



TRANSPORTATION ADVISORY COMMISSION

AGENDA

Tuesday, January 23, 2024, 5:30 p.m.

This meeting includes in-person and virtual participation.

Santiam Room, City Hall

333 Broadalbin Street SW

Or join the meeting here:

<https://council.cityofalbany.net/groups/tac/zoom>

You can use your microphone or dial in using your phone. Phone: 1 (253) 215-8782 (Long distance charges may apply)

Meeting ID: 825 1857 5813; Passcode: 053593

Please help us get Albany's work done.

Be respectful and refer to the rules of conduct posted by the main door to the Chambers and on the website.

1. Call to order
2. Roll call
3. Approval of November 28, 2023, and January 8, 2024, minutes
4. Scheduled Business
 - a. Election of Chair and Vice-Chair (5 minutes)
 - b. Fulton Street Stop Sign Request (10-minutes)
 - c. Highway 20 Corridor Study Presentation Recap (5-minutes)
 - d. Waverly/Columbus Speed Zone Study
 - e. Continuation of Street Funding Discussion (35-minutes)
5. Business from the Commission
6. Business from the Public

Persons wanting to provide comments may:

- 1- *Email written comments to Andrew Monaco, Andrew.Monaco@cityofalbany.net, including your name, before **noon on day of meeting**.*
 - 2- *To comment virtually during the meeting, register with your name by emailing Andrew Monaco, Andrew.Monaco@cityofalbany.net before **noon on day of meeting**. The chair will call upon those who have registered to speak.*
 - 3- *Appear in person at the meeting and register to speak using the sign-up sheet on the table.*
7. Next Meeting Date: February 27, 2024
 8. Adjournment

This meeting is accessible to the public via video connection. The location for in-person attendance is accessible to people with disabilities. If you have a disability that requires accommodation, please notify city staff at least 48 hours in advance of the meeting at Andrew.Monaco@cityofalbany.net or 541-917-7656.

Testimony provided at the meeting is part of the public record. Meetings are recorded, capturing both in-person and virtual participation, and are posted on the City website.

cityofalbany.net





TRANSPORTATION ADVISORY COMMISSION

MINUTES

November 28, 2023

5:30 p.m.

Santiam Room, City Hall/Virtual

Approved: DRAFT

Call to Order

5:30 p.m.

Chair Chuck Kratch called the meeting to order at 5:30 p.m.

Roll Call

Members present: Chuck Kratch, Mark Siddall, Frankie McCullough, Nolan Streitberger, Terry Virnig and Lacy Ramirez

Members absent: Kristen Andrews (excused)

Staff present: City Engineer Staci Belcastro, Transportation Manager Robb Romeo, Transportation Systems Analyst Ron Irish, Engineering Associate I Andrew Monaco, Public Works Clerk III Anita Dodd

Others present: Billy McGregor, AAMPO

Approval of October 24, 2023, Minutes

5:32 p.m.

After some discussion, Frankie McCullough made a motion to approve the minutes as presented; Chuck Kratch seconded the motion; and the motion passed unanimously.

Scheduled Business

5:32 p.m.

Transportation Systems Analyst Ron Irish started off by addressing an email that came in from a local citizen about possibly moving a stop sign or installing a speed hump in the Fulton Street/4th Avenue area to help with traffic control. The commission discussed the options to help resolve the issue and requested that Irish collect speed hump/ stop sign data and present the information at the January TAC meeting.

Next, Irish discussed the potential Rectangular Rapid Flashing Beacons (RRFB) pedestrian crossing improvement sites and the possible ways the city can raise funds to move forward with installing those units based on priority level. The commission rationalized the data revolving around the effectiveness of RRFB crosswalks and the cost. Kratch proposed Irish take the commission on a road trip to the proposed RRFB sites to help visualize why a special crosswalk is needed in these areas, and Irish said he will try to arrange for this to happen sometime in the first half of January.

Public Works Director Chris Bailey gave a brief presentation to inform how much it will cost to improve the streets to a satisfactory level and gave examples of alternative pavement funding options along with the

pros and cons of each. This presentation will also be given at the December 11, 2023, council work session to create a strategy for a comprehensive plan moving forward.

Business from Commission

6:55 p.m.

Mark Siddall presented a letter to the commission that they agreed to discuss further at the January meeting.

Business from the Public

7:01 p.m.

None.

Next Meeting Date

The next scheduled meeting is January 23, 2024.

Adjournment

Seeing no further business, the chair adjourned the meeting at 7:01p.m.

Respectfully submitted,

Reviewed by,

Anita Dodd
Clerk III

Ron Irish
Transportation Systems Analyst

**Documents discussed at the meeting that are not in the agenda packet are archived in the record. The documents are available by emailing cityclerk@cityofalbany.net.*



ALBANY CITY COUNCIL

MINUTES

Tuesday, January 8, 2024
Special Session
Council Chambers, City Hall

Approved: **DRAFT**

Call to Order

Mayor Alex Johnson II called the meeting to order at 4:00 p.m.

Roll Call

Councilors present: Mayor Alex Johnson II and Councilors Steph Newton, Matilda Novak, Ray Kopczynski, Ramycia McGhee, and Marilyn Smith

Councilors absent: Councilor Jackie Montague (excused)

Commissioners present: Lacy Ramirez (virtual), Mark Siddall, Frankie McCullough, Nolan Streitberger, Chuck Kratch

Commissioners absent: Terry Virnig

Highway 20 corridor study

Engineering Manager/Assistant City Engineer Rob Emmons introduced Scott Mansur and Aaron Berger from DKS Associates, who presented slides* with proposed improvements to the Highway 20 corridor that would decrease traffic congestion. Mansur and Berger answered clarifying questions from councilors and commissioners and showed simulations forecasting future traffic both with and without the changes. These simulations can be found in the video recording of the meeting.

Business from the council and commission

Chair of the Transportation Advisory Commission (TAC) Chuck Kratch thanked the council for inviting the commission to join this work session and relayed to councilors the upcoming work of the TAC. Kratch said the TAC had asked representatives from rail and bus lines, the Albany Area Metropolitan Planning Organization, and the Oregon Department of Transportation to present to the TAC. Commissioners Frankie McCollough and Nolan Streitberger also thanked the council for the invitation to attend.

Commissioner Mark Siddall said Albany needs to optimize transit and invest in mass transit systems.

ADJOURNMENT

There being no other business, the meeting was adjourned at 5:15 p.m.

Respectfully submitted,

Reviewed by,

Gabe Shepherd
Deputy City Clerk

Peter Troedsson
City Manager

cityofalbany.net/council





INTEROFFICE MEMO

TO: Angela Kargel, P.E.
Interim State Traffic-Roadway Engineer for Speed Zoning

FROM: Dorothy Upton, P.E.
Interim Region 2 Traffic Operations Engineer
(503) 986-5761

SUBJECT: **Speed Zone Investigation #13832**
Waverly Drive SE / Columbus Street SE
Salem Avenue SE to 0.10 mile south of Ellingson Road SE
City of Albany

Region 2 Traffic Operations Engineer

A speed zone investigation has been conducted on Waverly Drive SE / Columbus Street SE from Salem Avenue SE to 0.10 mile south of Ellingson Road SE. The investigation was requested by Ron Irish, Transportation Systems Analyst, City of Albany. This section is currently statutory 55 mph. The city is requesting 25 mph (Section A) / 35 mph (B) / 40 mph (C). Stated the reason of "Combination of residential and commercial uses along an arterial street that has been posted for 25 mph for decades without a speed zone order" for Section A. Stated the reason of "The existing 40 mph limit doesn't fit the context of the adjoining land uses, driveway/intersection spacing, and uncontrolled ped crossings" for Section B. Stated the reason of "Jurisdictional change, annexation of adjoining land to west, and construction of urban improvements for a residential subdivision" for Section C.

The first investigated section (Section A) is 0.54 mile in length and heavy residential in density and culture, with a urban mix context and has an ADT of 12,000. This road is classified as a Urban Minor Arterial (City – Albany, County – Linn). Two spot speed checks showed the cumulative 85% speed to be 32 mph and the cumulative 50% speed to be 28 mph. Eighty-eight percent of the cars are traveling within the pace limits of 24 - 33 mph. Seventy-nine percent of the cars are exceeding the existing 25 mph posted speed. There were 65 reported crashes between 01/01/19 and 12/31/21, with one fatal and one being Inj A. This section is posted 25 mph and unestablished, it does not meet the statutory definitions of a residence district as it is functionally classified as an arterial roadway.

The second investigated section (Section B) is 2.76 miles in length and heavy residential in density and culture, with a suburban commercial context and has an ADT of 22,000. This road is classified as a Urban Minor Arterial (City – Albany, County – Linn). Five spot speed checks showed the cumulative 85% speed to be 43 mph and the cumulative 50% speed to be 37 mph. Seventy percent of the cars are traveling within the pace limits of 33 - 42 mph. Thirty percent of the cars are exceeding the existing 40 mph posted speed. There were 110 reported crashes between 01/01/19 and 12/31/21, with one fatal and four being Inj A.

Speed Zone Investigation #13832
Waverly Drive SE / Columbus Street SE
Salem Avenue SE to 0.10 mile south of Ellingson Road SE
City of Albany
(page 2)

The third investigated section (Section C) is 0.51 miles in length and moderate residential in density and culture, with a suburban fringe context and has an ADT of 6,000. This road is classified as a Urban Minor Arterial (City – Albany, County – Linn). One spot speed check showed the 85% speed to be 58 mph and the 50% speed to be 52 mph. Seventy percent of the cars are traveling within the pace limits of 48 - 57 mph. Twenty-nine percent of the cars are exceeding the existing 55 mph posted speed. There were 6 reported crashes between 01/01/19 and 12/31/21, with one being Inj A.

While conducting this investigation it was determined that SSCB Order 2525 dated June 25, 1975 should have been rescinded when SZRP Delegated Order 1088D dated August 21, 1995 was established. Looking at investigation #1940 (dated July 5, 1995), the section(s) on SSCB Order 2525 was covered on the new order (SZRP Delegated Order 1088D).

Our recommendation is based on requested speed, culture, context, and crash rate; we are recommending to establish the speeds as described in the following sections. 25 mph for Section A under OAR 734-020-0015 (2)(b) – Based on context. 35 mph for Section B under OAR 734-020-0015 (2)(d) – The 50th percentile speed is 35 or greater. 50 mph for Section C under OAR 734-020-0015 (2)(d) – The 50th percentile speed is 35 or greater.

If you concur with this recommendation, please note your concurrence on the attached report.

DU/WR

OREGON DEPARTMENT OF TRANSPORTATION

Report of Speed Zone Investigation

WAVERLY DRIVE SE / COLUMBUS STREET SE

Salem Avenue SE to 0.10 mile south of Ellingson Road SE

City of Albany

January 10, 2024

Approved by
State Traffic-Roadway Engineer

Recommendation: Rescind existing SZRP Delegated Order 1088D dated August 21, 1995 and SSCB Order 2525 dated June 25, 1975 to establish the following speed zoning.

| <u>Section</u> | <u>Existing</u> | <u>Recommended</u> |
|----------------|-----------------|--------------------|
|----------------|-----------------|--------------------|

Investigated

On WAVERLY DRIVE SE

| | | | |
|----------|---|-------------------|--------|
| A | From: Salem Avenue SE To: Santiam Highway #016 (US 20) | 55 mph (stat.) | 25 mph |
| B | From: Santiam Highway #016 (US 20) To: Cascade Drive | 40 mph | 35 mph |

On COLUMBUS STREET SE

| | | | |
|----------|---|-------------------|--------|
| B | From: Cascade Drive To: 500 feet south of 54 th Avenue SE (Oak Creek) | 40 mph | 35 mph |
| C | From: 500 feet south of 54th Avenue SE (Oak Creek) To: 0.10 mile south of Ellingson Road SE | 55 mph (stat.) | 50 mph |

Historical Background:

Investigation Requested by: Ron Irish, Transportation Systems Analyst, City of Albany.

