

# Midtown Crossings Project



## Greenwood Quick-Build Post-Construction Monitoring

### Summary of Public Feedback and Traffic Data – Winter 2025

Final compiled data submitted February 24, 2025

The Greenwood Quick-Build is a one-year pilot project to evaluate the safety and operations impact of transforming the existing roadway on Greenwood Avenue from 2<sup>nd</sup> Street to Wall Street to a three-lane cross section with buffered bike lanes. This report is the second summary of feedback received since the pilot kicked off, which considers five and a half months of post-construction feedback and two sets of 48-hour traffic data collected on outcomes from the Quick-Build improvements. A final report will be provided later this year.

#### Feedback and Data Sources

<div></div> <p>All public feedback was collected and analyzed by JLA Public Involvement. A voluntary online survey was promoted by window clings displayed in local businesses, sidewalk decals placed along the corridor bike lanes, a street side sign, email and social media posts.</p> <p>JLA is collecting public feedback on the project to understand how it is perceived by travelers through the corridor in their daily lives.</p> <p><b>1,591 Public feedback responses were submitted from August 19, 2024 through January 31, 2025.</b></p> <p><i>This is not a statistically valid survey.</i></p>	<div></div> <p>All traffic data provided by Kittelson &amp; Associates, Inc. Kittelson monitors the pre- and post-construction volume, travel speed, and travel time data to assess the project's effects on traffic operations. Please see the full <b>Traffic Monitoring Summary</b> for more detailed traffic data.</p> <p>As part of the monitoring process, the following data were collected on <b>January 29 and 30</b>:</p> <p>Traffic Count Data</p> <ul style="list-style-type: none"><li>• 48-hour travel volume, speed, and vehicle classification data for vehicles</li><li>• 48-hour pedestrian and bicycle volumes</li></ul> <p>Travel Time Data from</p> <ul style="list-style-type: none"><li>• Google API</li><li>• INRIX</li></ul>
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# Key Traffic Data & Summary of Findings

For the full analysis of these results and detailed procedure used in this traffic data, please see the February **Traffic Monitoring Summary (TMS)**. This report includes just a snapshot of the key findings and figures.

While these results provide insight into vehicle travel times and multimodal usage, it's important to note that numerous factors such as weather, events, and crashes can influence these metrics. Therefore, definitive conclusions on the project's positive or negative effects are premature and will require ongoing monitoring. This section provides general observations based on the data collected thus far.

## Volume: Vehicles, Pedestrian, Bicycle

48 hours of vehicle, pedestrian, and bicycle counts were collected at two locations on Greenwood Avenue:

- between Harriman Street and Hill Street (west of Hill Street).
- between Hill Street and 1st Street (east of Hill Street near the undercrossing).

The data were collected on the following dates:

- Pre-construction: Tuesday May 14 and Wednesday May 15, 2024  
(temps 38-80°F, clear, calm winds, good air quality)
- Post-construction: Tuesday September 24 and Wednesday September 25, 2024  
(temps 49-90°F, wind gusts, moderate air quality)
- Post-construction: Wednesday January 29 and Thursday January 30, 2025  
(temps 10-59°F, clear, moderate wind)

Due to the City's dedication to implementing transportation projects and improvements, there has been significant construction activity throughout the City. As part of the ongoing Awbrey Butte Waterline Improvement project, Portland Avenue from 1st Street to 9th Street was closed in November 2024 and is expected to remain closed until the spring. The designated detour directs traffic south on 9th Street and east to Greenwood Avenue/Wall Street. These conditions were not presents during either the May or September data collection periods.

Following the closure of Portland Avenue, the project team received numerous public comments indicating increased travel times and congestion for eastbound traffic on Newport Avenue at Wall Street.

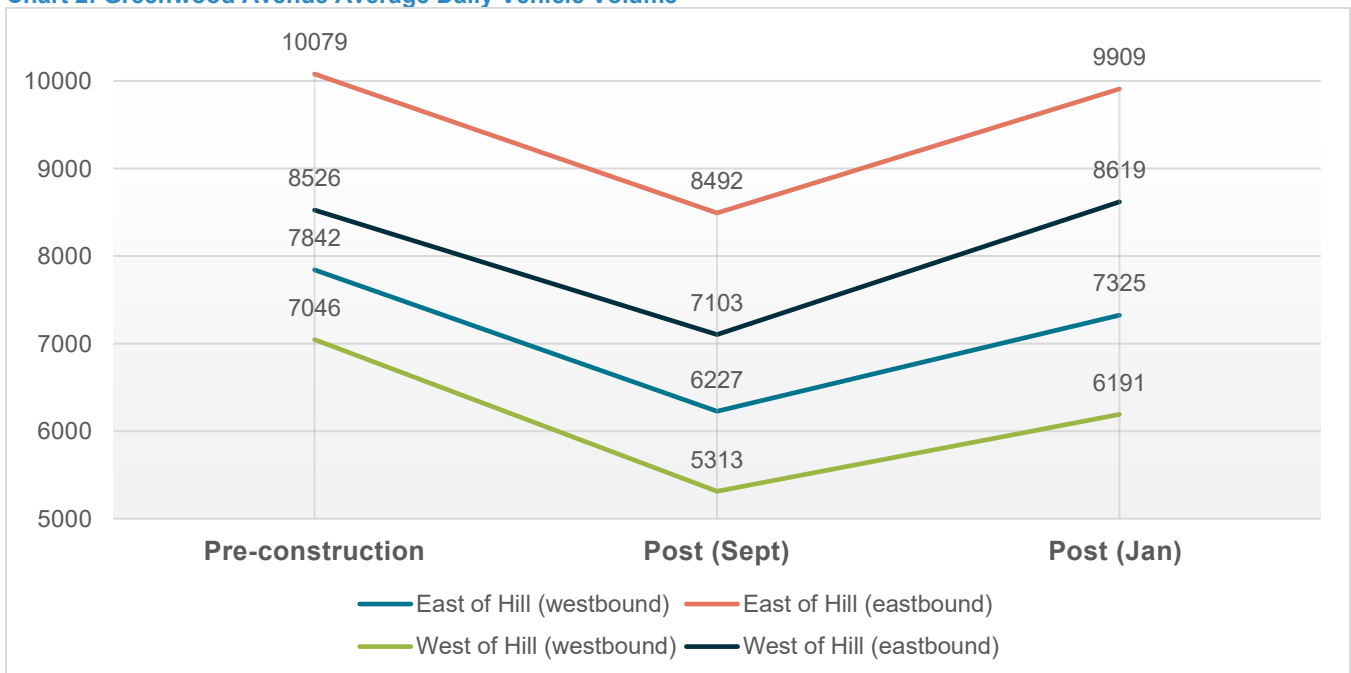
## Vehicle volume summary

- September **traffic volumes were lower** than pre-construction volumes by 18-20 percent.
  - Westbound volumes dropped by a larger percentage (21 and 25 percent) compared to eastbound (16 and 17 percent).
- In January 2025, volumes were **four and five percent below** pre-construction levels.
  - The eastbound volumes were similar to pre-construction levels, while the westbound volumes remained 7 to 12 percent below.

