



ROAD SAFETY AUDIT: 1300 EAST IN MILLCREEK

8/24/2026

PREPARED FOR:



SUBMITTED BY:



Table of Contents

1. Introduction.....	4
Road Safety Audit Definition	4
Road Safety Audit Meetings and Process	4
Project Team and Field Review	5
2. Project Context.....	6
WFRC Comprehensive Safety Action Plan	7
3. Existing Conditions	8
Roadway Cross Section.....	8
Volumes	9
Speeds	9
Sight Distance	9
Crash Summary.....	10
4. Findings and Measures for Consideration	12
Corridor-Wide	13
3300 South.....	17
Luck Spring Drive	18
3900 South.....	20
3900 South to Softball Complex	20
Softball Complex.....	21
4500 South (SR-266)	22
College Street / 4700 South.....	23
Murray Holladay Road	25
Van Winkle Expressway to 4500 South	26
Benefit-Cost Analysis	27
5. Recommendations	30
6. Appendix	34

List of Figures

Figure 1: Summary of What RSAs Are and Are Not	4
Figure 2: Key Steps in a Road Safety Audit	4
Figure 3: Project Location	7
Figure 4: Safety Measures Identified in WFRC CSAP	8

Figure 5: Existing Roadway Cross Sections 9

Figure 6: Crash Summary..... 10

Figure 7: Insights and Issues Summary 13

List of Tables

Table 1: RSA Team Members and Attendance 6

Table 2: Crash Data Summary 10

Table 3: Benefit-Cost Analysis 28

Table 4: Recommendations 30

1. INTRODUCTION

The city of Millcreek, Utah, submitted a request to the Wasatch Front Regional Council (WFRC) to conduct a Road Safety Audit along 1300 East. WFRC approved this request and retained METHODS Consulting as a third-party consultant to perform a Road Safety Audit with WFRC, staff from Millcreek, fire and police departments and residents in March 2026. This report summarizes the existing conditions of the project area, observations made in the field, and short-, medium-, and long-term recommendations.

Road Safety Audit Definition

According to the Federal Highway Administration (FHWA), a **Road Safety Audit (RSA)** is a formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for safety improvements for all road users.

Figure 1: Summary of What RSAs Are and Are Not

RSAs <u>are</u> :	RSAs <u>are not</u> :
♦ Focused on road safety ♦ A formal examination ♦ Proactive in nature ♦ Conducted by a multidisciplinary team ♦ Conducted by a team independent of the operations, design, or ownership of the facility ♦ Conducted by a qualified team ♦ Broad enough to consider the safety of all road users of the facility ♦ Qualitative in nature	♦ A means to evaluate the design of a facility ♦ A check of compliance with standards ♦ A means of ranking or justifying one project over another ♦ A means of rating one design option over another ♦ A redesign of a project ♦ A crash investigation (although the crash history of an existing facility is reviewed by an RSA team)

Road Safety Audit Meetings and Process

As noted above, the RSA process is conducted in accordance with FHWA guidelines. **Figure 2** outlines the steps involved in an RSA.