Requested Speed: 25 mph / 35 mph.

Previous Action: Existing SZRP Delegated Order 1088D dated August 21, 1995 and SSCB Order 2525 dated June 25, 1975.

| <u>Investigation:</u> | <u>Section A</u> | <u>Section B</u> | <u>Section C</u> |
|------------------------------|-------------------|-------------------|----------------------|
| Section Length | 0.54 mile | 2.76 mile | 0.51 mile |
| 85% Speed | 32 mph | 43 mph | 58 mph |
| 50% Speed | 28 mph | 37 mph | 52 mph |
| 2019-2021 Section Crash Rate | 9.16 | 1.65 | 1.79 |
| 2022 Average Daily Traffic | 12000 | 22000 | 6000 |
| Context | Urban Mix | Suburban Comm. | Suburban Fringe |
| Culture Type & Density | Heavy Residential | Heavy Residential | Moderate Residential |
| Horizontal Alignment | 0 curves | 2 curves | 0 curves |
| Vertical Alignment | Level | Level | Level |
| Curve Signs & Speed Riders | None | None | None |
| Existing Posted Speed | 25 mph | 40 mph | 55 mph |
| Recommended Speed | 25 mph | 35 mph | 50 mph |

| <u>Roadway Data:</u> | <u>Section A</u> | <u>Section B</u> | <u>Section C</u> |
|----------------------|----------------------|----------------------|--------------------------|
| Surface | AC | AC / PCC | AC |
| Lanes | 2-3 | 2-5 | 2-3 |
| Width | 34'-45' curb to curb | 50'-70' curb to curb | 31'-46' curb to curb |
| Parking | Partially Prohibited | Partially Prohibited | None (curb/ditch) |
| Shoulders | 0'-7' paved (curb) | 0'-16' paved (curb) | 3'-5' paved (curb/ditch) |
| Intersecting Streets | 6 | 28 | 2 |
| Paved | 6 | 28 | 2 |
| Stopped | 5 | 23 | 2 |
| Signalized and Other | 1 | 5 | 0 |
| Pedestrian Activity | High | High | Low |
| Bicycle Activity | High | High | Med |
| Bicycle Lanes | 35% | 90% | 30% |
| Sidewalks | 80% | 100% | 30% |
| Marked Crosswalks | 0 | 2 | 0 |
| Enhanced Crosswalks | 1 | 3 | 0 |
| Transit | Yes | Yes | No |

Crash Data:

| <u>Study Period</u> | 1/1/19-12/31/21 | 1/1/19-12/31/21 | 1/1/19-12/31/21 |
|--|-----------------|-----------------|-----------------|
| 19-21 Total Crashes | 65 | 110 | 6 |
| 19-21 Fatal K Crashes | 1 | 1 | 0 |
| 19-21 Serious Injury A Crashes | 1 | 4 | 1 |
| 19-21 Injury B and C Crashes | 37 | 56 | 3 |
| 19-21 No Injury O Crashes | 26 | 49 | 2 |
| 19-21 Section Crash Rate (R) | 9.16 | 1.65 | 1.79 |
| 21 Comparable Crash Rate (r) <u>1/</u> | 2.56 | 2.56 | 2.56 |
| Deviation (R-r) | 6.6 | - | - |

Spot Speed Data:

| | | | |
|------------------------------|-------------|-------------|-------------|
| 85% Speed | 32 mph | 43 mph | 58 mph |
| 50% Speed | 28 mph | 37 mph | 52 mph |
| Pace Limits <u>2/</u> | 24 – 33 mph | 33 – 42 mph | 48 – 57 mph |
| % in Pace | 88% | 70% | 70% |
| Maximum Speed | 42 mph | 64 mph | 67 mph |
| Posted Speed | 25 mph | 40 mph | 55 mph |
| % Exceeding Posted Speed | 79% | 30% | 29% |
| Computed 85% Speed <u>3/</u> | 25.4 mph | 43 mph | 58 mph |
| Recommended Speed | 25 mph | 35 mph | 50 mph |

1/ Urban Minor Arterial (City – Albany, County – Linn)

2/ Ten mile-per-hour range containing the largest number of sample vehicles

3/ 85% speed minus deviation/85% speed (if Deviation is zero or negative)

Factors Influencing Recommendation:

Our recommendation is based on requested speed, culture, context, and crash rate.

Section A: OAR 734-020-0015 (2)(b) Based on context.

Section B: OAR 734-020-0015 (2)(d) The 50th percentile speed is 35 or greater.

Section C: OAR 734-020-0015 (2)(d) The 50th percentile speed is 35 or greater.

SPEED ZONE INVESTIGATION

WAVERLY DRIVE SE / COLUMBUS STREET SE

CITY OF ALBANY

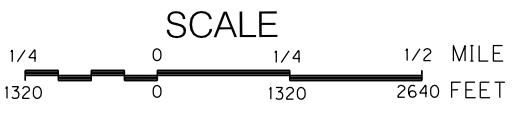
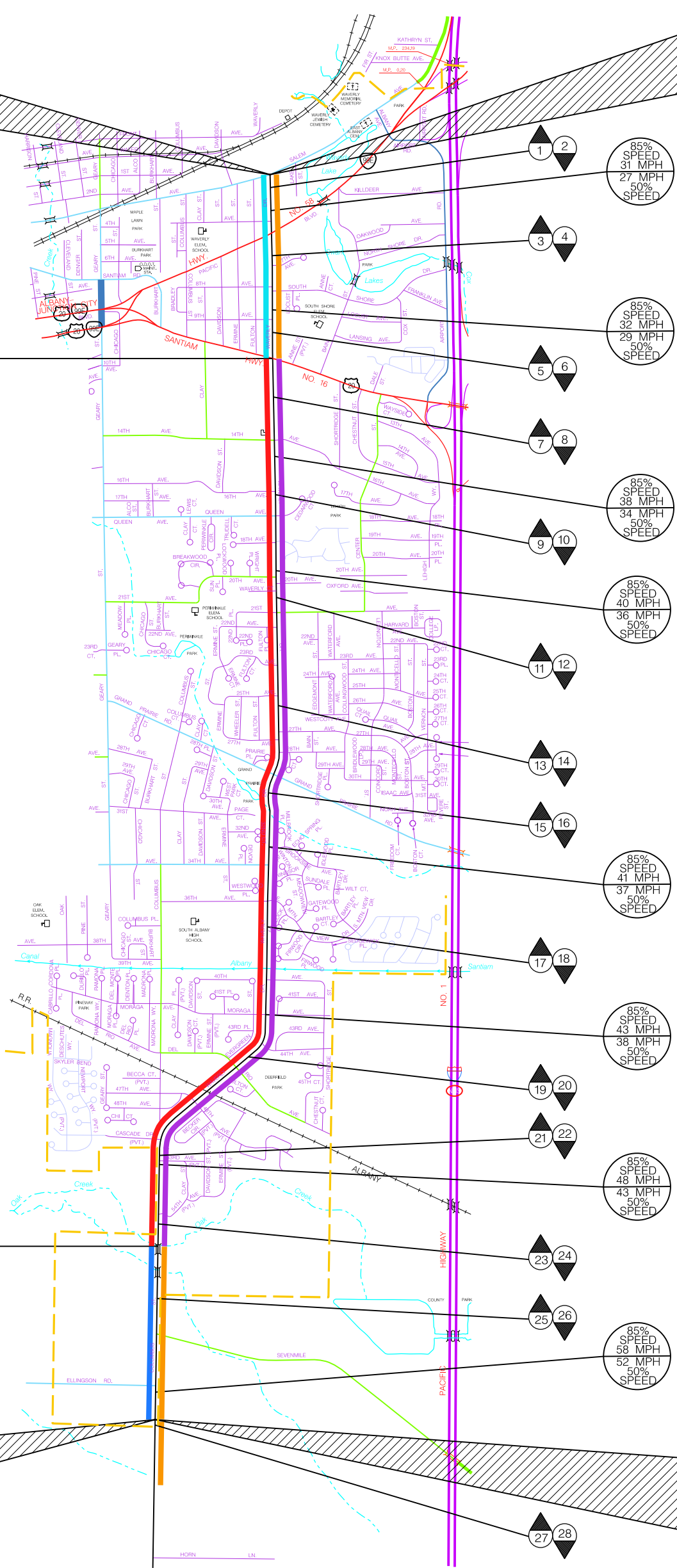
RECOMMENDED

EXISTING

SECTION A
INVESTIGATED

SECTION B
INVESTIGATED

SECTION C
INVESTIGATED



| LEGEND | |
|--|---------------|
| — | 20 MPH |
| — | 25 MPH |
| — | 30 MPH |
| — | 35 MPH |
| — | 40 MPH |
| — | 45 MPH |
| — | 50 MPH |
| — | 55 MPH (STAT) |
| | CITY LIMITS |



**TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024**



1. Looking northbound from 200 feet south of Salem Avenue SE.



2. Looking southbound from 200 feet south of Salem Avenue SE.

TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024



3. Looking northbound from 350 feet south of Albany-Junction City Hwy (99E).



4. Looking northbound from 350 feet south of Albany-Junction City Hwy (99E).

TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024



5. Looking northbound from 200 feet south of 9th Avenue SE.



6. Looking southbound from 200 feet south of 9th Avenue SE.

TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024



7. Looking northbound from 0.11 mile south of Santiam Highway (US 20).



8. Looking southbound from 0.11 mile south of Santiam Highway (US 20).

TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024



9. Looking northbound from 50 feet south of 16th Avenue SE.



10. Looking southbound from 50 feet south of 16th Avenue SE.

**TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024**



11. Looking northbound from 100 feet south of Waverly Court SE.



12. Looking southbound from 100 feet south of Waverly Court SE.

**TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024**



13. Looking northbound from 150 feet south of 25th Avenue SE.



14. Looking southbound from 150 feet south of 25th Avenue SE.

TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024



15. Looking northbound from 300 feet south of Grand Prairie Road SE.



16. Looking southbound from 300 feet south of Grand Prairie Road SE.

**TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024**



17. Looking northbound from 400 feet south of 36th Avenue SE.



18. Looking southbound from 400 feet south of 36th Avenue SE.

TYPICAL VIEWS
WAVERLY DRIVE SE
CITY OF ALBANY
JANUARY 4, 2024



19. Looking northbound from 250 feet north of Del Rio Avenue SE.



20. Looking southbound from 250 feet north of Del Rio Avenue SE.

**TYPICAL VIEWS
COLUMBUS STREET SE
CITY OF ALBANY
JANUARY 4, 2024**



21. Looking northbound from 250 feet south of Cascade Drive.



22. Looking southbound from 250 feet south of Cascade Drive.

TYPICAL VIEWS
COLUMBUS STREET SE
CITY OF ALBANY
JANUARY 4, 2024



23. Looking northbound from 150 feet south of 54th Avenue SE.



24. Looking southbound from 150 feet south of 54th Avenue SE.

**TYPICAL VIEWS
COLUMBUS STREET SE
CITY OF ALBANY
JANUARY 4, 2024**



25. Looking northbound from 0.10 mile north of Seven Mile Lane SE.



26. Looking southbound from 0.10 mile north of Seven Mile Lane SE.

TYPICAL VIEWS
COLUMBUS STREET SE
CITY OF ALBANY
JANUARY 4, 2024



27. Looking northbound from 0.10 mile south of Ellingson Road SE.



28. Looking southbound from 0.10 mile south of Ellingson Road SE.



Davidson St.

Davidson St.

Ermine St.

Highway 99E

Fulton St.