**Table 1: Greenwood Avenue Average Daily Vehicle Volume**

Location and Direction	Pre-Construction	Post-Construction 1	Post-Construction 2
	May-24	Sep-24	Jan-25
	Volume	Volume (% Difference from Pre-Construction)	Volume (% Difference from Pre-Construction)
<b>East of Hill Street</b>			
Eastbound traffic	10,079	8,492 (-16%)	9,909 (-2%)
Westbound traffic	7,842	6,227 (-21%)	7,325 (-7%)
Total traffic	17,921	14,719 (-18%)	17,234 (-4%)
<b>West of Hill Street</b>			
Eastbound traffic	8,526	7,103 (-17%)	8,619 (+1%)
Westbound traffic	7,046	5,313 (-25%)	6,191 (-12%)
Total traffic	15,572	12,416 (-20%)	14,810 (-5%)

**Chart 2: Greenwood Avenue Average Daily Vehicle Volume**



## Pedestrian volume summary

Pedestrian volumes declined and redistributed between north and south sidewalks.

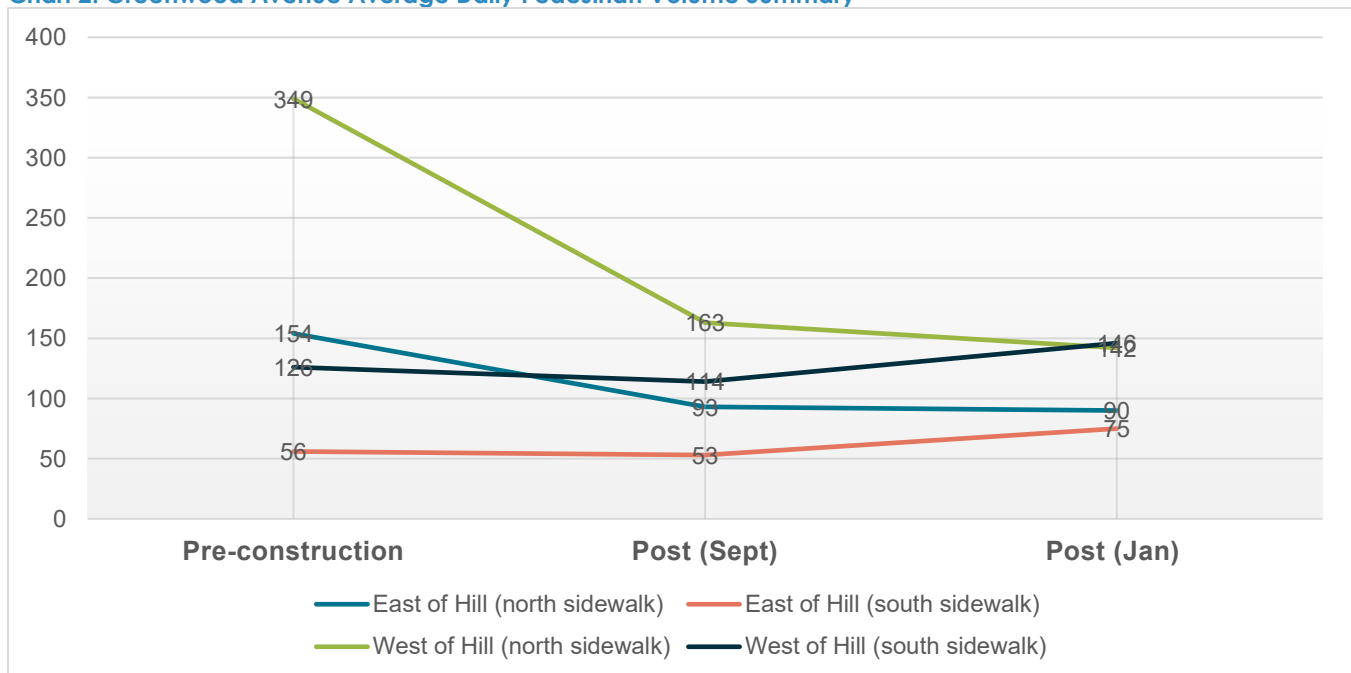
- Both locations experienced drops in pedestrian volumes after construction in September.
- Total daily pedestrian volumes **rebounded some in January 2025 but remained 21 to 39 percent below pre-construction levels.**
- Pre-construction, the north sidewalk had higher pedestrian volumes than the south sidewalk. However, the north sidewalk saw larger drops in volumes in September 2024 and the **volumes declined slightly again in January 2025.**
- In contrast, the south sidewalk saw less pedestrian activity pre-construction and was less affected by the construction in September. **In January 2025, the volumes rebounded and exceeded the pre-construction level by 16 to 34 percent.**

**Table 2: Greenwood Avenue Average Daily Pedestrian Volume Summary**

Location and Direction	Pre-Construction	Post-Construction 1	Post-Construction 2
	May-24	Sep-24	Jan-25
	Volume	Volume (% Difference from Pre-Construction)	Volume (% Difference from Pre-Construction)
<b>East of Hill Street</b>			
North Sidewalk	154	93 (-40%)	90 (-42%)
South Sidewalk	56	53 (-5%)	75 (+34%)
Combined Total	209	146 (-30%)	165 (-21%)
<b>West of Hill Street</b>			
North Sidewalk	349	163 (-53%)	142 (-59%)
South Sidewalk	126	114 (-10%)	146 (+16%)
Combined Total	474	276 (-42%)	288 (-39%)

