & Feedville Rd

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.491

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	6	202	108	84	251	5	6	1	12	155	4	172
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	17.00	6.00	10.00	12.00	14.00	0.00	0.00	0.00	0.00	22.00	0.00	19.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	202	108	84	251	5	6	1	12	155	4	172
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	60	32	25	75	1	2	0	4	46	1	51
Total Analysis Volume [veh/h]	7	240	129	100	299	6	7	1	14	185	5	205
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Free Running (No Pattern)
Coordination Type	<i>Free Running</i>
Actuation Type	<i>Fully actuated</i>
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Maximum Green [s]	10	40	0	10	40	0	0	25	0	0	25	0
Amber [s]	5.0	5.0	0.0	5.0	5.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	11	0	0	11	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Free Running (No Pattern)

Split [s]	9	14	0	9	14	0	0	14	0	0	14	0
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C
C, Cycle Length [s]	44	44	44	44	44	44	44	44
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	19	10	10	19	13	14	14	14
g / C, Green / Cycle	0.44	0.22	0.22	0.44	0.30	0.31	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.01	0.14	0.09	0.09	0.20	0.02	0.16	0.14
s, saturation flow rate [veh/h]	1058	1667	1370	1156	1551	1146	1174	1493
c, Capacity [veh/h]	534	375	308	623	459	463	293	464
d1, Uniform Delay [s]	7.60	15.56	14.71	7.81	13.68	10.78	14.81	12.26
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	1.83	0.91	0.12	1.66	0.04	2.25	0.69
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.64	0.42	0.16	0.66	0.05	0.63	0.45
d, Delay for Lane Group [s/veh]	7.61	17.39	15.61	7.93	15.34	10.82	17.07	12.95
Lane Group LOS	A	B	B	A	B	B	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.02	1.79	0.89	0.35	2.05	0.13	1.60	1.40
50th-Percentile Queue Length [ft/ln]	0.57	44.87	22.32	8.72	51.33	3.13	40.12	34.98
95th-Percentile Queue Length [veh/ln]	0.04	3.23	1.61	0.63	3.70	0.23	2.89	2.52
95th-Percentile Queue Length [ft/ln]	1.03	80.77	40.17	15.70	92.40	5.63	72.22	62.97

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Version 2024 (SP 0-1)

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.61	17.39	15.61	7.93	15.34	15.34	10.82	10.82	10.82	17.07	12.95	12.95
Movement LOS	A	B	B	A	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	16.60			13.51			10.82			14.88		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	14.88											
Intersection LOS	B											
Intersection V/C	0.491											

Emissions

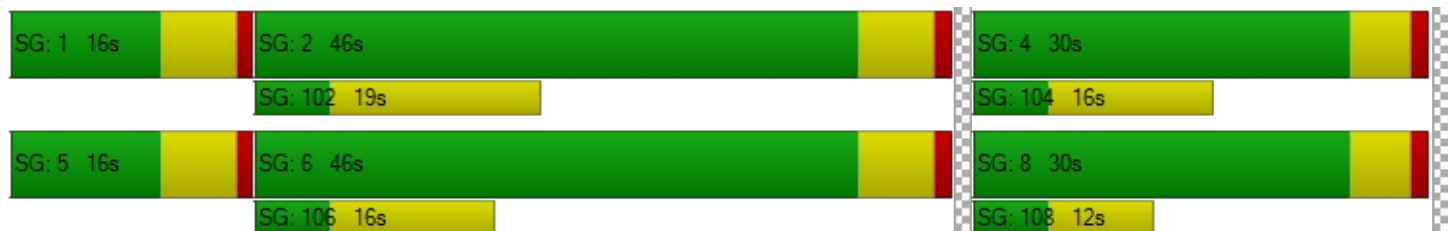
Vehicle Miles Traveled [mph]	0.68	23.38	12.57	13.25	40.41	8.11	80.07	90.89
Stops [stops/h]	1.87	146.23	72.72	28.43	167.28	10.18	130.76	114.00
Fuel consumption [US gal/h]	0.06	3.88	1.95	1.04	4.87	0.43	4.68	4.88
CO [g/h]	4.36	271.01	136.11	72.80	340.65	30.34	326.99	340.77
NOx [g/h]	0.85	52.73	26.48	14.16	66.28	5.90	63.62	66.30
VOC [g/h]	1.01	62.81	31.54	16.87	78.95	7.03	75.78	78.98

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	14.01	14.01	14.01	14.01
I_p,int, Pedestrian LOS Score for Intersectio	2.712	2.378	1.704	2.179
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1810	1810	1132	1132
d_b, Bicycle Delay [s]	0.20	0.20	4.17	4.17
I_b,int, Bicycle LOS Score for Intersection	2.180	2.228	1.596	2.211
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 14: 14 Background AM 2045 Mitigations

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 11.8
Level Of Service: B
Volume to Capacity (v/c): 0.097

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	68	622	2	11	386	44	0	0	95	0	0	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	15.00	6.00	50.00	25.00	11.00	6.00	0.00	0.00	14.00	0.00	0.00	13.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	68	622	2	11	386	44	0	0	95	0	0	47
Peak Hour Factor	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	190	1	3	118	13	0	0	29	0	0	14
Total Analysis Volume [veh/h]	83	759	2	13	471	54	0	0	116	0	0	57
Pedestrian Volume [ped/h]	0			0			0			0		

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Scenario 14: 14 Background AM 2045 Mitigations

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.10
d_M, Delay for Movement [s/veh]	9.14	0.00	0.00	10.15	0.00	0.00	28.85	35.24	10.85	37.63	37.17	11.78
Movement LOS	A	A	A	B	A	A	D	E	B	E	E	B
95th-Percentile Queue Length [veh/ln]	0.29	0.00	0.00	0.06	0.00	0.00	0.00	0.56	0.56	0.00	0.32	0.32
95th-Percentile Queue Length [ft/ln]	7.14	0.00	0.00	1.39	0.00	0.00	0.00	14.05	14.05	0.00	8.01	8.01
d_A, Approach Delay [s/veh]	0.90			0.25			10.85			11.78		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.81											
Intersection LOS	B											

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Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Hermiston, OR

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Scenario 15 Background PM 2045 Mitigations

Report File: H:\...\Background PM 2045 Mitigations.pdf

8/1/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Signalized	HCM 7th Edition	NB Thru	0.600	16.4	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	EB Right	0.280	12.9	B
6	US 395 & SE Kelli Blvd	Two-way stop	HCM 7th Edition	EB Right	0.673	24.4	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Version 2024 (SP 0-1)

Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Intersection Level Of Service Report
Intersection 1: OR-207 & Feedville Rd

Control Type:

Signalized

Delay (sec / veh):

16.4

Analysis Method:

HCM 7th Edition

Level Of Service:

B

Analysis Period:

15 minutes

Volume to Capacity (v/c):

0.600

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	8	302	146	178	220	5	6	5	9	160	6	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	25.00	10.00	20.00	21.00	5.00	0.00	0.00	0.00	22.00	6.00	20.00	5.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	302	146	178	220	5	6	5	9	160	6	195
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	79	38	46	57	1	2	1	2	42	2	51
Total Analysis Volume [veh/h]	8	315	152	185	229	5	6	5	9	167	6	203
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Appendix D