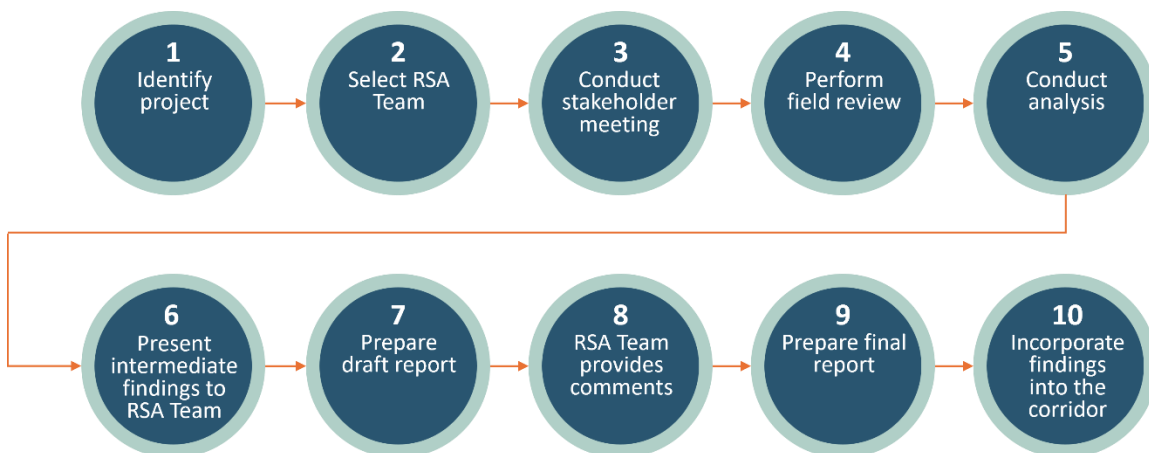


Figure 2: Key Steps in a Road Safety Audit

Stakeholders and points of contact participate throughout the process, particularly during key meetings. The kick-off meeting introduced concept of an RSA, its process, and the responsibilities of the point of contact. At the organization meeting, WFRC staff, METHODS staff, and the point of contact identified the following locations for the field review:

- College Street
- 4500 South
- 3900 South
- Luck Spring Drive

At the stakeholder meeting the RSA process was introduced, key features of the corridor were presented, and the plan for the field review was outlined. At the field review, observations were made at the locations outlined above. Key takeaways from the field review are included in the Appendix. The consultant team presented the identified key concerns and potential solutions at the intermediate meeting

Project Team and Field Review

RSAs require an independent, qualified, and multidisciplinary team of experts. Team members should act independently of the project owner/design team and have the freedom, ability, and comfort to comment frankly on potentially controversial safety issues. Having a combination of skills and experience in different areas is also helpful to ensure the most critical aspects of the project are addressed¹.

The 1300 East RSA's team included 16 members, identified in Table 1 with the elements of the audit for which they were present. Erica Wygonik of METHODS Consulting was the RSA team leader; Jeremy Searle from METHODS Consulting led the field review.

¹ FHWA Road Safety Audit Guidelines, Publication No. FHWA-SA-06-06, page 27

Table 1: RSA Team Members and Attendance

Name	Agency	AM Peak Hour Review	Stakeholder Meeting	Field Review	PM Peak Hour Review	Intermediate Results Meeting
Frederick Lutze	Millcreek		X	X		X
Rita Lund	Millcreek		X	X		X
Mason Adamson	Millcreek					X
John Miller	Millcreek					X
Jon Wilde	Unified Fire Authority		X	X		X
Shirl White	Unified Fire Authority		X	X		X
Hillary Chacon	Unified Police Department		X	X		
Mike West	St. Mark's Hospital		X	X		
Blair Tomten	Resident		X	X		X
Fariba Soltani	WFRC		X	X		X
Wayne Bennion	WFRC					X
Erica Wygonik (team leader)	METHODS (Consultant)					X
Ian MacGregor	METHODS (Consultant)	X	X	X	X	
Hannah Kalantari	METHODS (Consultant)		X	X	X	
Jeremy Searle	METHODS (Consultant)	X	X	X		
Savanah Allen	METHODS (Consultant)					X

The team gathered for a stakeholder meeting at Millcreek City Hall at 9:00 am on 5 March 2026, then held a field review, driving the corridor and making stops at key locations to discuss and observe together. METHODS also walked along the length of the corridor to make additional observations. Sight distance measurements were made at the pedestrian crossings near College Street and the Softball Complex. After the formal field review was over, METHODS collected speed data and made additional observations throughout the corridor. Findings and analysis from these observations are included in this report.

Following the field review and additional observations, METHODS met with members of the RSA team to discuss a list of short-, medium-, and long-term recommendations to include in the final report.

2. PROJECT CONTEXT

The total length of the study corridor is the 2.8-mile segment between 3300 South and Van Winkle Expressway. The project corridor is located between I-15 and I-215, west of

Highland Drive. 1300 East is a north-south route and is federal aid eligible road (2076)². Most of the land use surrounding 1300 East is residential. However, there are some key destinations along the corridor. Near 3300 South is a commercial zone, St. Mark's Hospital is located on 3900 South, and the Softball Complex is located between 3900 South and 4500 South. At the intersection with 4500 South, there is an assisted living facility and a credit union. A vicinity map of the study corridor is shown in **Figure 3**.