*Note: Average volumes were rounded and might not add to total volume.*

**Chart 2: Greenwood Avenue Average Daily Pedestrian Volume Summary**



# Bicycle volume summary

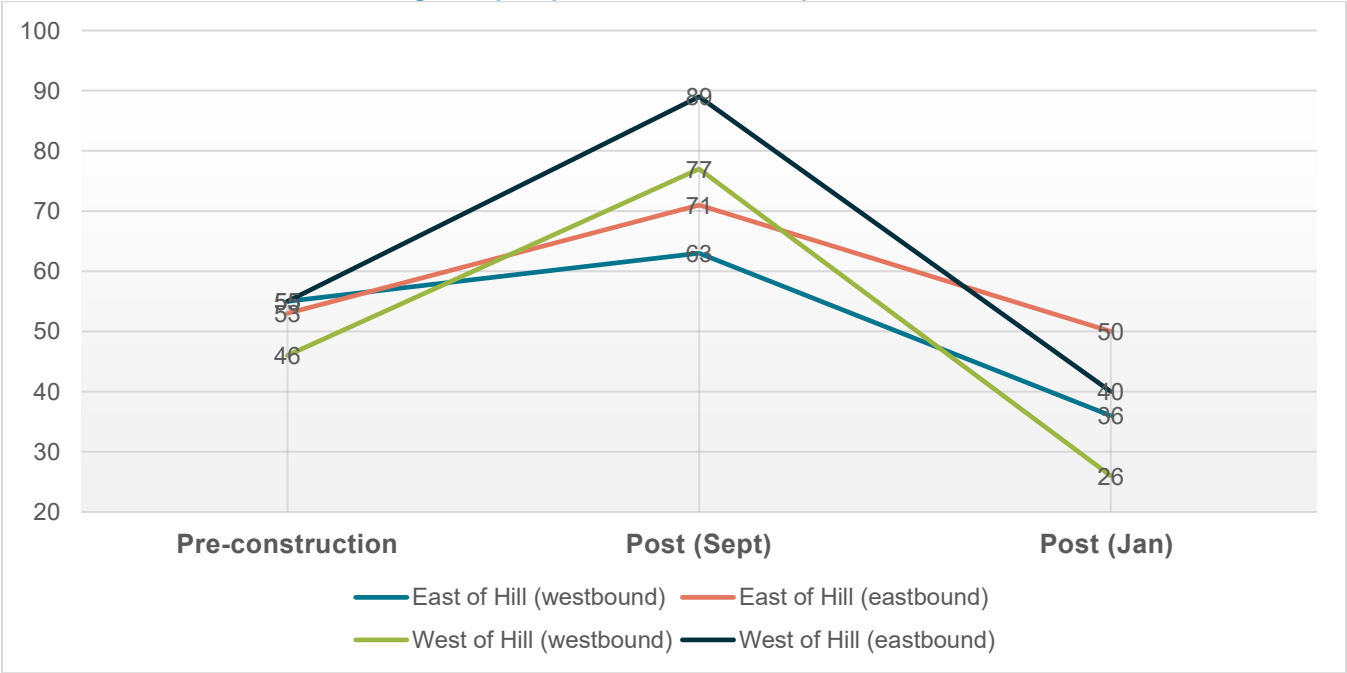
- Bicycle volume dropped in January 2025** (-20 and -35 percent) after initial increase in September 2024 (24 and 65 percent). Notably, weather conditions were much cooler in January compared to September, consistent with typical Bend weather patterns.

Table 3: Greenwood Avenue Average Daily Bicycle Volume Summary

Location and Direction	Pre-Construction	Post-Construction 1	Post-Construction 2
	May-24	Sep-24	Jan-25
	Volume	Volume (% Difference from Pre-Construction)	Volume (% Difference from Pre-Construction)
East of Hill Street			
Eastbound	53	71 (+33%)	50 (-6%)
Westbound	55	63 (+15%)	36 (-35%)
Combined Total	108	134 (+24%)	86 (-20%)
West of Hill Street			
Eastbound	55	89 (+61%)	40 (-27%)
Westbound	46	77 (+67%)	26 (-43%)
Combined Total	101	166 (+64%)	66 (-35%)

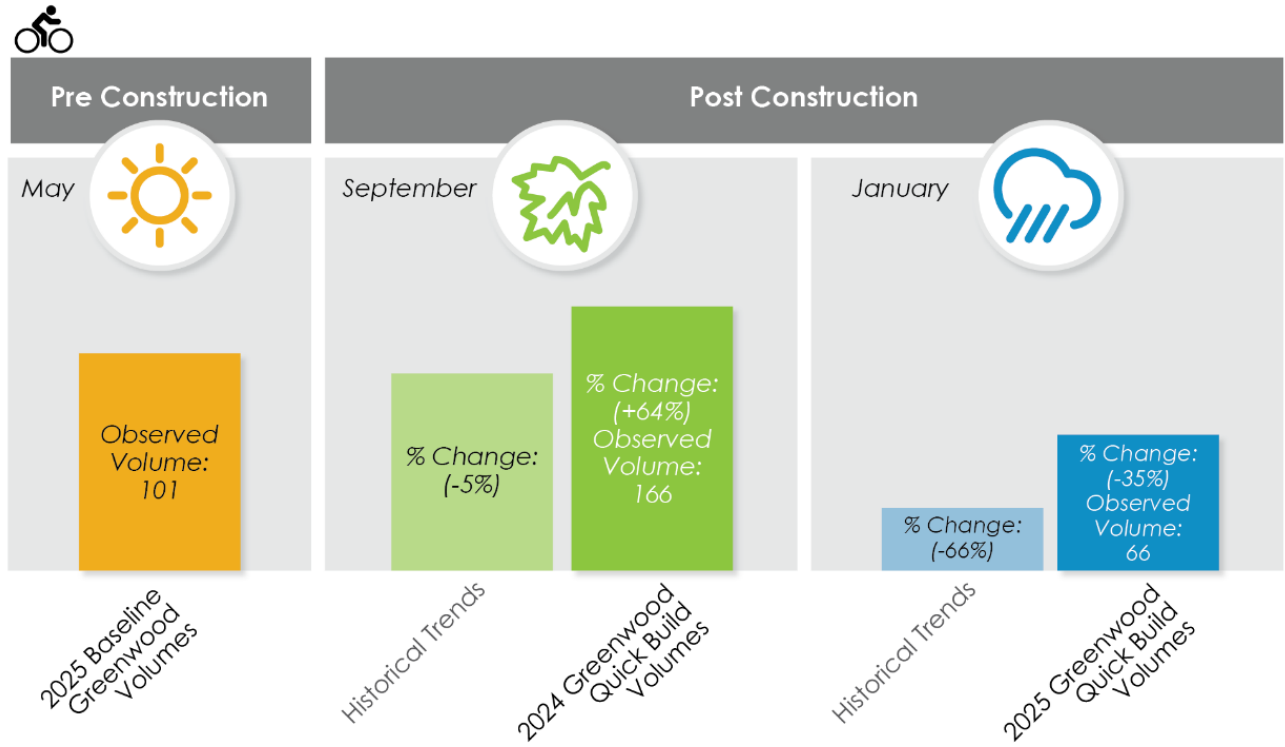
Note: Average volumes were rounded and might not add to total volume.