4th Ave.

24 Hour Speed

Site: Fulton
12/05/2023
Tuesday

| mph | Combined Channels | | | | | | | | | | | | | | | | | Avg. |
|------------|-------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----|-----|-----|------|
| | Total | < 15 | 15 - < 20 | 20 - < 25 | 25 - < 30 | 30 - < 35 | 35 - < 40 | 40 - < 45 | 45 - < 50 | 50 - < 55 | 55 - < 60 | 60 - < 65 | 65 - < 70 | 70 - < 200 | | | | |
| 2:00 PM | 56 | 1 | 13 | 21 | 15 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.5 |
| 3:00 PM | 75 | 3 | 11 | 37 | 20 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.2 |
| 4:00 PM | 74 | 0 | 16 | 22 | 33 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.2 |
| 5:00 PM | 55 | 1 | 5 | 19 | 24 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.1 |
| 6:00 PM | 46 | 0 | 2 | 26 | 16 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.0 |
| 7:00 PM | 16 | 0 | 1 | 8 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.3 |
| 8:00 PM | 17 | 0 | 3 | 7 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.1 |
| 9:00 PM | 14 | 1 | 2 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.2 |
| 10:00 PM | 7 | 0 | 2 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.6 |
| 11:00 PM | 5 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.9 |
| 12/06/2023 | | | | | | | | | | | | | | | | | | |
| 12:00 AM | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27.6 |
| 1:00 AM | 3 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.4 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 3:00 AM | 3 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20.7 |
| 4:00 AM | 11 | 1 | 0 | 3 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26.1 |
| 5:00 AM | 39 | 0 | 4 | 11 | 16 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26.7 |
| 6:00 AM | 54 | 0 | 3 | 13 | 35 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26.0 |
| 7:00 AM | 74 | 1 | 8 | 32 | 28 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.3 |
| 8:00 AM | 41 | 1 | 6 | 18 | 13 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.9 |
| 9:00 AM | 51 | 3 | 4 | 31 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.7 |
| 10:00 AM | 36 | 1 | 5 | 12 | 16 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.1 |
| 11:00 AM | 48 | 3 | 8 | 24 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.8 |
| 12:00 PM | 53 | 1 | 7 | 25 | 17 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.6 |
| 1:00 PM | 49 | 3 | 7 | 23 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| Total | 830 | 21 | 108 | 346 | 298 | 48 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.1 |
| % | | 2.5 | 13.0 | 41.7 | 35.9 | 5.8 | 1.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

| | | | | | | | | |
|--------------------------|----------|----------------|---------------|----------------|---------------|-------------------|-----------------|----------------------|
| Average (Mean) | 24.1 mph | Minimum | 10.6 mph | Maximum | 42.6 mph | Pace Range | 19.6 - 29.6 mph | 652 vehicles (78.6%) |
| Percentile Speeds | (mph) | 10% | 15% | 50% | 85% | 90% | | |
| | | 18.4 | 19.9 | 24.2 | 28.4 | 29.2 | | |
| Speeds Exceeded | | 25 mph | 35 mph | 45 mph | 55 mph | 65 mph | 75 mph | |
| | | 42.8% (355) | 1.1% (9) | 0% (0) | 0% (0) | 0% (0) | 0% (0) | |

24 Hour Speed

Combined Channels

| mph | Total | 0 - < 15 | 15 - < 20 | 20 - < 25 | 25 - < 30 | 30 - < 35 | 35 - < 40 | 40 - < 45 | 45 - < 50 | 50 - < 55 | 55 - < 60 | 60 - < 65 | 65 - < 70 | 70 - < 200 | Avg. |
|------------|-------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|------|
| 2:00 PM | 64 | 4 | 11 | 28 | 16 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 23.2 |
| 3:00 PM | 77 | 3 | 16 | 36 | 16 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 4:00 PM | 75 | 1 | 6 | 32 | 31 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.5 |
| 5:00 PM | 55 | 2 | 7 | 20 | 22 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.3 |
| 6:00 PM | 30 | 0 | 4 | 12 | 11 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.4 |
| 7:00 PM | 16 | 0 | 2 | 5 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.0 |
| 8:00 PM | 25 | 0 | 4 | 11 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.0 |
| 9:00 PM | 6 | 0 | 0 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.1 |
| 10:00 PM | 4 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.3 |
| 11:00 PM | 6 | 0 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26.9 |
| 12/05/2023 | | | | | | | | | | | | | | | |
| 12:00 AM | 4 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27.2 |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 2:00 AM | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32.8 |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 4:00 AM | 10 | 0 | 0 | 2 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27.7 |
| 5:00 AM | 36 | 0 | 2 | 10 | 16 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26.7 |
| 6:00 AM | 55 | 0 | 3 | 16 | 34 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25.3 |
| 7:00 AM | 68 | 1 | 13 | 25 | 23 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.1 |
| 8:00 AM | 49 | 0 | 10 | 25 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.4 |
| 9:00 AM | 47 | 3 | 9 | 27 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 10:00 AM | 41 | 2 | 8 | 18 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.2 |
| 11:00 AM | 48 | 3 | 5 | 21 | 15 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.5 |
| 12:00 PM | 59 | 3 | 11 | 25 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.9 |
| 1:00 PM | 58 | 6 | 11 | 29 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.0 |
| Total | 834 | 28 | 124 | 349 | 274 | 52 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 23.8 |
| % | | 3.4 | 14.9 | 41.8 | 32.9 | 6.2 | 0.7 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | |

Average (Mean) 23.8 mph Minimum 10.1 mph Maximum 54.2 mph Pace Range 19.0 - 29.0 mph 640 vehicles (76.7%)

| Percentile Speeds (mph) | 10% | 15% | 50% | 85% | 90% |
|-------------------------|------|------|------|------|------|
| | 17.7 | 19.2 | 23.8 | 27.9 | 28.9 |

| Speeds Exceeded | 25 mph | 35 mph | 45 mph | 55 mph | 65 mph | 75 mph |
|-----------------|-------------|----------|----------|--------|--------|--------|
| | 39.9% (333) | 0.8% (7) | 0.1% (1) | 0% (0) | 0% (0) | 0% (0) |

Crash Listing

Roadway Waverly Dr SE / Columbus St SE
 Route Number _____
 City Albany
 County Linn From _____
Salem Ave SE
 To 0.10 mi S of Ellingson Rd SE
 Years 2019 To 2021

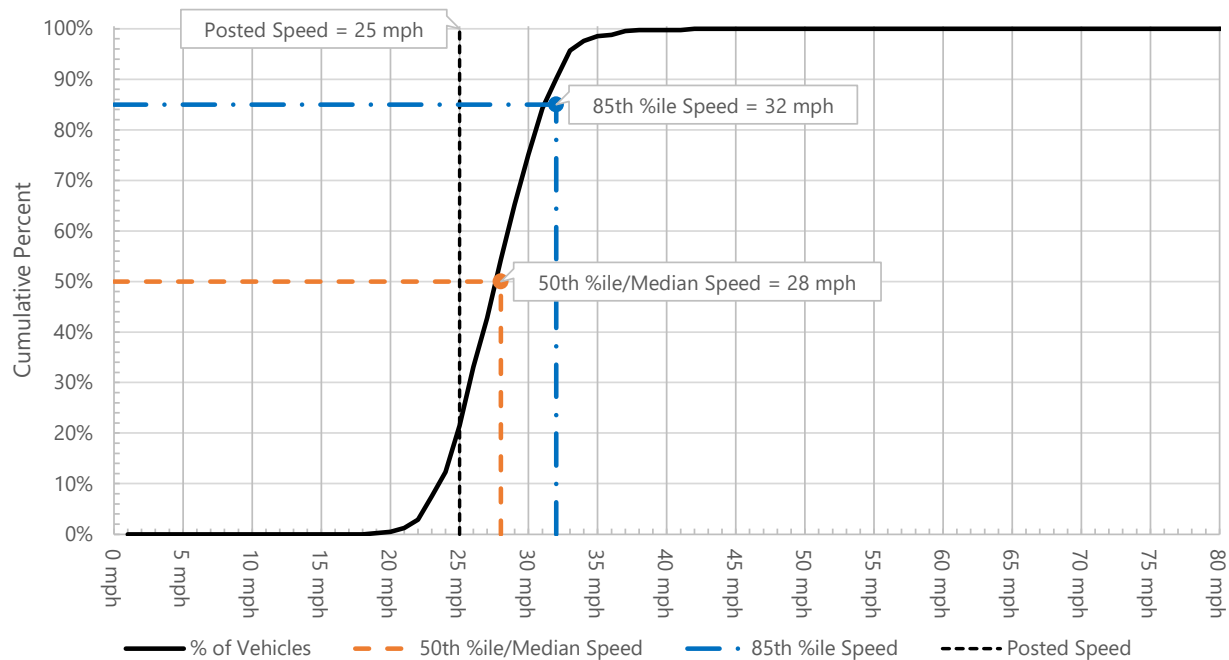
| | Year | Collision Type | | | | | | | | | | | | | All Crashes* | Classification | | | | | |
|---|-------|----------------|---------|----------|-------------------|----------------------|-------------------|------------------|---------------|--------------------|------------|---------|-------|------------------|--------------|----------------|------------------|----------------|-------------|----|---|
| | | Angle | Head-On | Rear-End | Sideswipe Meeting | Sideswipe Overtaking | Turning Movements | Parking Maneuver | Non-Collision | Fixed-Other Object | Pedestrian | Backing | Other | Bicycle Crashes* | | Fatal K | Serious Injury A | Injury B and C | No Injury O | | |
| Section A | 2021 | 4 | | 8 | | 1 | 7 | | | 2 | | | | | | 22 | | 1 | 13 | 8 | |
| From Salem Avenue SE | 2020 | | 1 | 9 | | | 5 | | 1 | | | 1 | 1 | | | 18 | 1 | | | 8 | 9 |
| To Santiam Highway #016 (US 20) | 2019 | 5 | | 14 | | 1 | 3 | | | 1 | | | 1 | | | 25 | | | | 16 | 9 |
| | Total | 9 | 1 | 31 | 0 | 2 | 15 | 0 | 1 | 3 | 1 | 2 | 0 | 0 | 65 | 1 | 1 | | 37 | 26 | |
| Section B | 2021 | 7 | | 8 | | 1 | 6 | | | 7 | | 1 | 1 | | | 31 | | 3 | 16 | 12 | |
| From Santiam Highway #016 (US 20) | 2020 | 4 | | 13 | | | 15 | | | 5 | | 1 | 1 | | | 39 | 1 | 1 | 15 | 22 | |
| To 500 feet south of 54th Avenue SE | 2019 | 8 | | 18 | | 1 | 11 | | | 2 | | | | | | 40 | | | 25 | 15 | |
| | Total | 19 | 0 | 39 | 0 | 2 | 32 | 0 | 0 | 14 | 2 | 2 | 0 | 0 | 110 | 1 | 4 | | 56 | 49 | |
| Section C | 2021 | | | | | | 1 | | | 1 | | | 1 | | | 3 | | 1 | 1 | 1 | |
| From 500 feet south of 54th Avenue SE | 2020 | | | | | | 1 | | | | | | | | | 1 | | | | 1 | |
| To 0.10 mile south of Ellingson Road SE | 2019 | | | | | | 1 | | | | | | 1 | | | 2 | | | 1 | 1 | |
| | Total | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 6 | 0 | 1 | | 3 | 2 | |
| | Total | | | | | | | | | | | | | | | | | | | | |
| | Total | | | | | | | | | | | | | | | | | | | | |
| | Total | | | | | | | | | | | | | | | | | | | | |
| | Total | | | | | | | | | | | | | | | | | | | | |
| | Total | | | | | | | | | | | | | | | | | | | | |
| | Total | | | | | | | | | | | | | | | | | | | | |
| | Total | | | | | | | | | | | | | | | | | | | | |