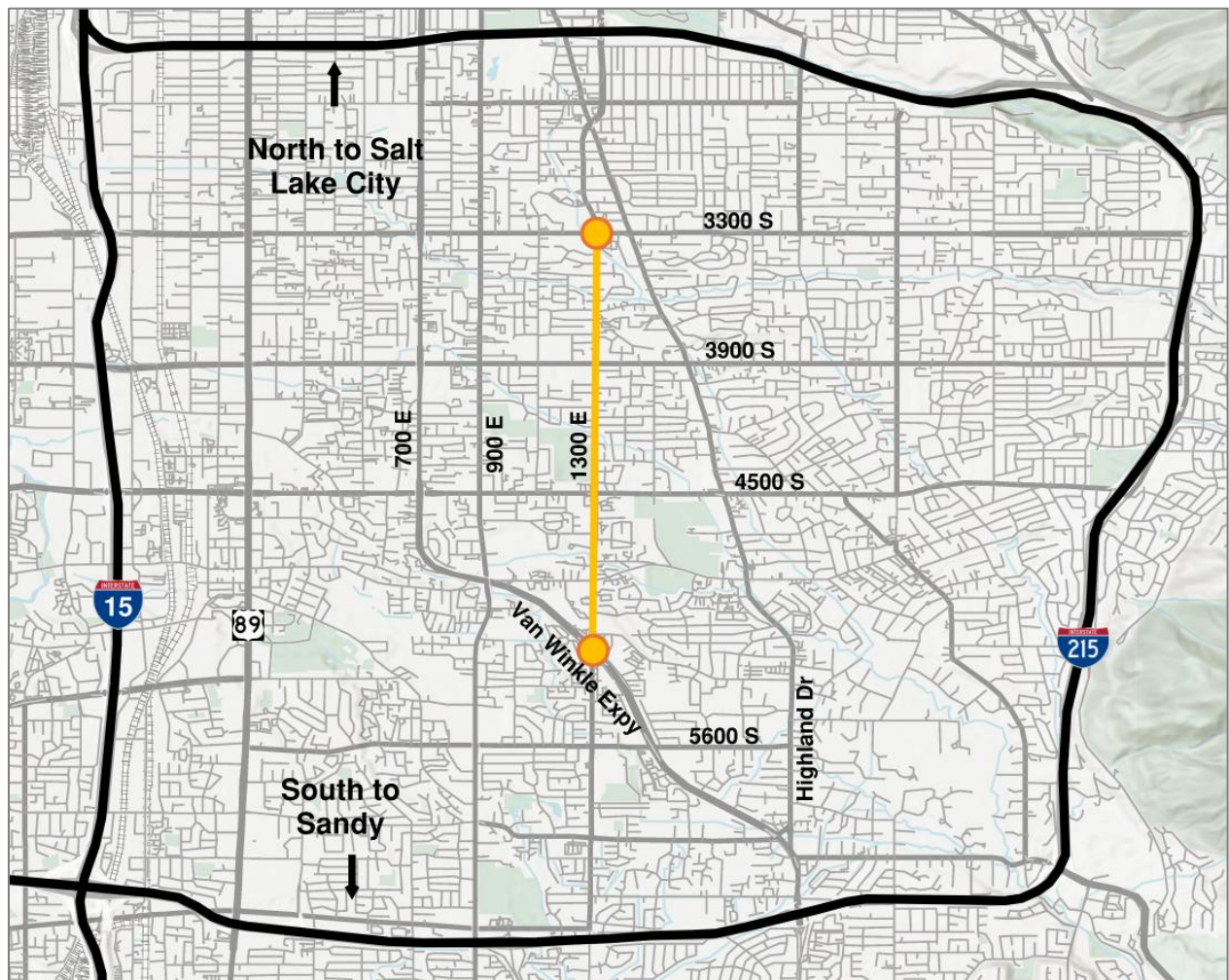


Figure 3: Project Location

WFRC Comprehensive Safety Action Plan

The WFRC Comprehensive Safety Action Plan (CSAP) was completed in 2024. This plan presents strategies to reduce roadway fatalities and serious injuries in the WFRC region.

² Federal-aid eligible roads are roads the Federal-Aid Highway Program supports with financial assistance for the nation's highway network, which includes locally owned roads. <https://www.fhwa.dot.gov/federal-aidessentials/federalaid.cfm>

1300 East was one of the corridors identified in the plan for safety improvements. Safety measures identified in the plan are shown in **Figure 4**.