Generated with **PTV VISTRO**

UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Free Running (No Pattern)
Coordination Type	<i>Free Running</i>
Actuation Type	<i>Fully actuated</i>
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Maximum Green [s]	10	40	0	10	40	0	0	25	0	0	25	0
Amber [s]	5.0	5.0	0.0	5.0	5.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	11	0	0	11	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Free Running (No Pattern)

Split [s]	9	14	0	9	14	0	0	14	0	0	14	0
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Appendix D

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C
C, Cycle Length [s]	50	50	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	24	12	12	24	18	15	15	15
g / C, Green / Cycle	0.48	0.25	0.25	0.48	0.35	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.12	0.18	0.14	0.02	0.12	0.17
s, saturation flow rate [veh/h]	1011	1612	1252	1028	1675	1022	1355	1258
c, Capacity [veh/h]	593	400	311	557	587	400	237	378
d1, Uniform Delay [s]	7.05	17.69	16.20	8.80	12.34	12.71	17.06	14.77
k, delay calibration	0.11	0.11	0.11	0.22	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	3.50	1.19	0.71	0.44	0.05	3.78	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.79	0.49	0.33	0.40	0.05	0.70	0.55
d, Delay for Lane Group [s/veh]	7.06	21.18	17.39	9.51	12.78	12.77	20.84	16.04
Lane Group LOS	A	C	B	A	B	B	C	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.03	3.01	1.26	0.85	1.51	0.14	1.79	1.80
50th-Percentile Queue Length [ft/ln]	0.73	75.35	31.58	21.19	37.66	3.50	44.78	44.92
95th-Percentile Queue Length [veh/ln]	0.05	5.43	2.27	1.53	2.71	0.25	3.22	3.23
95th-Percentile Queue Length [ft/ln]	1.32	135.64	56.85	38.15	67.79	6.31	80.60	80.86

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.06	21.18	17.39	9.51	12.78	12.78	12.77	12.77	12.77	20.84	16.04	16.04
Movement LOS	A	C	B	A	B	B	B	B	B	C	B	B
d_A, Approach Delay [s/veh]	19.73			11.34			12.77			18.17		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	16.44											
Intersection LOS	B											
Intersection V/C	0.600											

Emissions

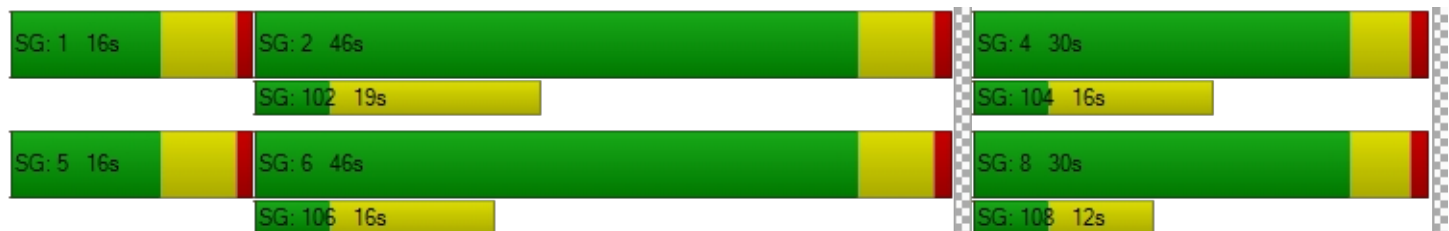
Vehicle Miles Traveled [mph]	0.78	30.69	14.81	24.51	31.00	7.37	72.28	90.45
Stops [stops/h]	2.10	216.21	90.63	60.81	108.06	10.05	128.48	128.89
Fuel consumption [US gal/h]	0.07	5.70	2.43	2.11	3.31	0.41	4.43	5.10
CO [g/h]	4.88	398.75	169.51	147.67	231.07	28.56	309.61	356.45
NOx [g/h]	0.95	77.58	32.98	28.73	44.96	5.56	60.24	69.35
VOC [g/h]	1.13	92.41	39.29	34.22	53.55	6.62	71.76	82.61

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	16.90	16.90	16.90	16.90
I_p,int, Pedestrian LOS Score for Intersectio	2.697	2.430	1.712	2.259
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1594	1594	996	996
d_b, Bicycle Delay [s]	1.03	1.03	6.32	6.32
I_b,int, Bicycle LOS Score for Intersection	2.343	2.251	1.593	2.180
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix D

Generated with **PTV VISTRO**

UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 12.9
Level Of Service: B
Volume to Capacity (v/c): 0.280

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	42	579	31	34	654	69	0	0	163	0	0	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	10.00	0.00	21.00	10.00	0.00	0.00	0.00	5.00	0.00	0.00	21.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	579	31	34	654	69	0	0	163	0	0	39
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	157	8	9	178	19	0	0	44	0	0	11
Total Analysis Volume [veh/h]	46	629	34	37	711	75	0	0	177	0	0	42
Pedestrian Volume [ped/h]	0			0			0			0		

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.28	0.00	0.00	0.07
d_M, Delay for Movement [s/veh]	9.52	0.00	0.00	9.69	0.00	0.00	34.48	41.45	12.89	40.65	41.69	11.14
Movement LOS	A	A	A	A	A	A	D	E	B	E	E	B
95th-Percentile Queue Length [veh/ln]	0.17	0.00	0.00	0.14	0.00	0.00	0.00	1.14	1.14	0.00	0.21	0.21
95th-Percentile Queue Length [ft/ln]	4.33	0.00	0.00	3.61	0.00	0.00	0.00	28.58	28.58	0.00	5.36	5.36
d_A, Approach Delay [s/veh]	0.62			0.44			12.89			11.14		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.03											
Intersection LOS	B											

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Intersection Level Of Service Report Intersection 6: US 395 & SE Kelli Blvd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 24.4
Level Of Service: C
Volume to Capacity (v/c): 0.673

Intersection Setup

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	450.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Base Volume Input [veh/h]	0	1086	0	0	773	97	0	0	336	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	52.00	6.00	0.00	0.00	7.00	6.00	0.00	0.00	4.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1086	0	0	773	97	0	0	336	0	0	0
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	292	0	0	208	26	0	0	90	0	0	0
Total Analysis Volume [veh/h]	0	1168	0	0	831	104	0	0	361	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Appendix D

Generated with **PTV VISTRO**

UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 15: 15 Background PM 2045 Mitigations

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.67	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.41	0.00	0.00	10.95	0.00	0.00	57.31	81.62	24.40	152.78	73.92	12.83
Movement LOS	B	A	A	B	A	A	F	F	C	F	F	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	5.02	5.02	5.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	125.47	125.47	125.47	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.00			24.40			79.84		
Approach LOS	A			A			C			F		
d_I, Intersection Delay [s/veh]	3.58											
Intersection LOS	C											

Appendix E 2045 UGB Expansion Traffic
Operations Worksheets

Appendix D

Generated with **PTV VISTRO**
Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 12: 12 Full Build AM 2045

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro
Report File: H:\...\Full Build AM 2045.pdf