Chart 3: Greenwood Avenue Average Daily Bicycle Volume Summary



However, if we compare the bicycle volumes to historical trends for seasonal fluctuations, post-construction bike volumes observed in September and January **were higher** than expected.

Figure 1: Greenwood Avenue Daily Bicycle Volume comparison to historical trends



# Vehicle Speed Distribution

## Daily Speed Analysis

- In general, the 85<sup>th</sup> percentile speeds **dropped by two to four mph** at both directions and count locations for both post-construction periods.
- Speeds were higher at the count location east of Hill Street compared to the location west of Hill Street. And the eastbound 85<sup>th</sup> percentile speeds were slightly faster than westbound.
- The trends are consistent pre- and post-construction.

Table 4: Greenwood Avenue two-day aggregate - 85th Percentile Speed

Location and Direction	Pre-Construction	Post-Construction 1	Post-Construction 2
	May-24	Sep-24	Jan-25
East of Hill Street			
Eastbound	34	32	33
Westbound	33	29	29
West of Hill Street			
Eastbound	32	28	28
Westbound	30	26	28

## Time-of-Day Trend

With a time-of-day trend analysis of the corridor, Kittelson found:

- **Average speed during peak hours dropped post-construction.**
- Pre-construction, the average speed ranged from 25 to 35 mph, except for westbound traffic at the west of Hill Street location, which dropped to 22 mph around noon (12 PM to 2 PM).
- During both post-construction periods, the **average speed generally ranged from 20 mph to 35 mph**, except for **westbound traffic, which dropped below 20 mph (to a minimum of 14 mph) between 11 AM and 5 PM.**

Lower speeds increase safety for all people on the corridor but especially those biking or walking.

## “Free Flow” Condition Speed Analysis

Kittelson analyzed average speeds on the corridor during non-peak times, comparing data without the likely influence from congestion. Vehicle volumes on Greenwood Avenue rise at 7am and stay steady until 6pm, indicating speed may be influenced by congestion and/or queuing. To see how speeds on the corridor behave during “free-flow” or non-peak period conditions, Kittelson examined average speeds for pre- and post-construction from 6-7am, 6-7pm, and 7-8pm.

**Vehicle speeds decrease from pre-construction to post-construction in both locations and directions.**

- Speeds east of Hill Street decreased on average by 7mph in September and by 3mph in January.
- Speeds west of Hill Street decreased on average by 2mph in September and by 4mph in January.

**Table 5: Greenwood Avenue Average Speed (mph) in “Free Flow” Conditions**

Time Period	Location and Direction	Pre-Construction	Post-Construction 1	Post-Construction 2
		May-24	Sep-24	Jan-25
East of Hill Street				
6:00-7:00am	Eastbound	32	26	32
	Westbound	33	26	29
6:00-7:00pm	Eastbound	32	24	30
	Westbound	30	21	26
7:00-8:00pm	Eastbound	30	24	24
	Westbound	27	22	26
West of Hill Street				
6:00-7:00am	Eastbound	32	29	27
	Westbound	31	29	28
6:00-7:00pm	Eastbound	30	29	23
	Westbound	26	26	24
7:00-8:00pm	Eastbound	32	29	30
	Westbound	31	26	27



## Travel Time Analysis

This section compares pre- and post-construction travel time findings from two data sources, INRIX and Google API. To monitor the cumulative, systemwide effect of the Quick-Build project, three parallel corridors are included in this analysis, as shown in Figure 1 and described below. Please see tables 6, 7, 8 and 9 in the TMS for full details of these results.

### Primary Corridor:

- Greenwood Avenue, from Wall Street to 3<sup>rd</sup> Street.

### Parallel Corridors:

- Revere Avenue, from Harriman Street to 3<sup>rd</sup> Street.
- Olney Avenue, from Wall Street to 3<sup>rd</sup> Street.
- Franklin Avenue, from Wall Street to 3<sup>rd</sup> Street.

Figure 2: Primary and Parallel Corridors



Travel time results varied between the two data sources: INRIX travel times were generally shorter than Google API travel times. This discrepancy might be due to several factors:

- INRIX travel time data are based on pre-determined XD segments that may not precisely align with the origins and destinations specified in Google API queries.
- It is unclear how the two platforms handle boundary intersections at the ends of the selected corridor (i.e., whether the delays at the first and the last intersections are included in travel time results).
- Google API uses historical speed data as part of the travel time estimate and might lag in reflecting the latest trends in travel times. In contrast, INRIX data are based on GPS-enabled devices and road sensors and were filtered to only include real-time data for this analysis.

Based on the methodology of the two data sources and the observed drop in 85th percentile speed on Greenwood Avenue, it is likely that the INRIX travel times better reflect the current conditions.

Travel times are not compared directly between the data sources. Instead, trends are observed within each data source relative to pre- and post-construction conditions.

- For example: INRIX average daily travel times along Greenwood Avenue **increased by 16 to 26 percent**, while Google API average daily travel times **decreased by 4 to 5 percent**.

## INRIX Travel Time Data

**Daily Average Travel Time:** In general, INRIX data shows average Greenwood Avenue travel times **increased in both directions for both post-construction periods**. This is consistent with the travel lane removal and the observed drop of 85<sup>th</sup> percentile speed as described in the Vehicle Speed Distribution section. The following trends were found:

- Eastbound Greenwood Avenue average travel times increased from 85 seconds to 97 seconds in September 2024, and increased to **107 seconds in January 2025**. **The travel times exceed pre-construction levels by 14 percent (12 seconds) and 26 percent (22 seconds), respectively. The longer eastbound travel times may be associated with the detour and closure on Portland Avenue.**
- Westbound Greenwood Avenue average travel times increased from 86 seconds to 100 seconds in September 2024 and remained stable at **99 seconds in January 2025, reflecting a consistent 16 percent increase compared to pre-construction conditions.**
- Travel times along parallel corridors fluctuated between post-construction periods.
  - September travel times generally saw a slight increase on parallel corridors.
  - January 2025 travel times fluctuate.
  - **The decrease in travel times on eastbound Revere Avenue and eastbound/westbound Olney Avenue is likely impacted by the detour and closure on Portland Avenue.** Minimal change was observed on Franklin Avenue and westbound Revere Avenue.