*Bicycle Crashes are included in other collision types, do not count twice

Spot Speed Measurement Report - Section Summary

| | | | |
|----------------------------|-------------------------|--|--|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Start of First Spot Speed Study | October 18, 2023 12:13 PM |
| County | Linn | End of Last Spot Speed Study | October 26, 2023 03:09 PM |
| Location | Combined Section A | Weather | See individual reports for specific locations. |
| Direction of Travel | Northbound & Southbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics (2 Spot Speed Studies)

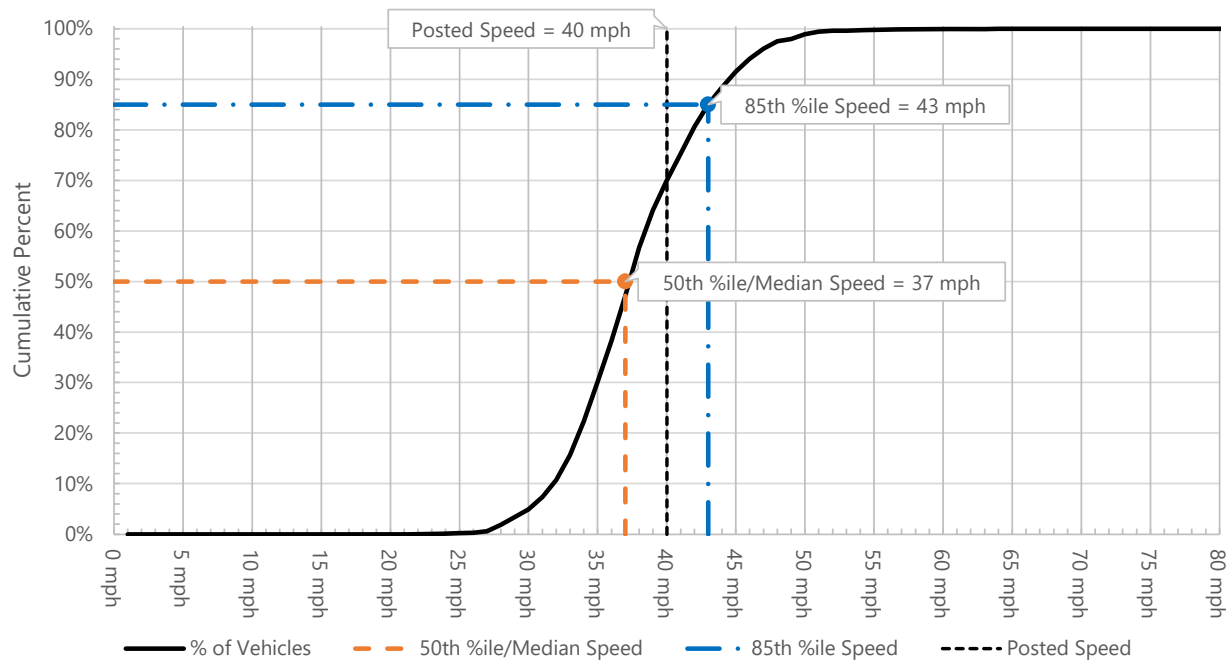
| Direction | Northbound | Combined | Southbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 208 vehicles | 414 vehicles | 206 vehicles |
| 85th %ile Speed | 32 mph | 32 mph | 31 mph |
| 50th %ile/Median Speed | 28 mph | 28 mph | 27 mph |
| Mean Speed | 29 mph | 28 mph | 28 mph |
| Standard Deviation | 3.5 mph | 3.3 mph | 3.0 mph |
| Pace Limits* | 24 mph - 33 mph | 24 mph - 33 mph | 23 mph - 32 mph |
| % In Pace | 87% | 88% | 91% |
| Max Speed | 42 mph | 42 mph | 37 mph |
| Posted Speed | 25 mph | 25 mph | 25 mph |
| % Exceeding Posted Speed | 80% | 79% | 77% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report - Section Summary

| | | | |
|----------------------------|-------------------------|--|--|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Start of First Spot Speed Study | October 19, 2023 01:29 PM |
| County | Linn | End of Last Spot Speed Study | November 09, 2023 02:57 PM |
| Location | Combined Section B | Weather | See individual reports for specific locations. |
| Direction of Travel | Northbound & Southbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics (5 Spot Speed Studies)

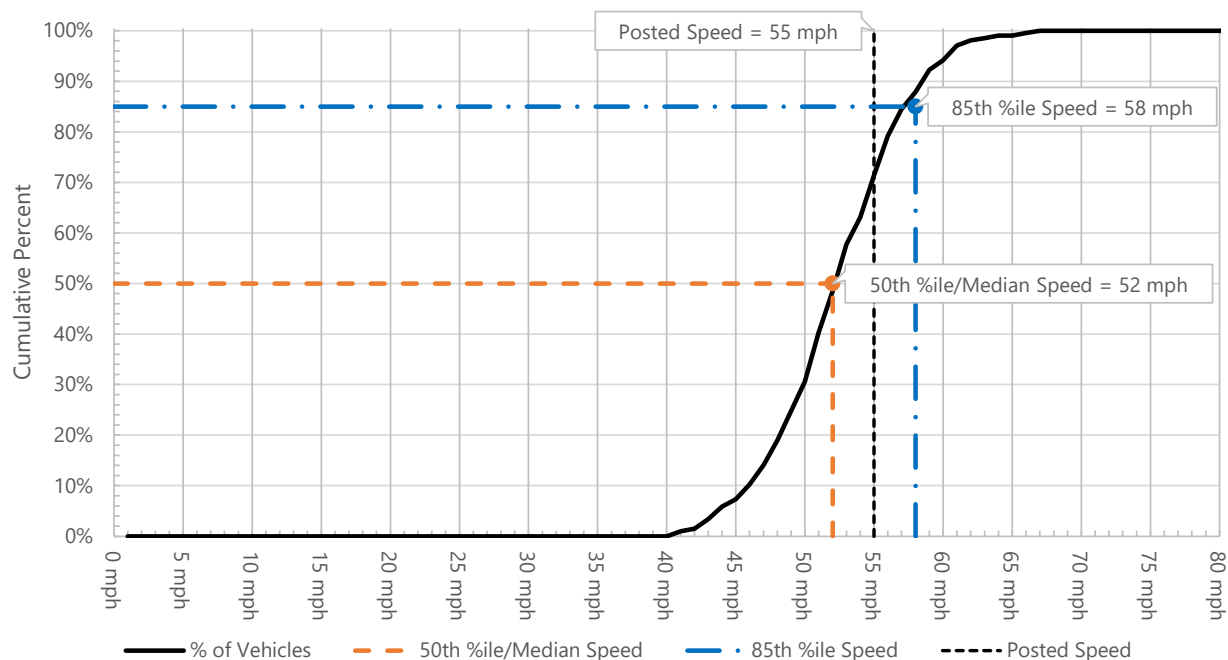
| Direction | Northbound | Combined | Southbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 507 vehicles | 1036 vehicles | 529 vehicles |
| 85th %ile Speed | 43 mph | 43 mph | 43 mph |
| 50th %ile/Median Speed | 37 mph | 37 mph | 37 mph |
| Mean Speed | 38 mph | 38 mph | 38 mph |
| Standard Deviation | 5.1 mph | 5.0 mph | 5.0 mph |
| Pace Limits* | 33 mph - 42 mph | 33 mph - 42 mph | 33 mph - 42 mph |
| % In Pace | 70% | 70% | 69% |
| Max Speed | 64 mph | 64 mph | 56 mph |
| Posted Speed | 40 mph | 40 mph | 40 mph |
| % Exceeding Posted Speed | 31% | 30% | 30% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

| | | | |
|----------------------------|-----------------------------|------------------------|---------------------|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Date | December 12, 2023 |
| County | Linn | Time | 11:21 AM - 01:19 PM |
| Location | 100 S ELLINGSON (Section C) | Weather | SUNNY |
| Direction of Travel | Northbound & Southbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics

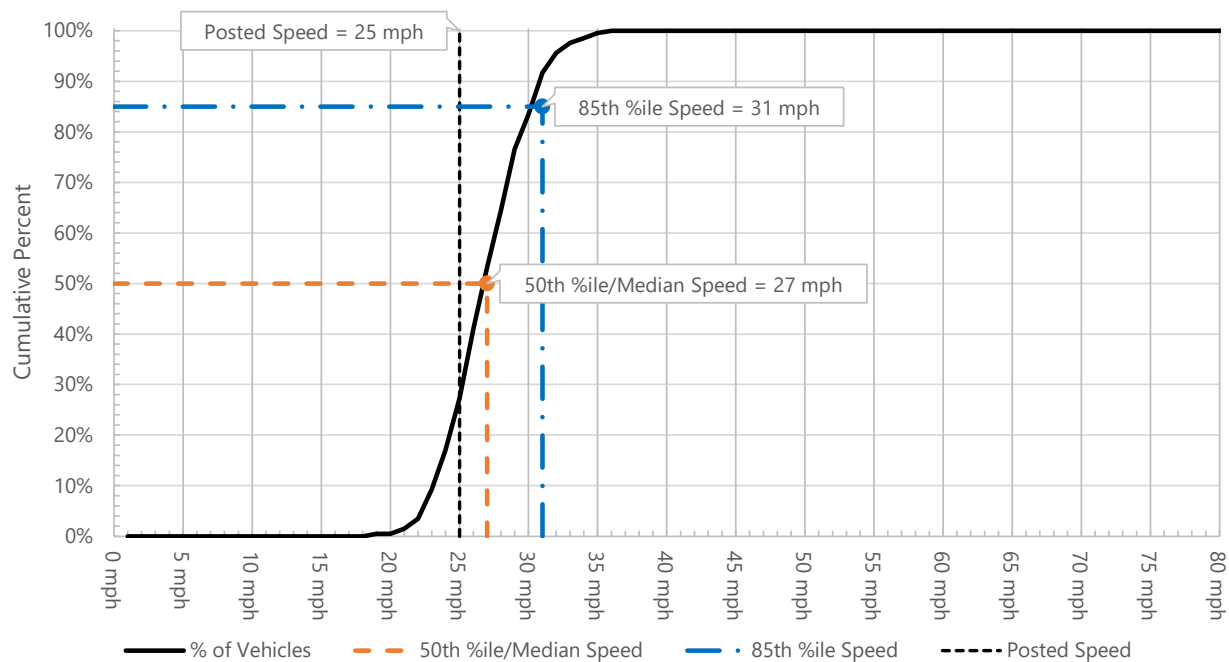
| Direction | Northbound | Combined | Southbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 103 vehicles | 206 vehicles | 103 vehicles |
| 85th %ile Speed | 57 mph | 58 mph | 59 mph |
| 50th %ile/Median Speed | 51 mph | 52 mph | 53 mph |
| Mean Speed | 52 mph | 53 mph | 53 mph |
| Standard Deviation | 4.9 mph | 4.9 mph | 4.7 mph |
| Pace Limits* | 48 mph - 57 mph | 48 mph - 57 mph | 50 mph - 59 mph |
| % In Pace | 70% | 70% | 72% |
| Max Speed | 67 mph | 67 mph | 64 mph |
| Posted Speed | 55 mph | 55 mph | 55 mph |
| % Exceeding Posted Speed | 24% | 29% | 33% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

| | | | |
|----------------------------|-------------------------|------------------------|---------------------|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Date | October 18, 2023 |
| County | Linn | Time | 12:13 PM - 02:30 PM |
| Location | 350 N OF PACIFIC HWY | Weather | OVERCAST |
| Direction of Travel | Northbound & Southbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics

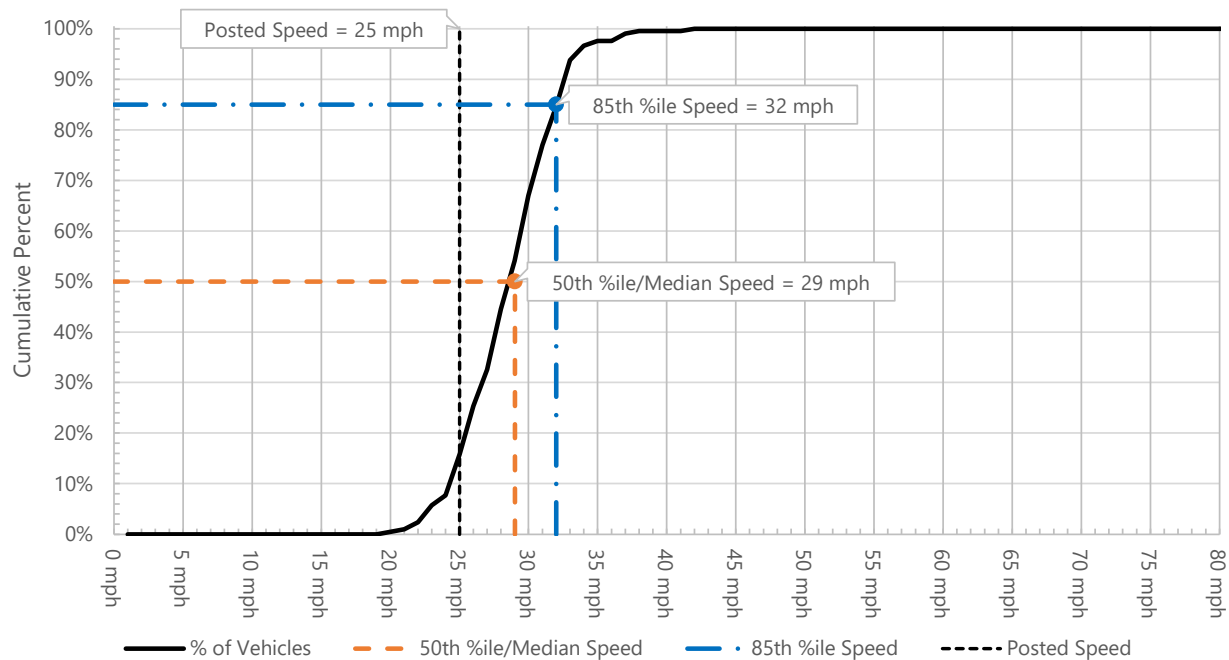
| Direction | Northbound | Combined | Southbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 94 vehicles | 205 vehicles | 111 vehicles |
| 85th %ile Speed | 31 mph | 31 mph | 30 mph |
| 50th %ile/Median Speed | 27 mph | 27 mph | 26 mph |
| Mean Speed | 28 mph | 27 mph | 27 mph |
| Standard Deviation | 3.2 mph | 3.0 mph | 2.8 mph |
| Pace Limits* | 23 mph - 32 mph | 23 mph - 32 mph | 23 mph - 32 mph |
| % In Pace | 88% | 92% | 95% |
| Max Speed | 35 mph | 36 mph | 36 mph |
| Posted Speed | 25 mph | 25 mph | 25 mph |
| % Exceeding Posted Speed | 77% | 73% | 69% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

| | | | |
|----------------------------|-------------------------|------------------------|---------------------|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Date | October 26, 2023 |
| County | Linn | Time | 02:13 PM - 03:09 PM |
| Location | 150 N NINTH ST | Weather | LT CLOUDS |
| Direction of Travel | Southbound & Northbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics

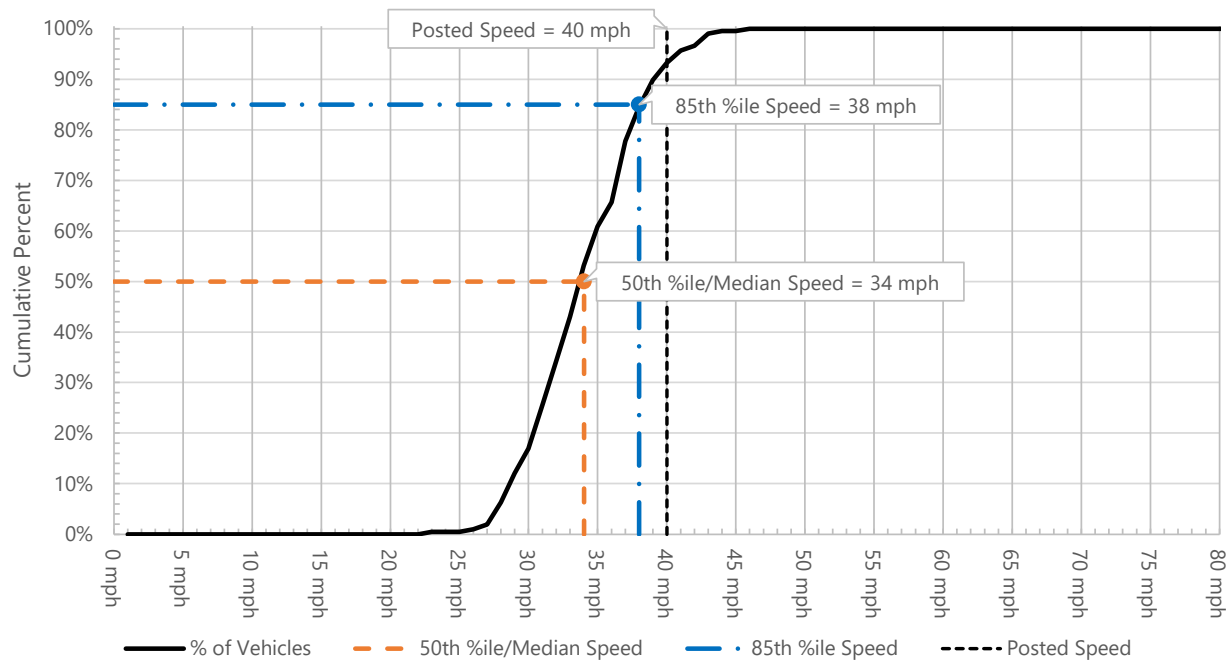
| Direction | Southbound | Combined | Northbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 95 vehicles | 209 vehicles | 114 vehicles |
| 85th %ile Speed | 32 mph | 32 mph | 33 mph |
| 50th %ile/Median Speed | 28 mph | 29 mph | 29 mph |
| Mean Speed | 29 mph | 29 mph | 29 mph |
| Standard Deviation | 3.1 mph | 3.4 mph | 3.6 mph |
| Pace Limits* | 24 mph - 33 mph | 25 mph - 34 mph | 25 mph - 34 mph |
| % In Pace | 88% | 89% | 89% |
| Max Speed | 37 mph | 42 mph | 42 mph |
| Posted Speed | 25 mph | 25 mph | 25 mph |
| % Exceeding Posted Speed | 85% | 84% | 83% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

| | | | |
|----------------------------|-------------------------|------------------------|---------------------|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Date | October 19, 2023 |
| County | Linn | Time | 01:29 PM - 03:18 PM |
| Location | 250 S 14TH AVE | Weather | SUNNY |
| Direction of Travel | Northbound & Southbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics

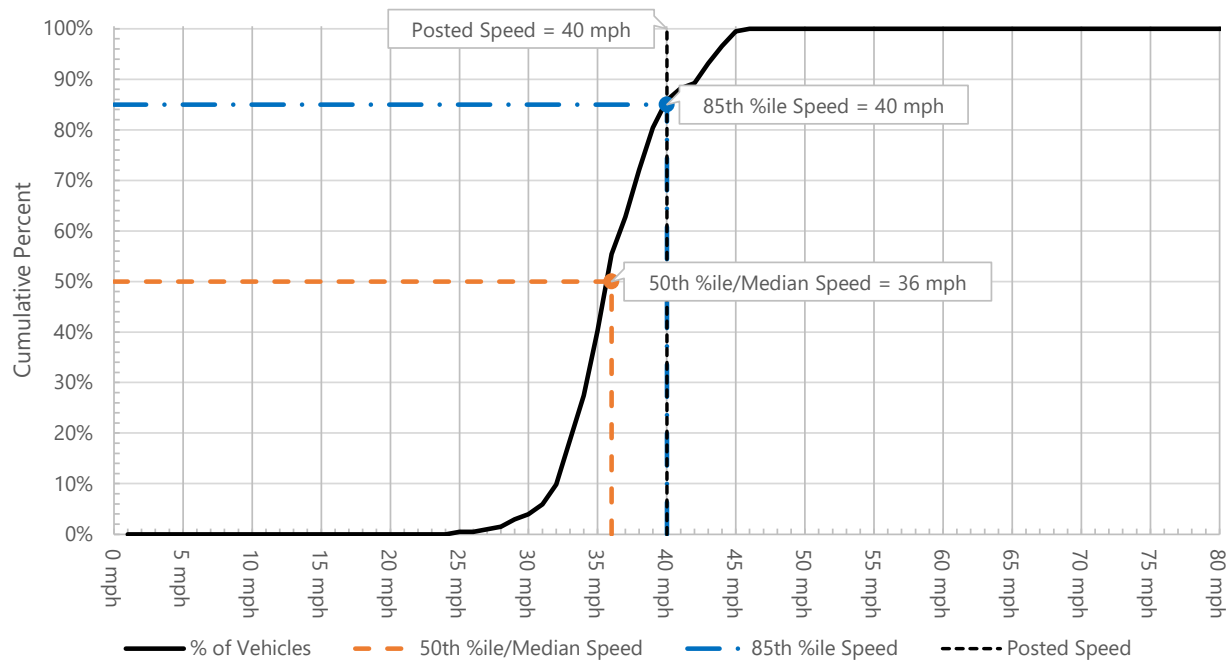
| Direction | Northbound | Combined | Southbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 101 vehicles | 207 vehicles | 106 vehicles |
| 85th %ile Speed | 38 mph | 38 mph | 39 mph |
| 50th %ile/Median Speed | 33 mph | 34 mph | 34 mph |
| Mean Speed | 34 mph | 34 mph | 35 mph |
| Standard Deviation | 4.0 mph | 4.0 mph | 4.1 mph |
| Pace Limits* | 29 mph - 38 mph | 29 mph - 38 mph | 29 mph - 38 mph |
| % In Pace | 81% | 78% | 75% |
| Max Speed | 44 mph | 46 mph | 46 mph |
| Posted Speed | 40 mph | 40 mph | 40 mph |
| % Exceeding Posted Speed | 5% | 7% | 8% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

| | | | |
|----------------------------|-------------------------|------------------------|---------------------|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Date | November 08, 2023 |
| County | Linn | Time | 12:39 PM - 01:36 PM |
| Location | 100 N SE 20TH AVE | Weather | OVERCAST |
| Direction of Travel | Southbound & Northbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics

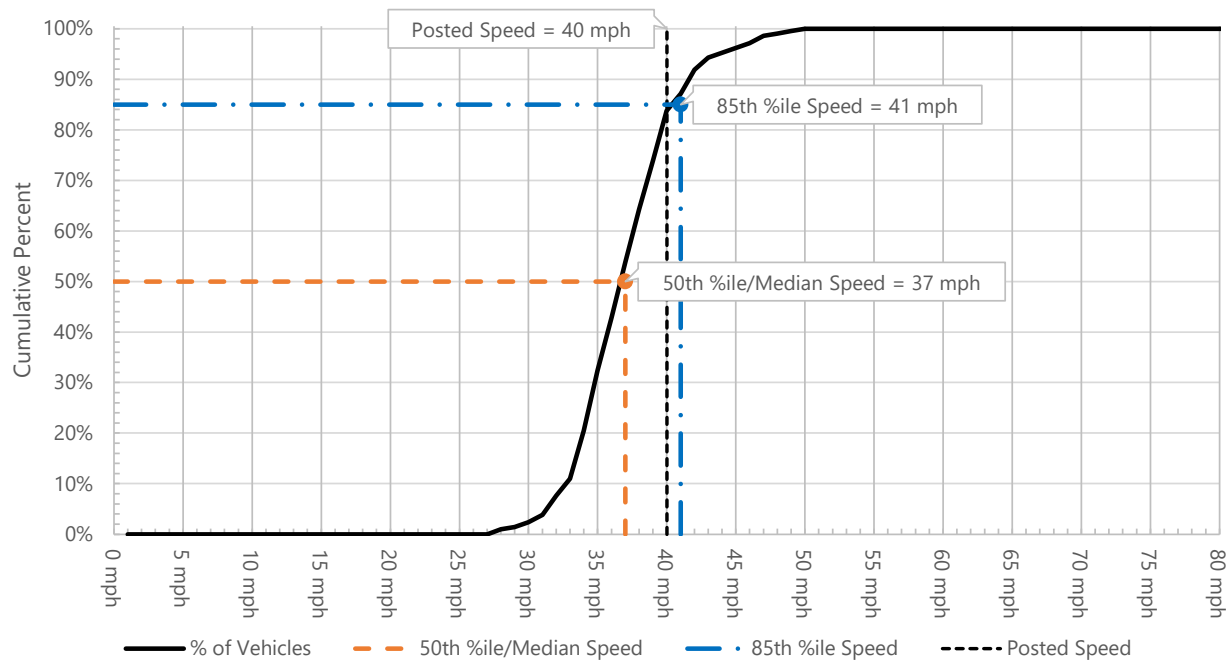
| Direction | Southbound | Combined | Northbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 102 vehicles | 204 vehicles | 102 vehicles |
| 85th %ile Speed | 40 mph | 40 mph | 42 mph |
| 50th %ile/Median Speed | 35 mph | 36 mph | 36 mph |
| Mean Speed | 36 mph | 37 mph | 37 mph |
| Standard Deviation | 3.8 mph | 3.8 mph | 3.7 mph |
| Pace Limits* | 31 mph - 40 mph | 32 mph - 41 mph | 32 mph - 41 mph |
| % In Pace | 83% | 82% | 81% |
| Max Speed | 45 mph | 46 mph | 46 mph |
| Posted Speed | 40 mph | 40 mph | 40 mph |
| % Exceeding Posted Speed | 11% | 14% | 18% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

| | | | |
|----------------------------|-------------------------|------------------------|---------------------|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Date | November 08, 2023 |
| County | Linn | Time | 01:51 PM - 03:05 PM |
| Location | @ BROOKSIDE AVE SE | Weather | OVERCAST |
| Direction of Travel | Northbound & Southbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics

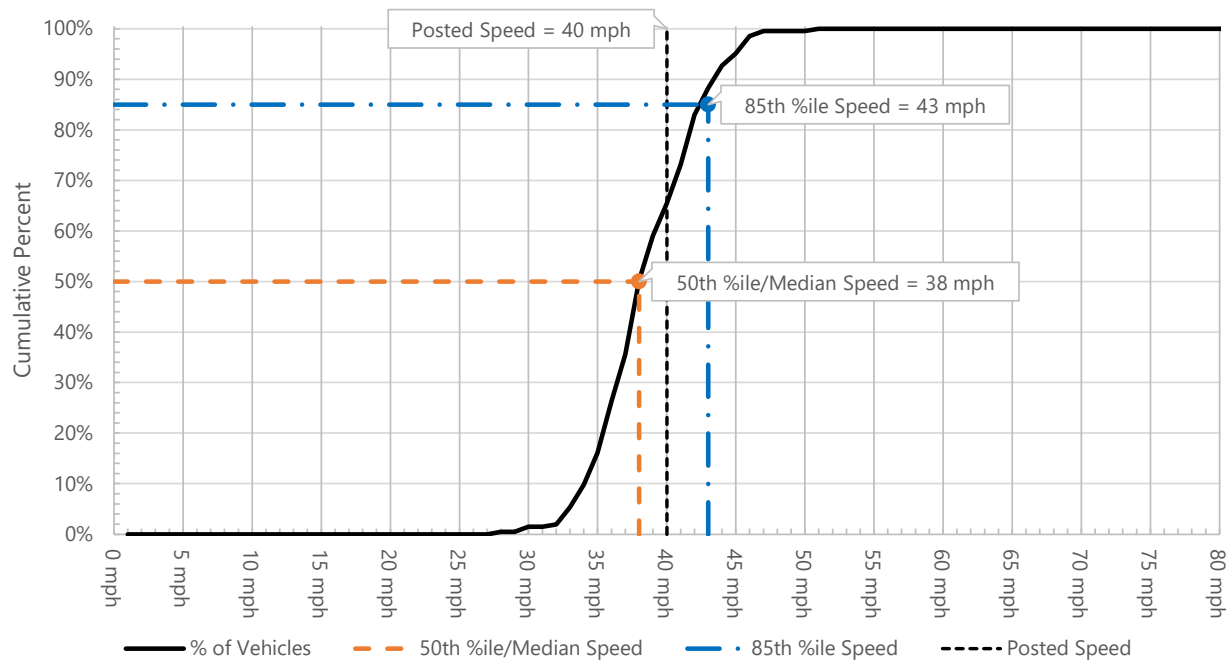
| Direction | Northbound | Combined | Southbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 96 vehicles | 210 vehicles | 114 vehicles |
| 85th %ile Speed | 41 mph | 41 mph | 41 mph |
| 50th %ile/Median Speed | 37 mph | 37 mph | 36 mph |
| Mean Speed | 38 mph | 37 mph | 37 mph |
| Standard Deviation | 3.7 mph | 3.8 mph | 3.8 mph |
| Pace Limits* | 32 mph - 41 mph | 33 mph - 42 mph | 33 mph - 42 mph |
| % In Pace | 85% | 84% | 83% |
| Max Speed | 48 mph | 50 mph | 50 mph |
| Posted Speed | 40 mph | 40 mph | 40 mph |
| % Exceeding Posted Speed | 16% | 16% | 17% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

| | | | |
|----------------------------|-------------------------|------------------------|---------------------|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Date | November 09, 2023 |
| County | Linn | Time | 11:48 AM - 01:40 PM |
| Location | @ MORAGA AVE | Weather | OVERCAST |
| Direction of Travel | Southbound & Northbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics

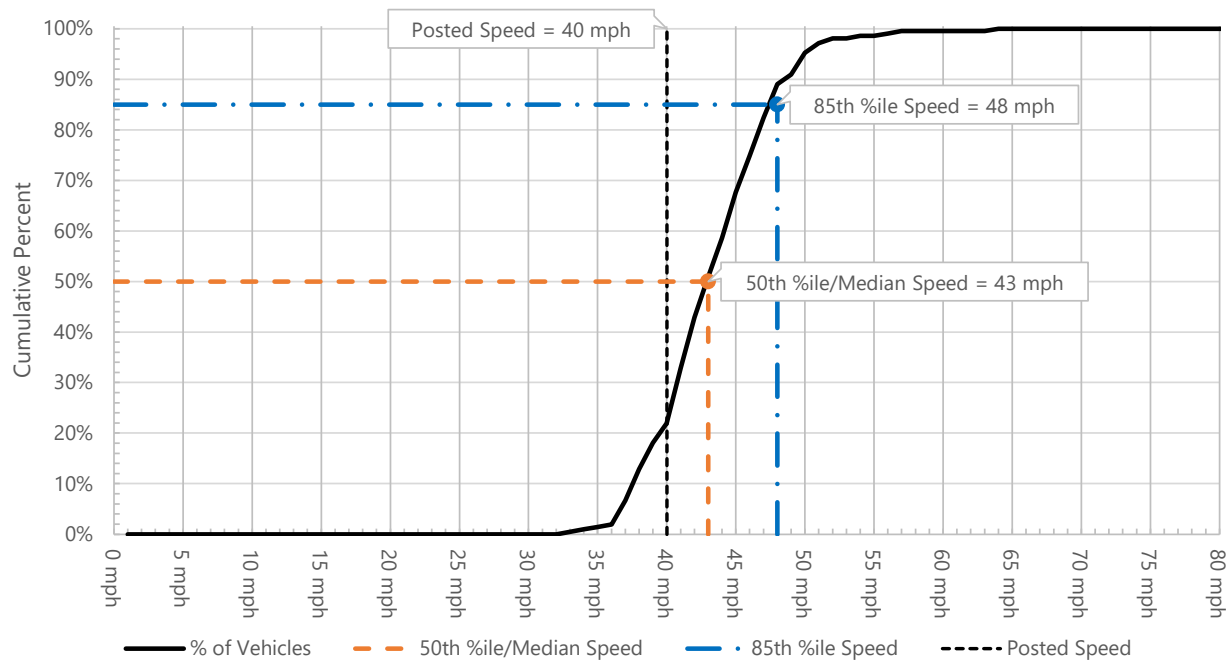
| Direction | Southbound | Combined | Northbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 100 vehicles | 205 vehicles | 105 vehicles |
| 85th %ile Speed | 42 mph | 43 mph | 43 mph |
| 50th %ile/Median Speed | 38 mph | 38 mph | 38 mph |
| Mean Speed | 39 mph | 39 mph | 39 mph |
| Standard Deviation | 3.6 mph | 3.7 mph | 3.8 mph |
| Pace Limits* | 33 mph - 42 mph | 35 mph - 44 mph | 35 mph - 44 mph |
| % In Pace | 84% | 83% | 83% |
| Max Speed | 47 mph | 51 mph | 51 mph |
| Posted Speed | 40 mph | 40 mph | 40 mph |
| % Exceeding Posted Speed | 30% | 35% | 39% |

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

| | | | |
|----------------------------|-------------------------|------------------------|---------------------|
| Roadway | Waverly Dr SE | Investigation # | 13832 |
| City | Albany | Date | November 09, 2023 |
| County | Linn | Time | 02:02 PM - 02:57 PM |
| Location | 0.50 N SEVEN MILE LN | Weather | OVERCAST |
| Direction of Travel | Southbound & Northbound | Investigator | WR (ODOT) |

Combined Direction Speed Profile



Summary Statistics

| Direction | Southbound | Combined | Northbound |
|--------------------------|-----------------|-----------------|-----------------|
| Total # of Vehicles | 107 vehicles | 210 vehicles | 103 vehicles |
| 85th %ile Speed | 48 mph | 48 mph | 48 mph |
| 50th %ile/Median Speed | 43 mph | 43 mph | 42 mph |
| Mean Speed | 44 mph | 44 mph | 43 mph |
| Standard Deviation | 3.8 mph | 4.4 mph | 4.9 mph |
| Pace Limits* | 39 mph - 48 mph | 39 mph - 48 mph | 38 mph - 47 mph |
| % In Pace | 79% | 76% | 73% |
| Max Speed | 56 mph | 64 mph | 64 mph |
| Posted Speed | 40 mph | 40 mph | 40 mph |
| % Exceeding Posted Speed | 82% | 78% | 74% |

*10 mph range containing the largest number of sampled vehicles.