Scenario 12 Full Build AM 2045
8/6/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Two-way stop	HCM 7th Edition	WB Left	0.888	154.4	F
2	Hermiston-Hinkle Rd & Feedville Rd	All-way stop	HCM 7th Edition	EB Thru	0.716	17.0	C
3	Kelli Rd & Feedville Rd & Site Driveway	Two-way stop	HCM 7th Edition	NB Left	0.132	21.8	C
4	Hinkle Motel Rd & Ott Rd & Feedville Rd	Two-way stop	HCM 7th Edition	NB Thru	0.006	15.1	C
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	EB Thru	0.024	94.2	F
102	Feedville Rd & Driveway	Two-way stop	HCM 7th Edition	NB Left	0.257	33.3	D
103	Hermiston-Hinkle Rd / Driveway	Two-way stop	HCM 7th Edition	EB Left	0.046	9.0	A
104	Feedville Rd & Driveway	Two-way stop	HCM 7th Edition	SB Left	0.011	14.6	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Level Of Service Report Intersection 1: OR-207 & Feedville Rd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 154.4
Level Of Service: F
Volume to Capacity (v/c): 0.888

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	6	202	131	109	251	5	6	1	12	173	4	192
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	17.00	6.00	10.00	12.00	14.00	0.00	0.00	0.00	0.00	22.00	0.00	19.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	202	131	109	251	5	6	1	12	173	4	192
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	60	39	32	75	1	2	0	4	51	1	57
Total Analysis Volume [veh/h]	7	240	156	130	299	6	7	1	14	206	5	229
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.12	0.00	0.00	0.05	0.00	0.02	0.89	0.02	0.30
d_M, Delay for Movement [s/veh]	8.08	0.00	0.00	8.67	0.00	0.00	33.17	22.14	10.87	154.44	152.04	143.66
Movement LOS	A	A	A	A	A	A	D	C	B	F	F	F
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.40	0.00	0.00	0.25	0.25	0.25	18.43	18.43	18.43
95th-Percentile Queue Length [ft/ln]	0.45	0.00	0.00	9.91	0.00	0.00	6.13	6.13	6.13	460.86	460.86	460.86
d_A, Approach Delay [s/veh]	0.14			2.59			18.48			148.80		
Approach LOS	A			A			C			F		
d_I, Intersection Delay [s/veh]	51.59											
Intersection LOS	F											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Level Of Service Report

Intersection 2: Hermiston-Hinkle Rd & Feedville Rd

Control Type:	All-way stop	Delay (sec / veh):	17.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.716

Intersection Setup

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Base Volume Input [veh/h]	22	20	14	73	30	100	153	155	24	18	100	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	33.00	0.00	100.00	21.00	0.00	5.00	0.00	11.00	20.00	50.00	21.00	15.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	20	14	73	30	100	153	155	24	18	100	49
Peak Hour Factor	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	7	5	25	10	34	52	53	8	6	34	17
Total Analysis Volume [veh/h]	30	27	19	100	41	137	210	212	33	25	137	67
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings				
Lanes				
Capacity per Entry Lane [veh/h]	501	597	636	589
Degree of Utilization, x	0.15	0.47	0.72	0.39
Movement, Approach, & Intersection Results				
95th-Percentile Queue Length [veh]	0.53	2.47	5.97	1.83
95th-Percentile Queue Length [ft]	13.26	61.64	149.25	45.84
Approach Delay [s/veh]	11.46	14.19	21.60	12.95
Approach LOS	B	B	C	B
Intersection Delay [s/veh]	16.96			
Intersection LOS	C			

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Level Of Service Report Intersection 3: Kelli Rd & Feedville Rd & Site Driveway

Control Type:	Two-way stop	Delay (sec / veh):	21.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.132

Intersection Setup

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	24	21	24	16	25	45	58	117	29	29	123	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	8.00	0.00	40.00	11.00	16.00	0.00	0.00	17.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	21	24	16	25	45	58	117	29	29	123	15
Peak Hour Factor	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	8	9	6	9	17	21	43	11	11	45	6
Total Analysis Volume [veh/h]	35	31	35	24	37	66	85	172	43	43	181	22
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.09	0.04	0.08	0.11	0.09	0.06	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	21.85	18.63	12.50	20.72	18.52	12.76	7.84	0.00	0.00	7.68	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.03	1.03	1.03	1.13	1.13	1.13	0.15	0.15	0.15	0.08	0.08	0.08
95th-Percentile Queue Length [ft/ln]	25.87	25.87	25.87	28.25	28.25	28.25	3.87	3.87	3.87	1.88	1.88	1.88
d_A, Approach Delay [s/veh]	17.62			15.94			2.22			1.34		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	6.20											
Intersection LOS	C											

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 12: 12 Full Build AM 2045

Intersection Level Of Service Report Intersection 4: Hinkle Motel Rd & Ott Rd & Feedville Rd

Control Type:	Two-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	1	1	1	0	1	22	11	127	0	0	145	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	100.00	0.00	0.00	0.00	10.00	0.00	19.00	0.00	0.00	16.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	1	0	1	22	11	127	0	0	145	5
Peak Hour Factor	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	9	4	51	0	0	58	2
Total Analysis Volume [veh/h]	2	2	2	0	2	35	18	205	0	0	234	8
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.99	15.07	9.37	12.63	12.72	9.85	7.71	0.00	0.00	7.61	0.00	0.00
Movement LOS	B	C	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.15	0.15	0.15	0.03	0.03	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.93	0.93	0.93	3.85	3.85	3.85	0.76	0.76	0.76	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.48			10.01			0.62			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.15											
Intersection LOS	C											

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Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 94.2
Level Of Service: F
Volume to Capacity (v/c): 0.024

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	108	615	1	11	380	30	7	1	120	6	14	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	15.00	6.00	0.00	25.00	11.00	0.00	0.00	100.00	14.00	50.00	20.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	108	615	1	11	380	30	7	1	120	6	14	27
Peak Hour Factor	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	188	0	3	116	9	2	0	37	2	4	8
Total Analysis Volume [veh/h]	132	750	1	13	463	37	9	1	146	7	17	33
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

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Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.01	0.00	0.02	0.00	0.00	0.09	0.02	0.20	0.13	0.21	0.05
d_M, Delay for Movement [s/veh]	9.27	0.00	0.00	10.10	0.00	0.00	42.50	94.24	13.04	84.32	63.52	25.29
Movement LOS	A	A	A	B	A	A	E	F	B	F	F	D
95th-Percentile Queue Length [veh/ln]	0.47	0.00	0.00	0.06	0.00	0.00	1.30	1.30	1.30	1.65	1.65	1.65
95th-Percentile Queue Length [ft/ln]	11.70	0.00	0.00	1.38	0.00	0.00	32.48	32.48	32.48	41.17	41.17	41.17
d_A, Approach Delay [s/veh]	1.39			0.26			15.26			43.94		
Approach LOS	A			A			C			E		
d_I, Intersection Delay [s/veh]	3.88											
Intersection LOS	F											

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HCM 7th Edition

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Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Level Of Service Report Intersection 102: Feedville Rd & Driveway

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 33.3
Level Of Service: D
Volume to Capacity (v/c): 0.257