**Table 6: Average Daily INRIX Travel Time**

Corridor	Pre-Construction	Post-Construction 1	Post-Construction 2
	May-24	Sep-24	Jan-25
	Travel Time in Seconds	Travel Time (% Difference from Pre-Construction)	Travel Time (% Difference from Pre-Construction)
<b>Primary Corridor</b>			
EB Greenwood Avenue	85	97 (+14%)	<b>107 (+26%)</b>
WB Greenwood Avenue	86	100 (+16%)	<b>99 (+16%)</b>
<b>Parallel Corridors</b>			
EB Revere Avenue	96	97 (+2%)	<b>82 (-15%)</b>
WB Revere Avenue	91	90 (<-1%)	<b>92 (+1%)</b>
EB Olney Avenue	64	65 (+1%)	<b>63 (-2%)</b>
WB Olney Avenue	62	64 (+3%)	<b>60 (-2%)</b>
EB Franklin Avenue	119	124 (+4%)	<b>117 (-2%)</b>
WB Franklin Avenue	120	123 (+3%)	<b>121 (+1%)</b>

**Peak Hour Travel Time:** Kittelson also analyzed peak hour travel time as it reflects the highest travel demand and therefore the most congested condition. For this analysis, peak hour is identified as the 60-minute period with the highest pre-construction volumes, which is between 3:00 and 4:00 PM.

Compared to the daily average travel time, peak hour travel time increases are more substantial along Greenwood Avenue:

- Eastbound Greenwood Avenue average travel time increased from 93 seconds pre-construction to 112 seconds in September 2024, and further to **122 seconds in January 2025, exceeding pre-construction levels by 20 percent (19 seconds) and 31 percent (29 seconds), respectively. The longer eastbound travel times may be associated with the detour and closure on Portland Avenue.**
- Westbound Greenwood Avenue average travel time increased from 93 seconds to 117 seconds in September 2024, a 26 percent increase. **In January 2025, the westbound travel time decreased slightly to 109 seconds, representing an 18 percent increase from pre-construction.**

Travel times along the parallel corridors increased to a lesser extent compared to Greenwood Avenue or decreased.

- In September 2024, the maximum increase occurs at westbound Olney Avenue and westbound Franklin Avenue (eight percent [five seconds] and seven percent [ten seconds], respectively).
- In January 2025, eastbound Revere Avenue experienced a 17 percent decrease (18 seconds) in travel times. **The decrease in travel times on eastbound Revere Avenue and eastbound/westbound Olney Avenue is likely impacted by the detour and closure on Portland Avenue.**
- Other than the corridors mentioned, the travel time changes of other parallel corridors are within five percent from pre-construction levels.

**Table 7: Average Peak Hour INRIX Travel Time**

Corridor	Pre-Construction	Post-Construction 1	Post-Construction 2
	May-24	Sep-24	Jan-25
	Travel Time in Seconds	Travel Time (% Difference from Pre-Construction)	Travel Time (% Difference from Pre-Construction)
<b>Primary Corridor</b>			
EB Greenwood Avenue	93	112 (+20%)	122 (+31%)
WB Greenwood Avenue	93	117 (+26%)	109 (+18%)
<b>Parallel Corridors</b>			
EB Revere Avenue	102	100 (-1%)	84 (-17%)
WB Revere Avenue	95	96 (+1%)	98 (+4%)
EB Olney Avenue	70	70 (<1%)	67 (-5%)
WB Olney Avenue	63	68 (+8%)	62 (-1%)
EB Franklin Avenue	139	145 (+4%)	134 (-4%)
WB Franklin Avenue	127	137 (+7%)	128 (+1%)

## Google API Travel Time

**Daily Average Travel Time:** the Google API data presented a notably different picture of travel time trends before and after the quick-build project. Along Greenwood Avenue, the data indicated slightly improved travel times in both directions, contrasting with the INRIX findings:

- **The average eastbound travel times on Greenwood Avenue decreased from 132 seconds pre-construction to 127 seconds post-construction in both September 2024 and January 2025, representing a 4 percent drop (5 seconds).**
- The average westbound travel times on Greenwood Avenue decreased from 132 seconds to 130 seconds in September 2024 and **126 seconds in January 2025, reflecting a 1 percent and 5 percent reduction.**

The parallel corridor analysis showed fluctuation in travel time on Olney Avenue in September 2024. Other than that, travel times generally remained similar or improved slightly in both post-construction periods:

- Travel times on Olney Avenue increased by more than 20 percent (up to 22 seconds) in September 2024, but dropped in **January to four percent below pre-construction levels.**
- On the other parallel corridors **travel times stayed stable or decreased slightly.** The maximum decrease occurred on Franklin Avenue in January 2025, where both directions' travel times dropped by six percent (ten seconds).

Table 8: Average Daily Google API Travel Time

Corridor	Pre-Construction	Post-Construction 1	Post-Construction 2
	May-24	Sep-24	Jan-25
	Travel Time in Seconds	Travel Time (% Difference from Pre-Construction)	Travel Time (% Difference from Pre-Construction)
Primary Corridor			
EB Greenwood Avenue	132	127 (-4%)	127 (-4%)
WB Greenwood Avenue	132	130 (-1%)	126 (-5%)
Parallel Corridors			
EB Revere Avenue	121	119 (-2%)	123 (1%)
WB Revere Avenue	108	108 (0%)	108 (0%)
EB Olney Avenue	94	114 (+21%)	90 (-4%)
WB Olney Avenue	91	113 (+25%)	88 (-4%)
EB Franklin Avenue	160	158 (-1%)	150 (-6%)
WB Franklin Avenue	154	147 (-4%)	144 (-6%)

**Peak Hour Travel Time:** Similar to INRIX analysis, travel times between 3:00 and 4:00 PM were used.

Along Greenwood Avenue, similar to the average daily travel times, peak hour travel times also decreased slightly:

- Eastbound decreased from 155 seconds to 145 seconds post-construction in September 2024, representing a 6 percent decrease, but rebounded slightly in **January to 151 seconds, still 3 percent below pre-construction levels.**
- Westbound peak hour travel times remained the same (151 seconds) in September 2024 but **decreased to 144 seconds in January 2025, showing a 5 percent reduction.**

Similar to the daily travel time trends, peak hour travel times along the parallel corridors decreased in general, except Olney Avenue:

- Travel times in both directions of Olney Avenue increased by about 20 percent (up to 22 seconds) in September 2024. **In January 2025, travel times dropped to three and four percent below pre-construction levels.**
- **The maximum decrease occurred on westbound Franklin Avenue, which dropped to 9 percent (17 seconds) below pre-construction levels in both September and January counts.**

Table 9: Average Peak Hour Google API Travel Time

Corridor	Pre-Construction	Post-Construction 1	Post-Construction 2
	May-24	Sep-24	Jan-25
	Travel Time in Seconds	Travel Time (% Difference from Pre-Construction)	Travel Time (% Difference from Pre-Construction)
Primary Corridor			
EB Greenwood Avenue	155	145 (-6%)	151 (-3%)
WB Greenwood Avenue	151	151 (<1%)	144 (-5%)
Parallel Corridors			
EB Revere Avenue	137	128 (-7%)	130 (-5%)
WB Revere Avenue	115	114 (-1%)	114 (-1%)
EB Olney Avenue	99	116 (+18%)	96 (-3%)
WB Olney Avenue	96	118 (+23%)	92 (-4%)
EB Franklin Avenue	203	189 (-7%)	195 (-4%)
WB Franklin Avenue	172	157 (-9%)	157 (-9%)

# Traffic Incidents Report

This data shows the number of reported crashes and traffic tickets given out by the City of Bend Police on Greenwood Avenue between Wall Street and 3<sup>rd</sup> Street. Two considerations to weigh with this data: not all crashes get reported, police patrol time may not have been consistent during the two time periods.

Data provided by the City of Bend Police Department, collected from the New World LERMS and Enterprise Mobile (Mappable events only).

Pre-construction data is compared to the post-construction data to gauge whether the quick-build improvements have increased safety on the corridor.

Reporting timeframes:

- Pre-construction: March 3 to August 15, 2024
- Post-construction: August 16, 2024 to January 15, 2025

## Summary of Findings

**Crashes have decreased** since the quick-build installation, from 32 to 25 during the respective 5-month timeframes. A primary goal of the traffic improvements were to improve safety on this corridor and these results support that outcome. This will require a longer evaluation, but so far the findings seem to support the project goals.

**Speeding offenses have decreased** since the quick-build installation. This could be due to inconsistent time monitoring by police officers and may also reflect the increased traffic, so less people have had the opportunity to speed. However, one of the goals of the safety improvements on the street were to keep vehicles traveling at safer speeds, so results could also indicate that the design is working to slow vehicles to posted speed limits.

The most frequent traffic offense during the post-construction period was “failing to obey traffic control device” which could indicate some drivers are still getting used to the new design.

## Motor Vehicle Accident and Hit & Run Calls for Service/Crash Reports

Police Calls for service include crashes and hit & runs: pre-construction police received 32 calls in the area, and post-construction they received 25 calls. DMV Crash Reports reflect slightly lower numbers as not everyone reports the crash to DMV.

Call types for pre and post construction are similar: highest occurrence is motor vehicle accidents-non-injury, then hit & run, then motor vehicle accident with injury.

**Table 10: Calls for Service and DMV Crash Reports**

Pre-Construction		Top Locations of Calls for Service/Reports	Post-construction	
CFS count	DMV Reports		DMV Reports	CFS count
<b>32</b>	<b>12</b>	<b>Total calls/reports</b> <i>Note: does not equal amounts per location, only top locations shown</i>	<b>9</b>	<b>25</b>
<b>8</b>	<b>5</b>	NE 3 <sup>rd</sup> St / Greenwood Ave	<b>4</b>	<b>5</b>
<b>3</b>	<b>2</b>	NW Hill St / Greenwood Ave	<b>1</b>	<b>2</b>
<b>2</b>		304 NE Greenwood Ave		<b>5</b>
<b>2</b>	<b>2</b>	NE 2 <sup>nd</sup> St / Greenwood Ave	<b>2</b>	<b>2</b>
<b>2</b>		NW BOND ST / Greenwood Ave		
<b>2</b>		NW Harriman St / Greenwood Ave		
	<b>2</b>	NW Wall St / Greenwood Ave	<b>2</b>	<b>2</b>
		250 NE Greenwood		<b>2</b>

## DMV Crash Reports

Pre-construction the top “first harmful events” were:

- angle crashes (4)
- parked motor vehicle crashes (4)

3 crashes included a pedestrian or bicycle.

Post-construction the top “first harmful events” were:

- rear-end crashes (4)
- sideswipe crashes (2)

2 crashes included a bicycle.

Other notable differences include: Pre-construction “non intersection” crashes had 6, post-construction had just 1. Most (4) post-construction crashes were intersection related.

## Traffic Tickets/Citations

### Pre-construction

91 tickets and 93 traffic offenses

Top traffic offenses were:

- operating a motor vehicle while using a mobile device
- violating speed limit
- fail to obey traffic control device

### Post-construction

85 tickets and 96 traffic offenses.

Top traffic offenses were:

- fail to obey traffic control device
- driving while suspended
- fail to obey traffic control device

Post-construction speeding offenses dropped from 24 to 9.

# Feedback Summary

The following feedback was collected through an online form which was advertised via multiple channels online and in-person along Greenwood Avenue. Participation is voluntary and not limited to one response per person.