Public Works Department Transportation Discussion



Funding Strategies

Transportation Advisory Commission

January 23, 2024

DISCUSSION OUTLINE

- Pavement Management Goals
 - Defining the target Level of Service for Albany streets
- Translate those goals into revenue need
 - What is the gap in annual funding needed to achieve the Level of Service?
- Possible sources of the needed revenue

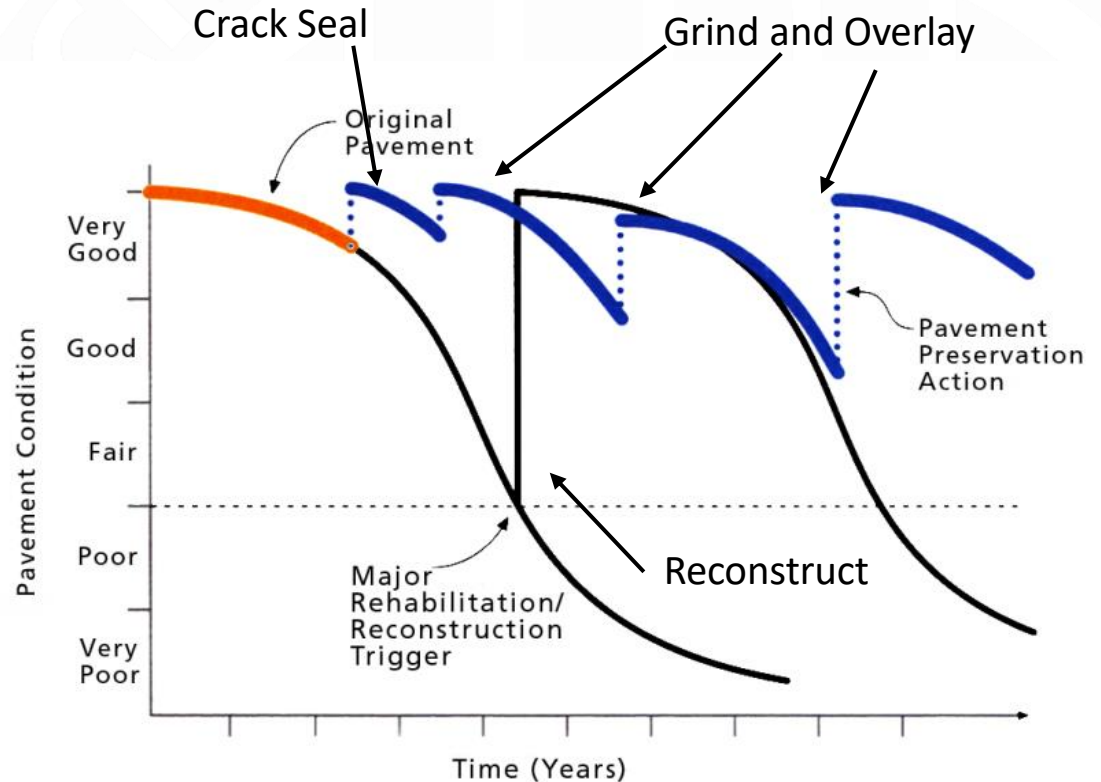
A graphic of a warning sign, consisting of a black rectangle with a white border. Inside the rectangle is a white trapezoidal shape pointing to the right, containing the word "WARNING" in bold, black, uppercase letters.

WARNING

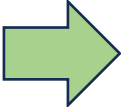
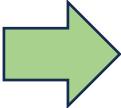
All estimates are based on industry standard assumptions for revenue generation potential, cost escalation, and longevity of capital investments

Keeping the Good Pavements Good

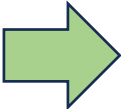
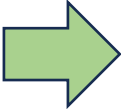
- The ideal strategy for pavement management: invest in (relatively) minor maintenance at appropriate intervals
- Only works for streets in good or fair condition
- The overall goal for our pavement management program is to get all streets to this level

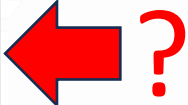


Current PCI for Albany Streets

| PAVEMENT CONDITION | ARTERIAL | | COLLECTOR | | LOCAL | |
|--|-------------|---------------|-------------|---------------|--------------|---------------|
| | MILES | PERCENT | MILES | PERCENT | MILES | PERCENT |
|  GOOD (100 TO 80) | 4.3 | 20.1% | 10.4 | 41.1% | 54.1 | 37.8% |
|  FAIR (79 TO 50) | 16.7 | 78.3% | 11.7 | 46.3% | 36.8 | 25.7% |
| POOR (49 TO 0) | 0.3 | 1.6% | 3.2 | 12.6% | 52.3 | 36.5% |
| TOTAL | 21.3 | 100.0% | 25.4 | 100.0% | 143.2 | 100.0% |

Current PCI for Albany Streets

| PAVEMENT CONDITION | ARTERIAL | | COLLECTOR | | LOCAL | |
|--|----------|---------|-----------|---------|-------|---------|
| | MILES | PERCENT | MILES | PERCENT | MILES | PERCENT |
|  GOOD (100 TO 80) | 4.3 | 20.1% | 10.4 | 41.1% | 54.1 | 37.8% |
|  FAIR (79 TO 50) | 16.7 | 78.3% | 11.7 | 46.3% | 36.8 | 25.7% |
| POOR (49 TO 0) | 0.3 | 1.6% | 3.2 | 12.6% | 52.3 | 36.5% |
| TOTAL | 21.3 | 100.0% | 25.4 | 100.0% | 143.2 | 100.0% |



Defining the Level of Service

- Level of Service (LOS) is established by the City Council and sets the target or expectation for any given function of the city
- The LOS defines the conditions; staff then calculates what is needed to accomplish that LOS and translates that into a revenue need

LOS → Revenue Target → Design underlying revenue mechanism

- Current LOS for street condition is in the Strategic Plan; maintain all arterials and collectors at a PCI of 60 or greater and address local streets as resources allow

Funding Strategies – Part One

- Keeping the good streets in good condition
- Annual funding gap for this portion of the plan:
 - \$1 million for good/fair arterial & collector streets
 - \$3 million for good/fair local streets
- Objective is to keep good/fair streets from falling into poor condition
 - When you've dug yourself a hole, first thing to do is stop digging.

Funding Strategies – Part Two

- Restoring failed arterials/collectors
- Not a lot of miles in this category
- Option 1: prepare a bond issuance for these roads
 - Not recommended. The street segments identified for the bond might not generate public support
- Option 2: prioritize existing funding to address these street segments over the next 5-10 years
 - Unlike local streets, there are sources of funding (STBG and SDCs) that can be used to rebuild failed arterials/collectors
 - If the condition of these street segments and others declines further, a bond can be considered when the problem is more ripe

Funding Strategies – Part Three

- Restoring failed local streets
- Total cost to reconstruct all local streets in poor condition: \$331.5M
- Important to implement Part One of this strategy to stop adding to the list of failed local streets
- Requires a dedicated portion of potential new local funding
 - Every \$1M in new annual funding could reconstruct approximately 2.75 blocks of typical local street

Funding Strategies – Proposed Revenue Target

| Category of Street Work | Amount Needed Annually |
|-------------------------------------|------------------------|
| Maintenance of Arterials/Collectors | \$1 million |
| Maintenance of Locals | \$3 million |
| Reconstruction of Locals | \$2 million |
| Total | \$6 million |

Assumptions:

- All streets in good/fair condition receive slurry seal at appropriate interval
- Arterials/Collectors in good/fair condition receive grind/overlay every 20 years on average
- Local streets in good/fair condition receive grind/overlay every 40 years on average
- Arterials/Collectors in poor condition are reconstructed using other funding sources
- Local streets in poor condition are reconstructed using this proposed funding
- Existing funding sources continue at current levels

Funding Alternative – Franchise Fees

- The General Fund received \$6.1 million in franchise fee revenue in FY 23
- Council can direct all or some franchise fee revenue to the street fund. Council could then raise the City Services Fee to offset the loss of franchise fee revenue
 - Arguments for: PW does essentially all of the work related to managing franchise utilities and their impacts; franchise utilities directly use/impact the public ROW, maintenance of which is paid for by the street fund
 - Arguments against: the loss of \$6.1 million to the General Fund would be catastrophic; future Councils could undo this transfer leaving the street fund vulnerable; residential CSF would need to be increased significantly

Funding Alternative – Local Fuel Tax

- Arguments for:
 - Captures revenue from those using Albany streets, including non-residents
 - Could capture revenue from interstate travelers
- Arguments against:
 - Regressive tax
 - No ability to create a low-income or other discount program
 - Any change would require another vote of the public
- Estimated revenue per penny = \$300,000
 - Would require \$0.20 per gallon tax to fully fund proposed revenue target of \$6M/YR
 - $15,000\text{mi/year} \div 20\text{mi/gal} \times \$0.20/\text{gal} = \$150/\text{year}$ per typical car

Funding Alternative – Transportation Utility

- Arguments for:
 - All properties pay based on their impact to the street system
 - Flexible – can be phased-in, adjustments require only council action, can provide low-income discounts
 - Can be designed to indirectly capture revenue from nonresidents who use the system
- Arguments against:
 - Would not directly gather revenue from non-residents using our street system
- Rough estimate is that a monthly single residential equivalent charge of \$14.00-18.00 would be required to generate revenue target of \$6M/YR

Recommendations

1996 Mayor's Task Force Recommendations

- Additional funding above existing at that time (including general fund and franchise fees)
 - Implement In Lieu of Franchise Fees for water and sewer
 - Establish a Transportation Utility ✘
 - Issue a series of General Obligation bonds for large capital projects ✘

Current Staff Recommendation

- Establish a Transportation Utility
- Consider General Obligation bonds in the future as conditions change

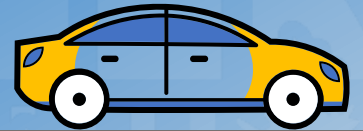
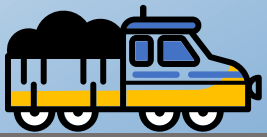
Conclusions and Discussion

- There are not adequate street funds to fully achieve the PCI goal for arterials/collectors or to prevent the further decay of local streets
- There are only a limited number of options to create ongoing dedicated street funding at the local level
- Staff recommends a revenue target that provides additional funding to fill the gap in arterial/collector maintenance; creates ongoing targeted maintenance for good/fair local streets; and begins to address failed local streets
- The approach will depend on the Council and community priorities and goals; any new funding will require significant public outreach

Conclusions and Discussion

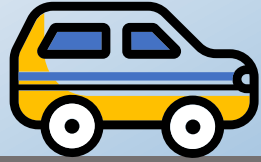
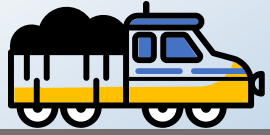
- Staff needs direction:
 - What is the Council's desired Level of Service?
 - For instance, do you want to pursue a different target PCI for arterials/collectors?
 - Do you want to include maintenance of good/fair local streets?
 - Do you want to include restoration of failed local streets?
 - What, if any, change or addition to street funding does the Council want to further explore?
 - Does the Council have specific input on a community outreach effort?
- *From the Work Session yesterday:*
 - *Council supports a LOS that includes addressing local streets with new ongoing revenue*
 - *They generally would like to pursue either a TUF or fuel tax with the consensus of developing options to implement both*

Public Works Department Transportation Discussion



Questions & Discussion

Next Steps



• Pavement 101

- TAC *September 26, 2023*
- Council Work Session *October 9, 2023*

• Funding Overview

- TAC *October 24, 2023*
- Council Work Session *November 6, 2023*

• Funding Alternatives

- TAC *November 28, 2023*
- Council Work Session *December 11, 2023*

Funding Strategy

- TAC *January 23, 2024*
- Council Work Session *January 22, 2024*

Recommendations

- TAC *February 20, 2024*
- Council Work Session *February 26, 2024*

Community Outreach

Current Street Funding Needs Arterials and Collectors

Average Annual Expenditures \$4,000,000*

Current Average Annual Expenditures \$2,500,000

Additional Annual Funding Needed \$1,500,000

Assumptions:

- Reconstruct streets in Poor Condition
- Grind and Overlay streets every 20 years on average to keep PCI>50
- Funding from STBG, State Gas Tax, and Water and Sewer ILFF

*This scenario will meet the City Council Strategic Plan Goal of maintaining arterial and collector streets to a minimum PCI of 60.