Intersection Setup

Name	Driveway				Residential Access				Feedville Rd			
Approach	Northbound				Southbound				Eastbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name	Driveway				Residential Access				Feedville Rd			
Base Volume Input [veh/h]	34	0	0	34	0	0	0	0	75	0	125	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.00	0.00	0.00	2.00	0.00	2.00	2.00	0.00	2.00	10.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	0	0	34	0	0	0	0	75	0	125	42
Peak Hour Factor	0.8300	1.0000	0.8300	0.8300	1.0000	1.0000	1.0000	1.0000	0.8300	1.0000	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	0	10	0	0	0	0	23	0	38	13
Total Analysis Volume [veh/h]	41	0	0	41	0	0	0	0	90	0	151	51
Pedestrian Volume [ped/h]	0				0				0			

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free
Flared Lane	No	No	
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.26	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	33.34	13.18	15.40	14.87	16.32	16.24	15.67	9.18	7.76	7.78	0.00	0.00
Movement LOS	D	B	C	B	C	C	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.25	1.25	1.25	1.25	0.00	0.00	0.00	0.00	0.17	0.17	0.17	0.17
95th-Percentile Queue Length [ft/ln]	31.16	31.16	31.16	31.16	0.00	0.00	0.00	0.00	4.15	4.15	4.15	4.15
d_A, Approach Delay [s/veh]	24.10				14.35				2.39			
Approach LOS	C				B				A			
d_I, Intersection Delay [s/veh]	12.14											
Intersection LOS	D											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Setup

Name	Feedville Road				Driveway			
Approach	Westbound				Southwestbound			
Lane Configuration								
Turning Movement	Left	Thru	Right	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name	Feedville Road				Driveway			
Base Volume Input [veh/h]	42	119	62	0	177	0	0	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	16.00	0.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	119	62	0	177	0	0	217
Peak Hour Factor	0.8300	0.8300	0.8300	1.0000	0.8300	0.8300	1.0000	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	36	19	0	53	0	0	65
Total Analysis Volume [veh/h]	51	143	75	0	213	0	0	261
Pedestrian Volume [ped/h]	0				0			

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Settings

Priority Scheme	Free	Stop
Flared Lane		No
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.00	0.00	0.00	0.66	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	7.67	0.00	0.00	0.00	28.02	27.91	21.47	17.35
Movement LOS	A	A	A	A	D	D	C	C
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.09	0.09	5.82	5.82	5.82	5.82
95th-Percentile Queue Length [ft/ln]	2.34	2.34	2.34	2.34	145.44	145.44	145.44	145.44
d_A, Approach Delay [s/veh]	1.45				22.14			
Approach LOS	A				C			
d_I, Intersection Delay [s/veh]	12.14							
Intersection LOS	D							

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Level Of Service Report Intersection 103: Hermiston-Hinkle Rd / Driveway

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.046

Intersection Setup

Name	Hermiston-Hinkle Road		Hermiston-Hinkle Road		S2 Driveway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hermiston-Hinkle Road		Hermiston-Hinkle Road		S2 Driveway	
Base Volume Input [veh/h]	0	12	18	54	44	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	12	18	54	44	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	5	14	11	0
Total Analysis Volume [veh/h]	0	12	18	54	44	0
Pedestrian Volume [ped/h]	0		0		0	

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	0.00	0.00	8.97	8.70
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.15	0.15
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.64	3.64
d_A, Approach Delay [s/veh]	0.00		0.00		8.97	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.08					
Intersection LOS	A					

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Level Of Service Report Intersection 104: Feedville Rd & Driveway

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 14.6
Level Of Service: B
Volume to Capacity (v/c): 0.011

Intersection Setup

Name	Driveway			Driveway			Feedville Road			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Driveway			Feedville Road			Feedville Rd		
Base Volume Input [veh/h]	12	0	22	3	0	1	1	193	15	27	165	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.00	0.00	0.00	23.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	0	22	3	0	1	1	193	15	27	165	3
Peak Hour Factor	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100	0.7100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	8	1	0	0	0	68	5	10	58	1
Total Analysis Volume [veh/h]	17	0	31	4	0	1	1	272	21	38	232	4
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 12: 12 Full Build AM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	14.48	14.46	10.29	14.60	14.10	9.55	7.68	0.00	0.00	7.86	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.27	0.27	0.27	0.04	0.04	0.04	0.00	0.00	0.00	0.06	0.06	0.06
95th-Percentile Queue Length [ft/ln]	6.75	6.75	6.75	0.89	0.89	0.89	0.04	0.04	0.04	1.62	1.62	1.62
d_A, Approach Delay [s/veh]	11.77			13.59			0.03			1.09		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.51											
Intersection LOS	B											

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 13: 13 Full Build PM 2045

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro
Report File: H:\...\Full Build PM 2045.pdf

Scenario 13 Full Build PM 2045
7/30/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Two-way stop	HCM 7th Edition	WB Left	1.083	254.7	F
2	Hermiston-Hinkle Rd & Feedville Rd	All-way stop	HCM 7th Edition	WB Thru	0.777	22.9	C
3	Kelli Rd & Feedville Rd & Site Driveway	Two-way stop	HCM 7th Edition	NB Left	0.339	51.4	F
4	Hinkle Motel Rd & Ott Rd & Feedville Rd	Two-way stop	HCM 7th Edition	NB Left	0.002	13.6	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	WB Left	0.087	115.2	F
6	US 395 & SE Kelli Blvd	Two-way stop	HCM 7th Edition	EB Left	3.592	1,264.3	F
102	Feedville Rd & Driveway	Two-way stop	HCM 7th Edition	NB Left	1.956	733.0	F
103	Hermiston-Hinkle Rd / Driveway	Two-way stop	HCM 7th Edition	EB Left	0.059	9.0	A
104	Feedville Rd & Driveway	Two-way stop	HCM 7th Edition	SB Left	0.010	17.4	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Level Of Service Report Intersection 1: OR-207 & Feedville Rd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 254.7
Level Of Service: F
Volume to Capacity (v/c): 1.083

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	8	302	157	189	220	5	6	5	9	184	6	221
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	25.00	10.00	20.00	21.00	5.00	0.00	0.00	0.00	22.00	6.00	20.00	5.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	302	157	189	220	5	6	5	9	184	6	221
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	79	41	49	57	1	2	1	2	48	2	58
Total Analysis Volume [veh/h]	8	315	164	197	229	5	6	5	9	192	6	230
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.20	0.00	0.00	0.06	0.03	0.01	1.08	0.03	0.32
d_M, Delay for Movement [s/veh]	8.00	0.00	0.00	9.53	0.00	0.00	46.28	29.03	12.03	254.72	253.29	239.43
Movement LOS	A	A	A	A	A	A	E	D	B	F	F	F
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.74	0.00	0.00	0.35	0.35	0.35	23.14	23.14	23.14
95th-Percentile Queue Length [ft/ln]	0.50	0.00	0.00	18.46	0.00	0.00	8.84	8.84	8.84	578.46	578.46	578.46
d_A, Approach Delay [s/veh]	0.13			4.36			26.55			246.48		
Approach LOS	A			A			D			F		
d_I, Intersection Delay [s/veh]	79.04											
Intersection LOS	F											

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HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Level Of Service Report Intersection 2: Hermiston-Hinkle Rd & Feedville Rd