## Travel Modes and Times

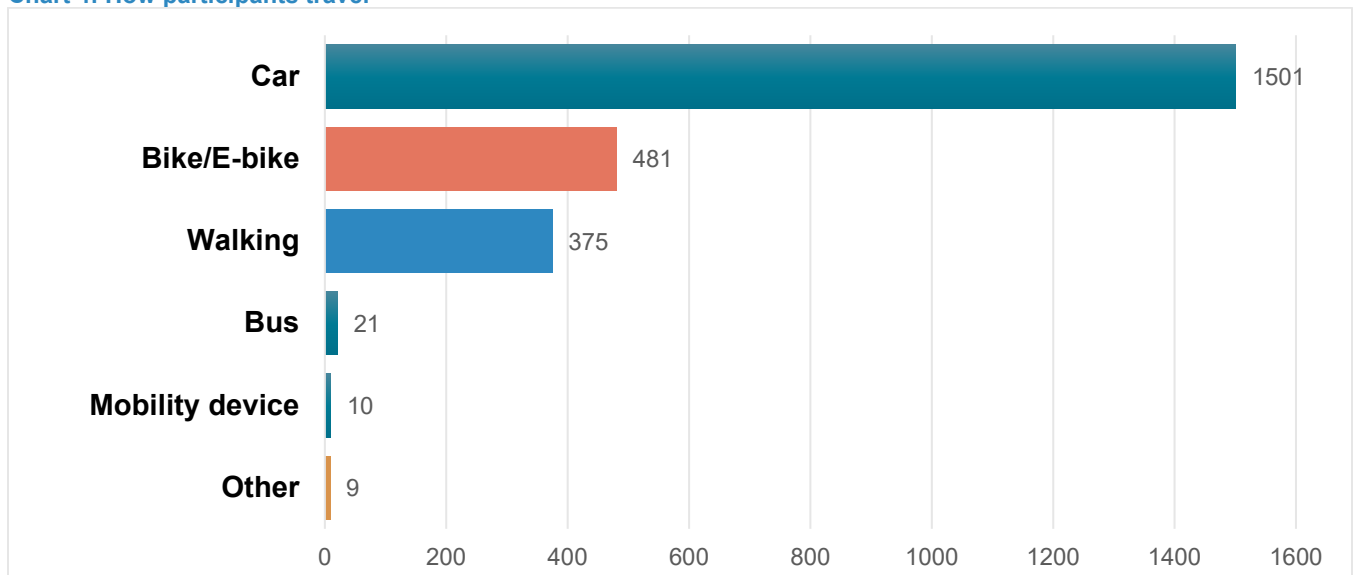
We asked participants how they **usually travel**, to understand who was completing the voluntary feedback form. They could select more than one option.

*1,574 total responses to this question, with 2,517 selections made. Percentages are rounded to the nearest whole number and based on the total 1,574 people who responded.*

- **Car** (1,501, 95%) of these, 954 did not list a secondary form of travel
- All **bikes** (481, 31%) – Bike (361, 23%), E-bike (120, 8%)
- **Walking** (375, 24%)
- **Bus** (21, 1%), **Mobility Device** (10, <1%), **Other** (9, <1%)

**Car travel is the most selected (95%) option by participants traveling on Greenwood Avenue, with 64% of those relying solely on car travel.** This is followed by biking (including regular bikes and e-bikes) and walking.

Chart 4: How participants travel



### Others mentioned:

- Motorcycle (3)
- Semi-truck/trailer or delivery vehicle (3)
- Electric scooter (1)
- One-wheel (1)

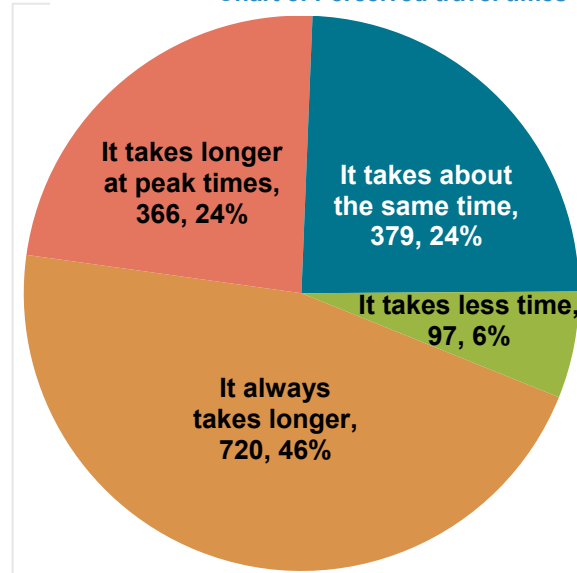


## How have these changes affected your travel time?

(1,562 responses total)

46% of those who responded to this question say that travel times have increased at all times of the day. 24% reported that they only notice an increase in travel time during hours. A similar number of respondents said that travel times are about the same as before the quick-build.

Chart 5: Perceived travel times



## Perception Rating of the corridor

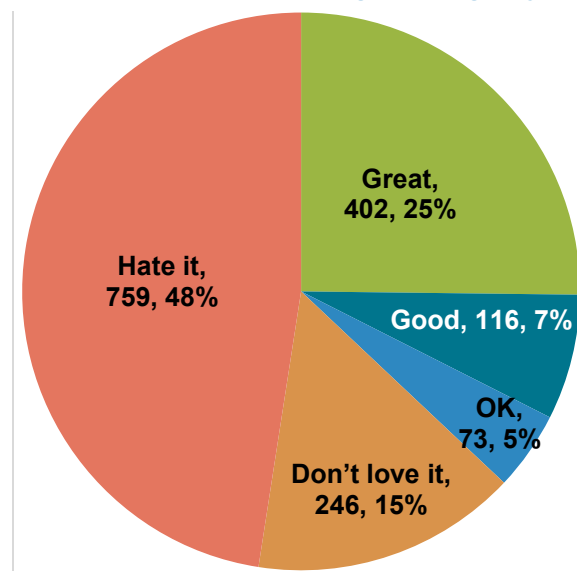
### Overall, how well is the new design working for you?

(1,598 responses total)

In the September report, early responses were primarily positive. Responses have shifted to more negative opinions, considerably outweighing the positive feedback. This response seems to be significantly tied to increased traffic delays for drivers. Much of this increased traffic seems to be from road closures nearby (Portland Avenue) that have redirected traffic to Greenwood Avenue.

At this time the negative responses "Hate it" and "Don't love it" make up 63% of those participating. Whereas positive perceptions "Great" and "Good" make up just 32% of the responses. The middle ground option "OK" has received just 5% of the responses.

Chart 6: How well is the new design working for you?