Current Street Funding Needs Local Streets – Good and Fair

Average Annual Expenditures \$3,500,000*

Current Average Annual Expenditures of \$500,000

Additional Annual Funding Needed \$3,000,000

Assumptions:

- Grind & Overlay Good and Fair Streets every 40 years on average
- Slurry Seal all streets every 20 years on average
- Funding from State Gas Tax and Water and Sewer ILFF

* This scenario will maintain local streets to a minimum PCI of 60.

Current Street Funding Need Local Streets – Poor

Average Annual Cost of \$8,300,000

Current Average Annual Expenditures of \$0

Additional Annual Funding Needed \$8,300,000

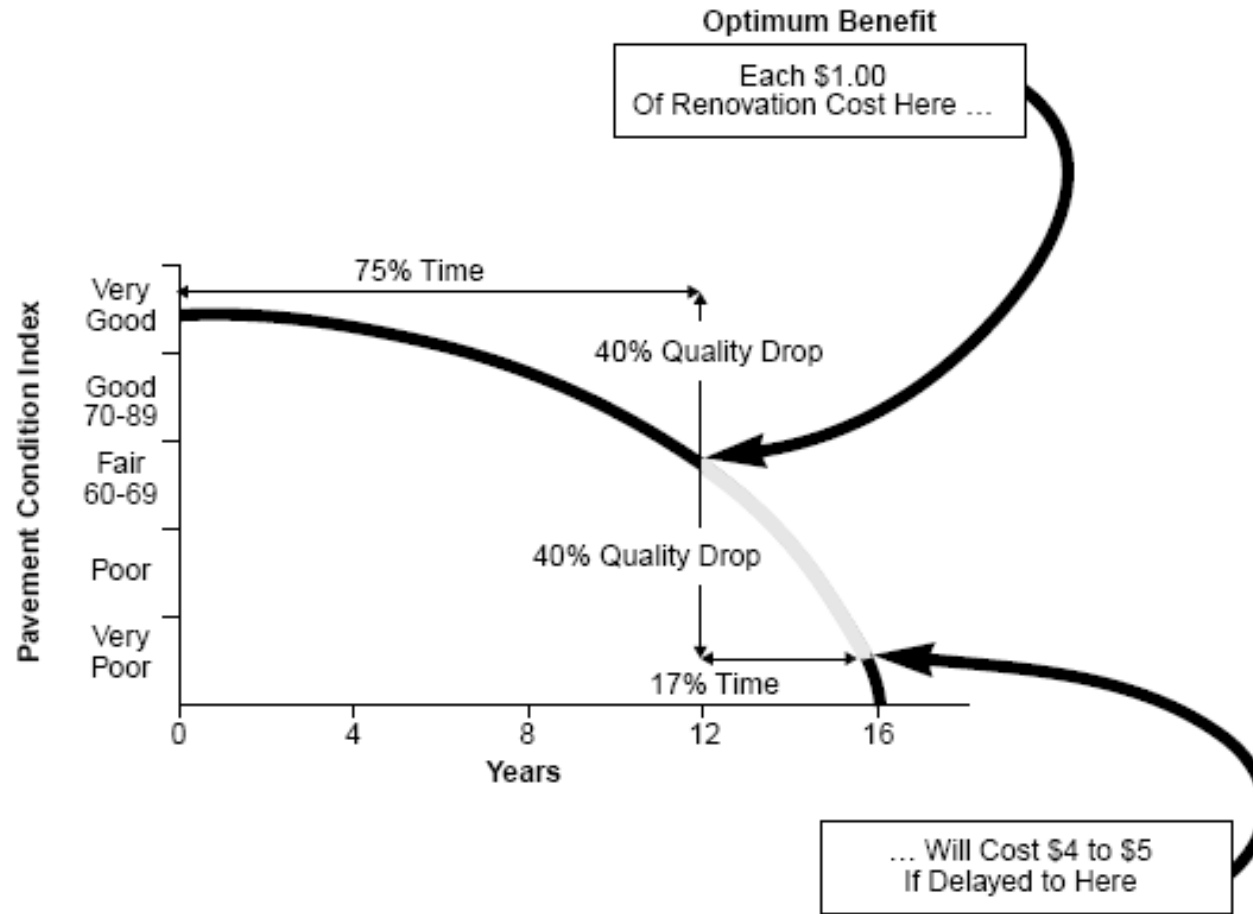
Assumptions:

- Reconstruct local streets in poor condition
- Improvements made over a 40-year period

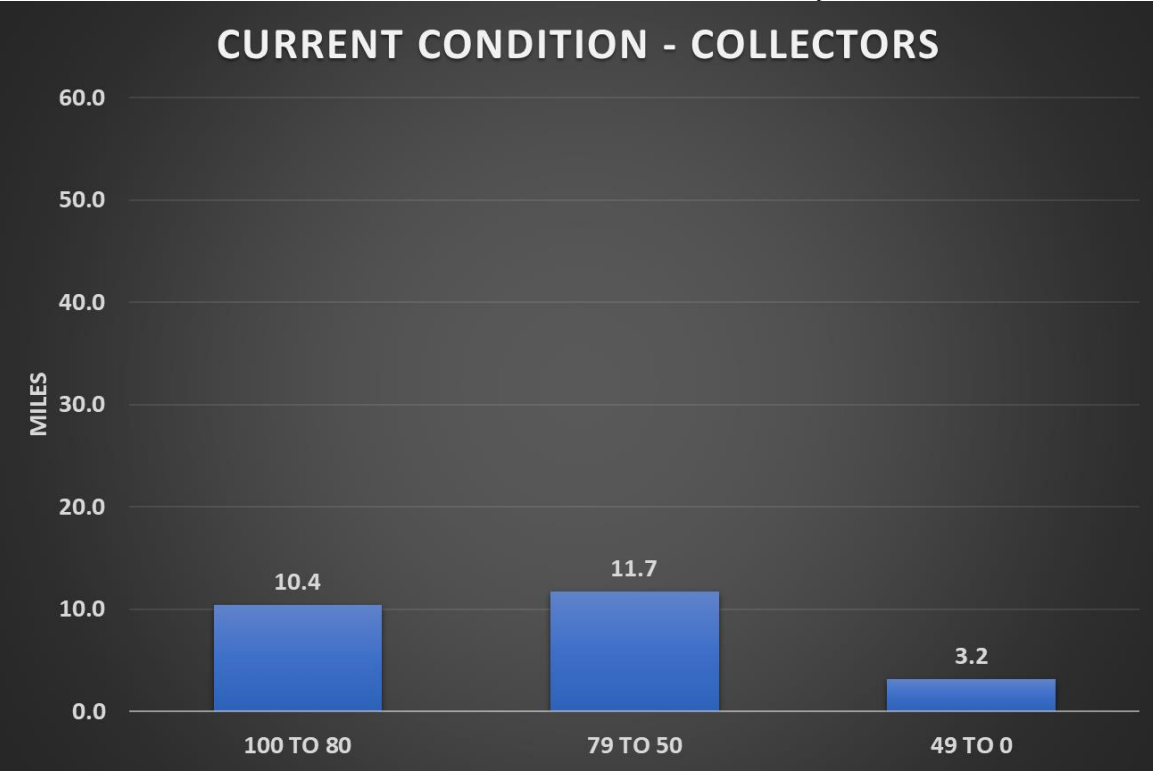
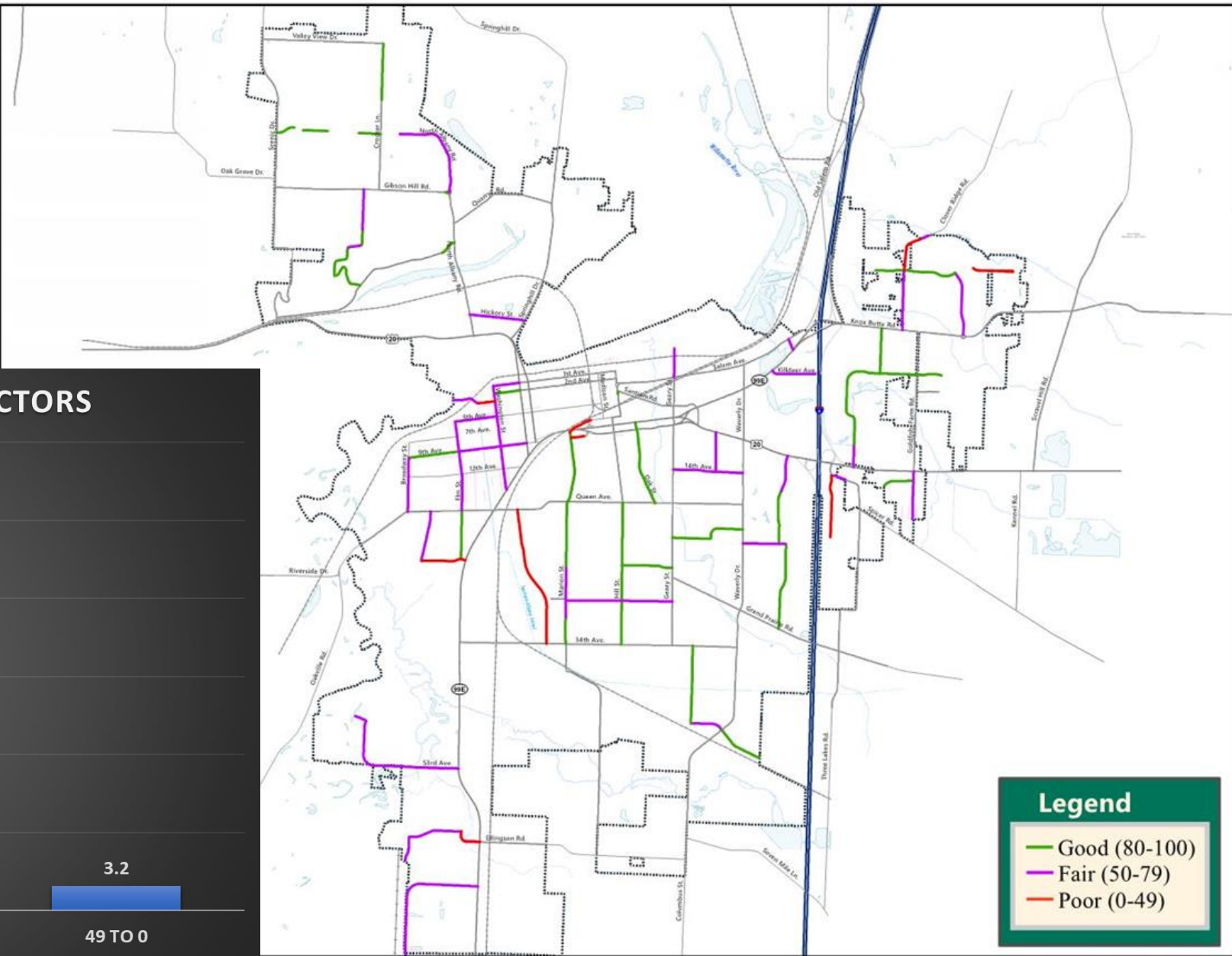
Summary

- Investing in routine pavement management is the most efficient way to keep streets in good/fair condition
- Targeted investment in arterials & collectors for the past 20 years has resulted in the majority of those streets being in good/fair condition
- The street fund receives on average \$7.8 million per year to fund all street fund activities of which pavement management is just one part
- The funding gap to get and keep all city streets to good/fair over the next 40 years is \$12.8 million per year in today's dollars

Pavement Renovation Economics



Current Condition - Collectors



Current Condition - Locals