Control Type:	All-way stop	Delay (sec / veh):	22.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.777

Intersection Setup

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hermiston-Hinkle Road			Hermiston-Hinkle Road			Feedville Road			Feedville Road		
Base Volume Input [veh/h]	27	34	21	57	13	161	145	121	10	9	228	100
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	14.00	0.00	0.00	9.00	0.00	7.00	10.00	21.00	100.00	0.00	3.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	34	21	57	13	161	145	121	10	9	228	100
Peak Hour Factor	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	11	7	19	4	54	49	41	3	3	77	34
Total Analysis Volume [veh/h]	36	46	28	77	18	218	196	164	14	12	308	135
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	477	545	531	586
Degree of Utilization, x	0.23	0.57	0.70	0.78

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.88	3.60	5.57	7.24
95th-Percentile Queue Length [ft]	22.04	90.07	139.34	180.95
Approach Delay [s/veh]	12.79	18.15	24.37	27.27
Approach LOS	B	C	C	D
Intersection Delay [s/veh]	22.85			
Intersection LOS	C			

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Level Of Service Report Intersection 3: Kelli Rd & Feedville Rd & Site Driveway

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 51.4
Level Of Service: F
Volume to Capacity (v/c): 0.339

Intersection Setup

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Kelli Blvd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	31	27	31	31	11	44	63	141	13	14	199	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	4.00	0.00	0.00	23.00	12.00	0.00	0.00	1.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	27	31	31	11	44	63	141	13	14	199	92
Peak Hour Factor	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	12	13	13	5	19	27	61	6	6	86	40
Total Analysis Volume [veh/h]	53	47	53	53	19	76	109	243	22	24	343	159
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

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Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.34	0.23	0.07	0.38	0.09	0.12	0.11	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	51.37	46.30	32.93	49.21	39.72	29.04	8.87	0.00	0.00	7.78	0.00	0.00
Movement LOS	F	E	D	E	E	D	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	3.91	3.91	3.91	3.38	3.38	3.38	0.20	0.20	0.20	0.04	0.04	0.04
95th-Percentile Queue Length [ft/ln]	97.74	97.74	97.74	84.40	84.40	84.40	4.92	4.92	4.92	1.08	1.08	1.08
d_A, Approach Delay [s/veh]	43.43			37.63			2.59			0.35		
Approach LOS	E			E			A			A		
d_I, Intersection Delay [s/veh]	11.13											
Intersection LOS	F											

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HCM 7th Edition

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Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Level Of Service Report Intersection 4: Hinkle Motel Rd & Ott Rd & Feedville Rd

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hinkle Motel Rd			Ott Rd			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	1	1	1	2	0	10	20	200	1	0	129	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	25.00	33.00	7.00	0.00	0.00	11.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	1	2	0	10	20	200	1	0	129	1
Peak Hour Factor	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700	0.6700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	4	7	75	0	0	48	0
Total Analysis Volume [veh/h]	1	1	1	3	0	15	30	299	1	0	193	1
Pedestrian Volume [ped/h]	0			0			0			0		

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Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.61	13.41	9.88	13.48	13.50	9.68	8.00	0.00	0.00	7.83	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.08	0.08	0.08	0.05	0.05	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.46	0.46	0.46	1.99	1.99	1.99	1.27	1.27	1.27	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.30			10.31			0.73			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.85											
Intersection LOS	B											

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Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 115.2
Level Of Service: F
Volume to Capacity (v/c): 0.087

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	61	545	6	34	651	61	34	25	146	3	8	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	10.00	0.00	21.00	10.00	0.00	8.00	11.00	2.00	100.00	17.00	15.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	545	6	34	651	61	34	25	146	3	8	28
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	148	2	9	177	17	9	7	40	1	2	8
Total Analysis Volume [veh/h]	66	592	7	37	708	66	37	27	159	3	9	30
Pedestrian Volume [ped/h]	0			0			0			0		

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Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.01	0.00	0.04	0.01	0.00	0.37	0.28	0.25	0.09	0.11	0.05
d_M, Delay for Movement [s/veh]	9.59	0.00	0.00	9.40	0.00	0.00	98.49	99.67	67.92	115.19	54.46	16.78
Movement LOS	A	A	A	A	A	A	F	F	F	F	F	C
95th-Percentile Queue Length [veh/ln]	0.25	0.00	0.00	0.14	0.00	0.00	7.72	7.72	7.72	0.90	0.90	0.90
95th-Percentile Queue Length [ft/ln]	6.29	0.00	0.00	3.39	0.00	0.00	192.97	192.97	192.97	22.42	22.42	22.42
d_A, Approach Delay [s/veh]	0.95			0.43			76.83			31.88		
Approach LOS	A			A			F			D		
d_I, Intersection Delay [s/veh]	11.17											
Intersection LOS	F											

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Scenario 13: 13 Full Build PM 2045

Intersection Level Of Service Report Intersection 6: US 395 & SE Kelli Blvd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 1,264.3
Level Of Service: F
Volume to Capacity (v/c): 3.592

Intersection Setup

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	450.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Base Volume Input [veh/h]	8	773	0	0	779	110	369	0	17	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	52.00	6.00	0.00	0.00	7.00	6.00	2.00	0.00	43.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	773	0	0	779	110	369	0	17	0	0	0
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	208	0	0	209	30	99	0	5	0	0	0
Total Analysis Volume [veh/h]	9	831	0	0	838	118	397	0	18	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

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Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00	3.59	0.00	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.73	0.00	0.00	9.44	0.00	0.00	1264.32	1273.85	1239.99	35.02	50.79	11.09
Movement LOS	B	A	A	A	A	A	F	F	F	E	F	B
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.00	0.00	0.00	0.00	41.36	41.36	41.36	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.45	0.00	0.00	0.00	0.00	0.00	1033.96	1033.96	1033.96	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.14			0.00			1263.26			32.30		
Approach LOS	A			A			F			D		
d_I, Intersection Delay [s/veh]	237.16											
Intersection LOS	F											

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Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Level Of Service Report Intersection 102: Feedville Rd & Driveway

Control Type:	Two-way stop	Delay (sec / veh):	733.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.956

Intersection Setup

Name	Driveway				Residential Access				Feedville Rd			
Approach	Northbound				Southbound				Eastbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name	Driveway				Residential Access				Feedville Rd			
Base Volume Input [veh/h]	44	0	0	44	0	0	0	0	237	0	97	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.00	0.00	0.00	2.00	0.00	2.00	2.00	0.00	2.00	19.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	0	0	44	0	0	0	0	237	0	97	19
Peak Hour Factor	0.9600	1.0000	0.9600	0.9600	1.0000	1.0000	1.0000	1.0000	0.9600	1.0000	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	0	11	0	0	0	0	62	0	25	5
Total Analysis Volume [veh/h]	46	0	0	46	0	0	0	0	247	0	101	20
Pedestrian Volume [ped/h]	0				0				0			