## Comments

*Note: In the comment sections below, numbers in parenthesis (#) indicate the number of times that topic was mentioned. This does not indicate the number of people who hold those opinions, but the number of times the comment was made. Some respondents mentioned the same comment in both comment fields, and some participants completed the survey more than once.*

To get more detailed information, we asked participants:

- **Is the new Greenwood working better for you? Have you noticed any new points of conflict between bikes, cars, or people walking, or difficulty with parking?** (1,052 responses)
- **Is there anything else you'd like to share with us?** (999 responses)

Many of the responses to the first question were repeated in the second question, so both comment tallies have been compiled together. Comment topics with less than 20 mentions have not been included.

### Negative Feedback / Complaints

**(543) Respondents expressed general disapproval for the quick-build project.** Many of these comments shared frustration or anger towards the project. Some expressed a preference for Greenwood Avenue to return to a layout with two lanes in each direction. Some also shared the feeling that their comments have been ignored in favor of bike advocates. Specifically, respondents commented on:

- **(650) Severe traffic:** Road users reported significant traffic backups and longer commute times on Greenwood, which has led to frustration and anger. Some say this trend lasts all day and not just during peak hours. Many participants believe the congestion is directly caused by the vehicle lane reduction. Some acknowledged the detour from Portland Avenue as a contributing factor.
  - **(101) Greenwood needs more lanes for cars.** Respondents expressed the desire to have more vehicle lanes on this main east-west route, since it is now so congested.
  - Locations where traffic backs up:
    - **Newport Avenue/Greenwood Avenue and Wall Street intersection** – Significant traffic back up during peak hours and when heading eastbound.
      - A “bottleneck” on Newport Avenue with delays extending all the way to the former Kenwood Elementary School building.
      - The traffic signal timing for the left turn lane onto Wall Street is very short and further increases congestion.
    - **3rd Street Intersection** – Traffic back up at this intersection is related to the lane reduction and a short left-turn lane.
      - The left-turn lane eastbound is short and causes back up in the through lane. Some suggested extending the left-turn lanes at Wall and 3rd Streets.
- **(260) Low bike ridership numbers:** Many participants commented that they “rarely”, “never” or “hardly ever” see people riding a bike in the new bike lane. Some believe that the low numbers negate the need for these bike lanes, especially at the expense of vehicle lanes. A few people suggested moving the bike lane to a smaller road.

- **(57) Bend's weather is unsuitable for yearlong biking and not worth the cost.** Similarly, some participants shared that bike lanes will become “useless” in snowy and icy weather, and most people in Bend get around by car. Several people are also concerned about how snow removal will be accomplished with the bike lane design.
- **(248) Parking and accessibility / Impact on businesses:** Many respondents feel the removal of parking has hurt businesses and makes it less convenient to visit the downtown area, especially for people with mobility issues (seniors and parents with young children).
  - Many business owners are concerned about the impact on customer access and foot traffic, leading to reduced sales.
  - Some customers raised concerns about businesses relocating or closing and having difficulties with pick-ups.
  - The Cascade Theater, Planet Hair, Old Towne Pizza and M & J Tavern are mentioned as businesses that have been impacted by the changes.
- **(66) Difficult turning onto Greenwood:** Respondents feel stress turning onto Greenwood Avenue from side streets due to the constant traffic in the single lane. They describe long waits and difficulty finding a safe gap in traffic for both right and left turns.
  - Additionally, users on Greenwood shared that cars seem to “jump out” from side streets and create “near miss” situations.
  - Users also shared that parked cars on the south of Greenwood obstruct views of oncoming traffic when trying to turn onto Greenwood. This has led some drivers to pull out into the crosswalk to see oncoming traffic.
- **(34) Feels more dangerous or confusing:** Some people are concerned with the amount of street furniture now on the road. They say it can be confusing with so many things to interpret and consider. The increased traffic currently also seems to make this worse as there are so many things to look out for, and people are making rash decisions due to the stress of the traffic. A few also bring up that this street design is not aesthetically pleasing with so much to look at.

## Safety Concerns

Respondents shared safety concerns in specific areas from the quick-build changes:

- **(70) 2<sup>nd</sup> Street to 3<sup>rd</sup> Street:** Many participants commented on this section of the project.
  - Respondents feel the westbound transition from two lanes to one lane is unsafe. They reported drivers making last-minute lane changes from the right-turn-only lane to continue west and cut off other vehicle or bike users. Some suggested warning of the right turn only should be more advanced.
  - The bike lane ends abruptly at 2<sup>nd</sup> Street for eastbound bike users, causing confusion for people biking beyond 2<sup>nd</sup> and whether they are required to turn onto 2nd Street, merging with traffic, or biking on the sidewalk.

- **(39) Emergency services access:** Some are concerned over how these changes are affecting emergency response times. A few people mentioned emergency vehicles needing to cross into oncoming traffic to get around cars.
- **(38) Crosswalk visibility blocked or confusing at specific intersections:** Respondents shared that visibility at crosswalks is blocked, or confusing at specific intersections (Harriman, Hill, 1<sup>st</sup>). Many commented that more lighting is needed at crosswalks or flashing beacons to alert drivers when pedestrians are present. They report often seeing cars not yielding to pedestrians at crosswalks due to poor visibility.

Some commented that the median islands and bollards make it harder to see people walking and biking at Harriman Street. At the Wall Street intersection, bike users find the left turn onto Wall Street from Newport unsafe because bikes must merge with traffic.

### Positive Feedback / Appreciation

**(466) Respondents shared general support for the project and appreciation.** Many road users feel safer because of the slower speeds and better visibility. They shared that driving, biking, or walking on Greenwood Avenue recently has been a less stressful experience. Participants also thanked the project team for the safety improvements and features for all road users. They also shared that the design is working well from their perspectives. Some continued to request further bike safety amenities such as additional bike buffers/protection along the lanes. Specifically, respondents commented on:

- **(130) Safer:** Several people commented that they feel safer traveling on Greenwood, whether using the crosswalks, biking, or driving. Many felt there is better visibility of pedestrians for drivers.
  - Some respondents mentioned a safer crosswalk is needed on 1<sup>st</sup> or 2<sup>nd</sup> Street.
- **(98) Appreciate one lane with turn lane design:** Respondents shared various user experiences with the one wider traffic lane configuration:
  - Easier to see people walking and biking (improved visibility) with fewer travel lanes to monitor.
  - Easier to turn left with the left turn lanes, which makes traffic flow more consistent.
  - Wider single lane is easier to drive on compared to the former 2 lanes (especially for large vehicles/trucks), and easier to turn onto side streets. (No more fear of mirrors being knocked off)
- **(26) Steady flow/no traffic congestion impacts**