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free
Flared Lane	No	No	
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.96	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	733.03	587.90	585.02	583.76	27.87	27.67	24.49	10.11	8.52	8.55	0.00	0.00
Movement LOS	F	F	F	F	D	D	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	9.42	9.42	9.42	9.42	0.00	0.00	0.00	0.00	0.49	0.49	0.49	0.49
95th-Percentile Queue Length [ft/ln]	235.59	235.59	235.59	235.59	0.00	0.00	0.00	0.00	12.36	12.36	12.36	12.36
d_A, Approach Delay [s/veh]	658.40				22.53				5.72			
Approach LOS	F				C				A			
d_I, Intersection Delay [s/veh]	128.05											
Intersection LOS	F											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Setup

Name	Feedville Road				Driveway			
Approach	Westbound				Southwestbound			
Lane Configuration								
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name	Feedville Road				Driveway			
Base Volume Input [veh/h]	19	227	194	0	116	0	142	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	4.00	0.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	227	194	0	116	0	142	0
Peak Hour Factor	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	59	51	0	30	0	37	0
Total Analysis Volume [veh/h]	20	236	202	0	121	0	148	0
Pedestrian Volume [ped/h]	0				0			

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Free	Stop
Flared Lane		No
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.74	0.00	0.84	0.00
d_M, Delay for Movement [s/veh]	7.46	0.00	0.00	0.00	332.32	332.32	330.77	317.20
Movement LOS	A	A	A	A	F	F	F	F
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.04	17.86	17.86	17.86	17.86
95th-Percentile Queue Length [ft/ln]	0.92	0.92	0.92	0.92	446.60	446.60	446.60	446.60
d_A, Approach Delay [s/veh]	0.33				331.47			
Approach LOS	A				F			
d_I, Intersection Delay [s/veh]	128.05							
Intersection LOS	F							

Appendix D

Intersection Level Of Service Report Intersection 103: Hermiston-Hinkle Rd / Driveway

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.059

Intersection Setup

Name	Hermiston-Hinkle Road		Hermiston-Hinkle Road		S2 Driveway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hermiston-Hinkle Road		Hermiston-Hinkle Road		S2 Driveway	
Base Volume Input [veh/h]	0	25	7	25	57	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	25	7	25	57	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	2	6	14	0
Total Analysis Volume [veh/h]	0	25	7	25	57	0
Pedestrian Volume [ped/h]	0		0		0	

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.06	0.00
d_M, Delay for Movement [s/veh]	7.28	0.00	0.00	0.00	8.96	8.63
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.19	0.19
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.70	4.70
d_A, Approach Delay [s/veh]	0.00		0.00		8.96	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.48					
Intersection LOS	A					

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Level Of Service Report Intersection 104: Feedville Rd & Driveway

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 17.4
Level Of Service: C
Volume to Capacity (v/c): 0.010

Intersection Setup

Name							Feedville Road			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Feedville Road			Feedville Rd		
Base Volume Input [veh/h]	15	0	30	2	0	1	1	192	7	13	267	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	1.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	30	2	0	1	1	192	7	13	267	1
Peak Hour Factor	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	11	1	0	0	0	73	3	5	101	0
Total Analysis Volume [veh/h]	23	0	45	3	0	2	2	291	11	20	405	2
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 13: 13 Full Build PM 2045

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	17.20	16.77	10.86	17.35	15.91	10.67	8.10	0.00	0.00	7.86	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.45	0.45	0.45	0.04	0.04	0.04	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	11.26	11.26	11.26	1.01	1.01	1.01	0.08	0.08	0.08	0.84	0.84	0.84
d_A, Approach Delay [s/veh]	13.01			14.68			0.05			0.37		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.41											
Intersection LOS	C											

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 16: 16 Full Build AM 2045 Mitigations

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro

Scenario 16 Full Build AM 2045 Mitigations

Report File: H:\...\Full Build AM 2045 Mitigations.pdf

8/6/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Signalized	HCM 7th Edition	NB Thru	0.518	15.7	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	WB Right	0.097	11.8	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Version 2024 (SP 0-1)

Intersection Level Of Service Report
Intersection 1: OR-207 & Feedville Rd

Control Type: Signalized

Analysis Method: HCM 7th Edition

Analysis Period: 15 minutes

Delay (sec / veh): 15.7

Level Of Service: B

Volume to Capacity (v/c): 0.518

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 16: 16 Full Build AM 2045 Mitigations

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	6	202	131	109	251	5	6	1	12	173	4	192
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	17.00	6.00	10.00	12.00	14.00	0.00	0.00	0.00	0.00	22.00	0.00	19.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	202	131	109	251	5	6	1	12	173	4	192
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	60	39	32	75	1	2	0	4	51	1	57
Total Analysis Volume [veh/h]	7	240	156	130	299	6	7	1	14	206	5	229
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 16: 16 Full Build AM 2045 Mitigations

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Free Running (No Pattern)
Coordination Type	<i>Free Running</i>
Actuation Type	<i>Fully actuated</i>
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Maximum Green [s]	10	40	0	10	40	0	0	25	0	0	25	0
Amber [s]	5.0	5.0	0.0	5.0	5.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	11	0	0	11	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Free Running (No Pattern)

Split [s]	9	14	0	9	14	0	0	14	0	0	14	0
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 16: 16 Full Build AM 2045 Mitigations

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C
C, Cycle Length [s]	46	46	46	46	46	46	46	46
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	20	10	10	20	14	15	15	15
g / C, Green / Cycle	0.43	0.21	0.21	0.43	0.29	0.33	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.01	0.14	0.11	0.11	0.20	0.02	0.18	0.16
s, saturation flow rate [veh/h]	1055	1667	1370	1151	1551	1114	1174	1492
c, Capacity [veh/h]	508	358	294	597	455	471	307	494
d1, Uniform Delay [s]	8.23	16.71	16.14	8.66	14.42	10.67	15.30	12.32
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	2.18	1.49	0.18	1.72	0.04	2.55	0.71
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.67	0.53	0.22	0.67	0.05	0.67	0.47
d, Delay for Lane Group [s/veh]	8.24	18.90	17.63	8.85	16.14	10.71	17.85	13.02
Lane Group LOS	A	B	B	A	B	B	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.03	1.98	1.23	0.53	2.23	0.13	1.91	1.63
50th-Percentile Queue Length [ft/ln]	0.65	49.62	30.78	13.22	55.68	3.20	47.87	40.63
95th-Percentile Queue Length [veh/ln]	0.05	3.57	2.22	0.95	4.01	0.23	3.45	2.93
95th-Percentile Queue Length [ft/ln]	1.18	89.31	55.40	23.80	100.22	5.77	86.16	73.13

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 16: 16 Full Build AM 2045 Mitigations

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.24	18.90	17.63	8.85	16.14	16.14	10.71	10.71	10.71	17.85	13.02	13.02
Movement LOS	A	B	B	A	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	18.22			13.96			10.71			15.28		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	15.67											
Intersection LOS	B											
Intersection V/C	0.518											

Emissions

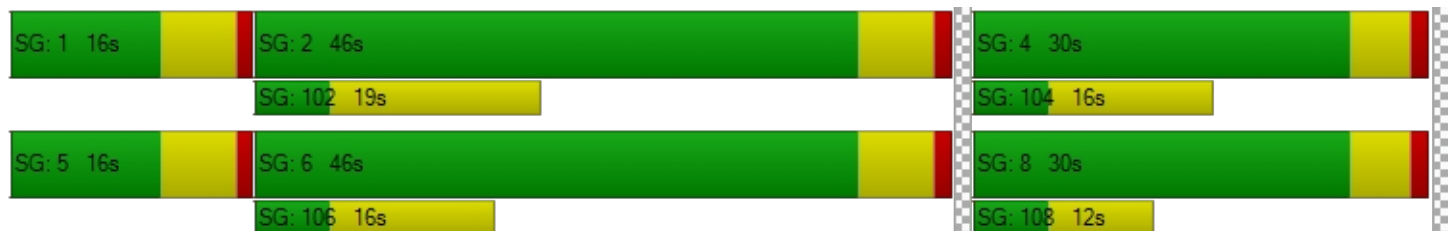
Vehicle Miles Traveled [mph]	0.68	23.38	15.20	17.22	40.41	8.11	89.16	101.27
Stops [stops/h]	2.03	154.33	95.74	41.12	173.19	9.96	148.89	126.36
Fuel consumption [US gal/h]	0.07	4.07	2.54	1.44	5.01	0.43	5.27	5.43
CO [g/h]	4.60	284.84	177.43	100.80	350.47	30.19	368.12	379.62
NOx [g/h]	0.90	55.42	34.52	19.61	68.19	5.87	71.62	73.86
VOC [g/h]	1.07	66.01	41.12	23.36	81.23	7.00	85.31	87.98

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	15.02	15.02	15.02	15.02
I_p,int, Pedestrian LOS Score for Intersectio	2.765	2.410	1.707	2.230
Crosswalk LOS	C	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1728	1728	1080	1080
d_b, Bicycle Delay [s]	0.43	0.43	4.90	4.90
I_b,int, Bicycle LOS Score for Intersection	2.225	2.277	1.596	2.286
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 16: 16 Full Build AM 2045 Mitigations

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 11.8
Level Of Service: B
Volume to Capacity (v/c): 0.097

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	108	622	2	11	386	44	0	0	128	0	0	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	15.00	6.00	50.00	25.00	11.00	6.00	0.00	0.00	14.00	0.00	0.00	13.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	108	622	2	11	386	44	0	0	128	0	0	47
Peak Hour Factor	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	190	1	3	118	13	0	0	39	0	0	14
Total Analysis Volume [veh/h]	132	759	2	13	471	54	0	0	156	0	0	57
Pedestrian Volume [ped/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 16: 16 Full Build AM 2045 Mitigations

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.10
d_M, Delay for Movement [s/veh]	9.39	0.00	0.00	10.15	0.00	0.00	34.81	41.95	11.26	48.66	43.97	11.78
Movement LOS	A	A	A	B	A	A	D	E	B	E	E	B
95th-Percentile Queue Length [veh/ln]	0.48	0.00	0.00	0.06	0.00	0.00	0.00	0.81	0.81	0.00	0.32	0.32
95th-Percentile Queue Length [ft/ln]	12.01	0.00	0.00	1.39	0.00	0.00	0.00	20.13	20.13	0.00	8.01	8.01
d_A, Approach Delay [s/veh]	1.39			0.25			11.26			11.78		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.31											
Intersection LOS	B											

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Version 2024 (SP 0-1)

UGB Expansion
Hermiston, OR

HCM 7th Edition
Scenario 17: 17 Full Build PM 2045 Mitigations

Hermiston, OR

Vistro File: H:\...\30926_Vistro.vistro

Scenario 17 Full Build PM 2045 Mitigations

Report File: H:\...\Full Build PM 2045 Mitigations.pdf

8/1/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	OR-207 & Feedville Rd	Signalized	HCM 7th Edition	NB Thru	0.625	17.8	B
5	Feedville Rd & US-395	Two-way stop	HCM 7th Edition	EB Right	0.353	13.8	B
6	US 395 & SE Kelli Blvd	Two-way stop	HCM 7th Edition	EB Right	0.786	32.4	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report				
Intersection 1: OR-207 & Feedville Rd				
Control Type:	Signalized	Delay (sec / veh):	17.8	
Analysis Method:	HCM 7th Edition	Level Of Service:	B	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625	

Intersection Setup

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 17: 17 Full Build PM 2045 Mitigations

Volumes

Name	OR-207			OR-207			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	8	302	157	189	220	5	6	5	9	184	6	221
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	25.00	10.00	20.00	21.00	5.00	0.00	0.00	0.00	22.00	6.00	20.00	5.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	302	157	189	220	5	6	5	9	184	6	221
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	79	41	49	57	1	2	1	2	48	2	58
Total Analysis Volume [veh/h]	8	315	164	197	229	5	6	5	9	192	6	230
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 17: 17 Full Build PM 2045 Mitigations

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Free Running (No Pattern)
Coordination Type	<i>Free Running</i>
Actuation Type	<i>Fully actuated</i>
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Maximum Green [s]	10	40	0	10	40	0	0	25	0	0	25	0
Amber [s]	5.0	5.0	0.0	5.0	5.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	11	0	0	11	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Free Running (No Pattern)

Split [s]	9	14	0	9	14	0	0	14	0	0	14	0
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 17: 17 Full Build PM 2045 Mitigations

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C
C, Cycle Length [s]	54	54	54	54	54	54	54	54
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	26	13	13	26	19	17	17	17
g / C, Green / Cycle	0.48	0.24	0.24	0.48	0.35	0.32	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.13	0.19	0.14	0.02	0.14	0.19
s, saturation flow rate [veh/h]	1006	1612	1252	1027	1675	987	1355	1257
c, Capacity [veh/h]	565	394	306	532	593	402	258	402
d1, Uniform Delay [s]	7.73	19.13	17.71	9.83	13.05	12.96	18.24	15.36
k, delay calibration	0.11	0.11	0.11	0.29	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	3.80	1.46	1.17	0.43	0.05	4.22	1.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.80	0.54	0.37	0.39	0.05	0.74	0.59
d, Delay for Lane Group [s/veh]	7.74	22.93	19.17	11.00	13.48	13.01	22.46	16.73
Lane Group LOS	A	C	B	B	B	B	C	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.03	3.35	1.54	1.10	1.66	0.15	2.32	2.20
50th-Percentile Queue Length [ft/ln]	0.85	83.67	38.42	27.39	41.51	3.71	57.91	55.02
95th-Percentile Queue Length [veh/ln]	0.06	6.02	2.77	1.97	2.99	0.27	4.17	3.96
95th-Percentile Queue Length [ft/ln]	1.53	150.60	69.16	49.31	74.72	6.68	104.24	99.03

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 17: 17 Full Build PM 2045 Mitigations

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.74	22.93	19.17	11.00	13.48	13.48	13.01	13.01	13.01	22.46	16.73	16.73
Movement LOS	A	C	B	B	B	B	B	B	B	C	B	B
d_A, Approach Delay [s/veh]	21.41			12.35			13.01			19.30		
Approach LOS	C			B			B			B		
d_I, Intersection Delay [s/veh]	17.77											
Intersection LOS	B											
Intersection V/C	0.625											

Emissions

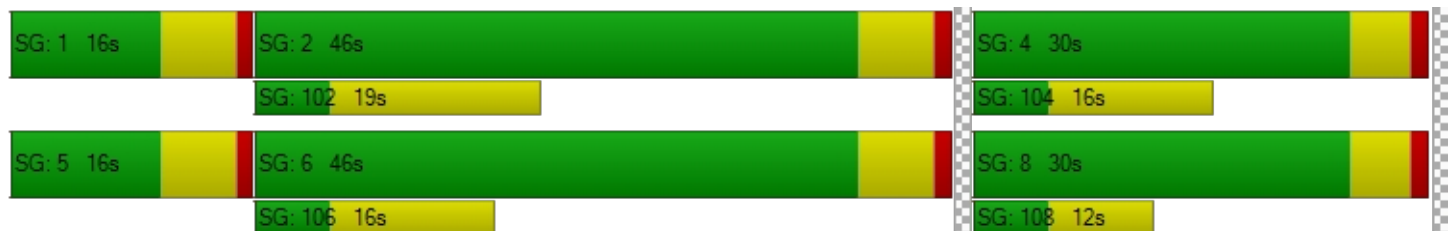
Vehicle Miles Traveled [mph]	0.78	30.69	15.98	26.10	31.00	7.37	83.10	102.14
Stops [stops/h]	2.27	224.33	103.02	73.45	111.29	9.95	155.27	147.52
Fuel consumption [US gal/h]	0.07	5.94	2.76	2.44	3.39	0.41	5.21	5.81
CO [g/h]	5.14	415.29	192.66	170.75	236.87	28.57	364.36	405.85
NOx [g/h]	1.00	80.80	37.48	33.22	46.09	5.56	70.89	78.96
VOC [g/h]	1.19	96.25	44.65	39.57	54.90	6.62	84.44	94.06

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	18.61	18.61	18.61	18.61
I_p,int, Pedestrian LOS Score for Intersectio	2.751	2.455	1.716	2.295
Crosswalk LOS	C	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1490	1490	931	931
d_b, Bicycle Delay [s]	1.75	1.75	7.67	7.67
I_b,int, Bicycle LOS Score for Intersection	2.363	2.271	1.593	2.266
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix D

Generated with **PTV VISTRO**

UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 17: 17 Full Build PM 2045 Mitigations

Intersection Level Of Service Report Intersection 5: Feedville Rd & US-395

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 13.8
Level Of Service: B
Volume to Capacity (v/c): 0.353

Intersection Setup

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Feedville Rd			Feedville Rd		
Base Volume Input [veh/h]	61	579	31	34	654	69	0	0	205	0	0	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	10.00	0.00	21.00	10.00	0.00	0.00	0.00	5.00	0.00	0.00	21.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	579	31	34	654	69	0	0	205	0	0	39
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	157	8	9	178	19	0	0	56	0	0	11
Total Analysis Volume [veh/h]	66	629	34	37	711	75	0	0	223	0	0	42
Pedestrian Volume [ped/h]	0			0			0			0		

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 17: 17 Full Build PM 2045 Mitigations

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.35	0.00	0.00	0.07
d_M, Delay for Movement [s/veh]	9.64	0.00	0.00	9.69	0.00	0.00	37.35	45.23	13.76	48.52	44.78	11.14
Movement LOS	A	A	A	A	A	A	E	E	B	E	E	B
95th-Percentile Queue Length [veh/ln]	0.25	0.00	0.00	0.14	0.00	0.00	0.00	1.59	1.59	0.00	0.21	0.21
95th-Percentile Queue Length [ft/ln]	6.36	0.00	0.00	3.61	0.00	0.00	0.00	39.64	39.64	0.00	5.36	5.36
d_A, Approach Delay [s/veh]	0.87			0.44			13.76			11.14		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.49											
Intersection LOS	B											

Appendix D

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UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 17: 17 Full Build PM 2045 Mitigations

Intersection Level Of Service Report Intersection 6: US 395 & SE Kelli Blvd

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 32.4
Level Of Service: D
Volume to Capacity (v/c): 0.786

Intersection Setup

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	450.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			20.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	US 395			US 395			Kelli Blvd			Private Dwy		
Base Volume Input [veh/h]	8	1142	0	0	779	110	0	0	386	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	52.00	6.00	0.00	0.00	7.00	6.00	0.00	0.00	4.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	1142	0	0	779	110	0	0	386	0	0	0
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	307	0	0	209	30	0	0	104	0	0	0
Total Analysis Volume [veh/h]	9	1228	0	0	838	118	0	0	415	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Appendix D

Generated with **PTV VISTRO**

UGB Expansion

HCM 7th Edition

Version 2024 (SP 0-1)

Hermiston, OR

Scenario 17: 17 Full Build PM 2045 Mitigations

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.79	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.73	0.00	0.00	11.27	0.00	0.00	70.49	100.04	32.40	269.66	86.12	13.19
Movement LOS	B	A	A	B	A	A	F	F	D	F	F	B
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.00	0.00	0.00	0.00	7.27	7.27	7.27	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.45	0.00	0.00	0.00	0.00	0.00	181.66	181.66	181.66	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.09			0.00			32.40			122.99		
Approach LOS	A			A			D			F		
d_I, Intersection Delay [s/veh]	5.20											
Intersection LOS	D											

Oregon Department of Transportation					
Transportation Development Branch					
Transportation Planning Analysis Unit					
Preliminary Traffic Signal Warrant Analysis¹					
Major Street: OR 207			Minor Street: Feedville Road		
Project: UGB Expansion			City/County: Hermiston/Umatilla County		
Year: 2045			Alternative: UGB Expansion		
Preliminary Signal Warrant Volumes					
Number of Approach lanes		ADT on major street approaching from both directions		ADT on minor street, highest approaching volume	
Major Street	Minor Street	Percent of standard warrants 100 70		Percent of standard warrants 100 70	
Case A: Minimum Vehicular Traffic					
1	1	8850	6200	2650	1850
2 or more	1	10600	7400	2650	1850
2 or more	2 or more	10600	7400	3550	2500
1	2 or more	8850	6200	3550	2500
Case B: Interruption of Continuous Traffic					
1	1	13300	9300	1350	950
2 or more	1	15900	11100	1350	950
2 or more	2 or more	15900	11100	1750	1250
1	2 or more	13300	9300	1750	1250
	100 percent of standard warrants				
X	70 percent of standard warrants ²				
Preliminary Signal Warrant Calculation					
	Street	Number of Lanes	Warrant Volumes	Approach Volumes	Warrant Met
Case A	Major	1	6200	8810	Y
	Minor	2 or more	2500	2623	
Case B	Major	1	9300	8810	N
	Minor	2 or more	1250	2623	
Analyst and Date:			Reviewer and Date:		

¹ Meeting preliminary signal warrants does **not** guarantee that a signal will be installed. When preliminary signal warrants are met, project analysts need to coordinate with Region Traffic to initiate the traffic signal engineering investigation as outlined in the Traffic Manual. Before a signal can be installed, the engineering investigation must be conducted or reviewed by the Region Traffic Manager who will forward signal recommendations to headquarters. Traffic signal warrants must be met and the State Traffic Engineer's approval obtained before a traffic signal can be installed on a state

² Used due to 85th percentile speed in excess of 40 mph or isolated community with population of less than 10,000.