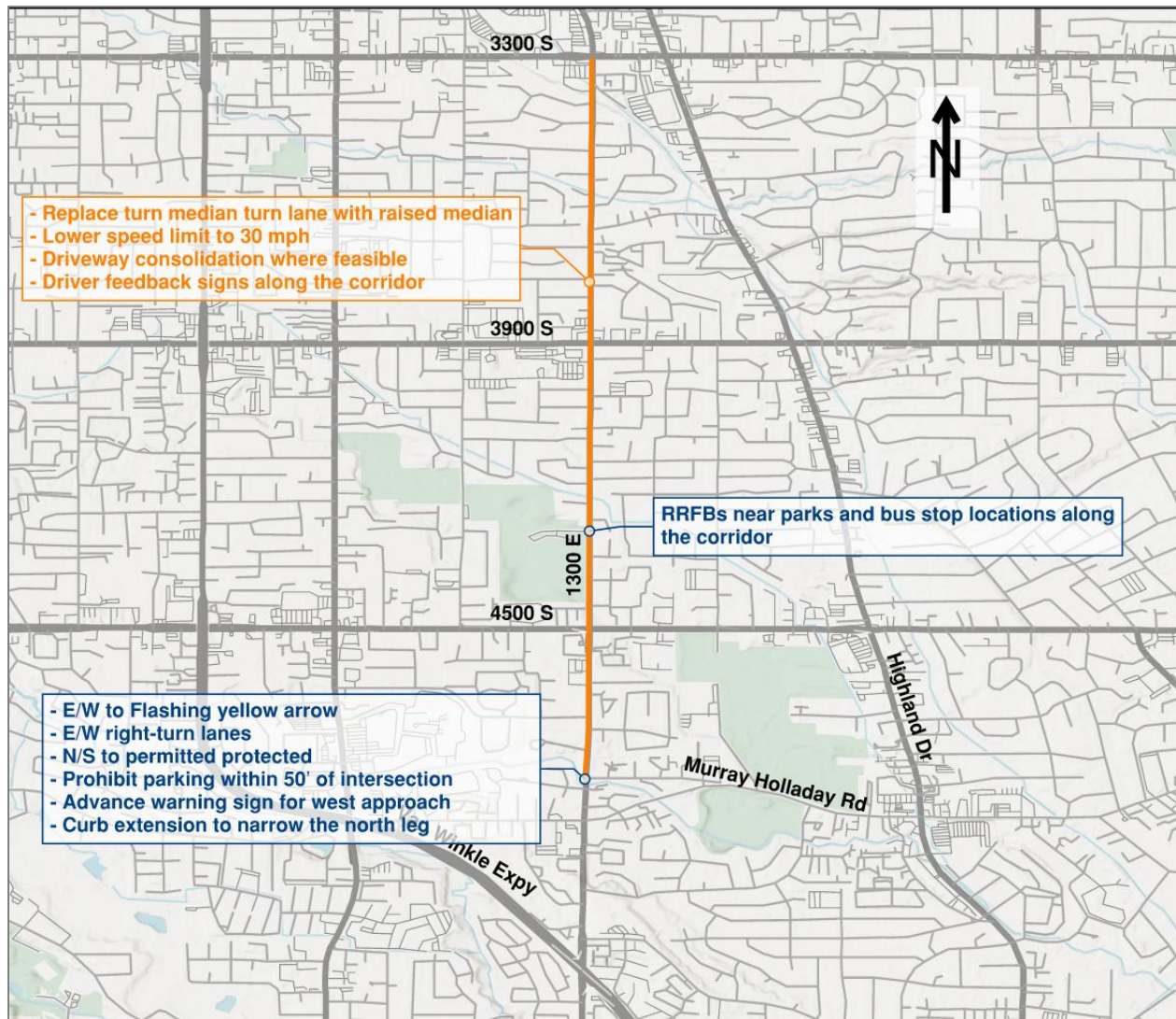


Figure 4: Safety Measures Identified in WFRC CSAP

3. EXISTING CONDITIONS

The study corridor is the 2.8-mile segment between 3300 South and Van Winkle Expressway.

Roadway Cross Section

Currently, different segments of the corridor vary in cross sections, as shown in **Figure 5**.

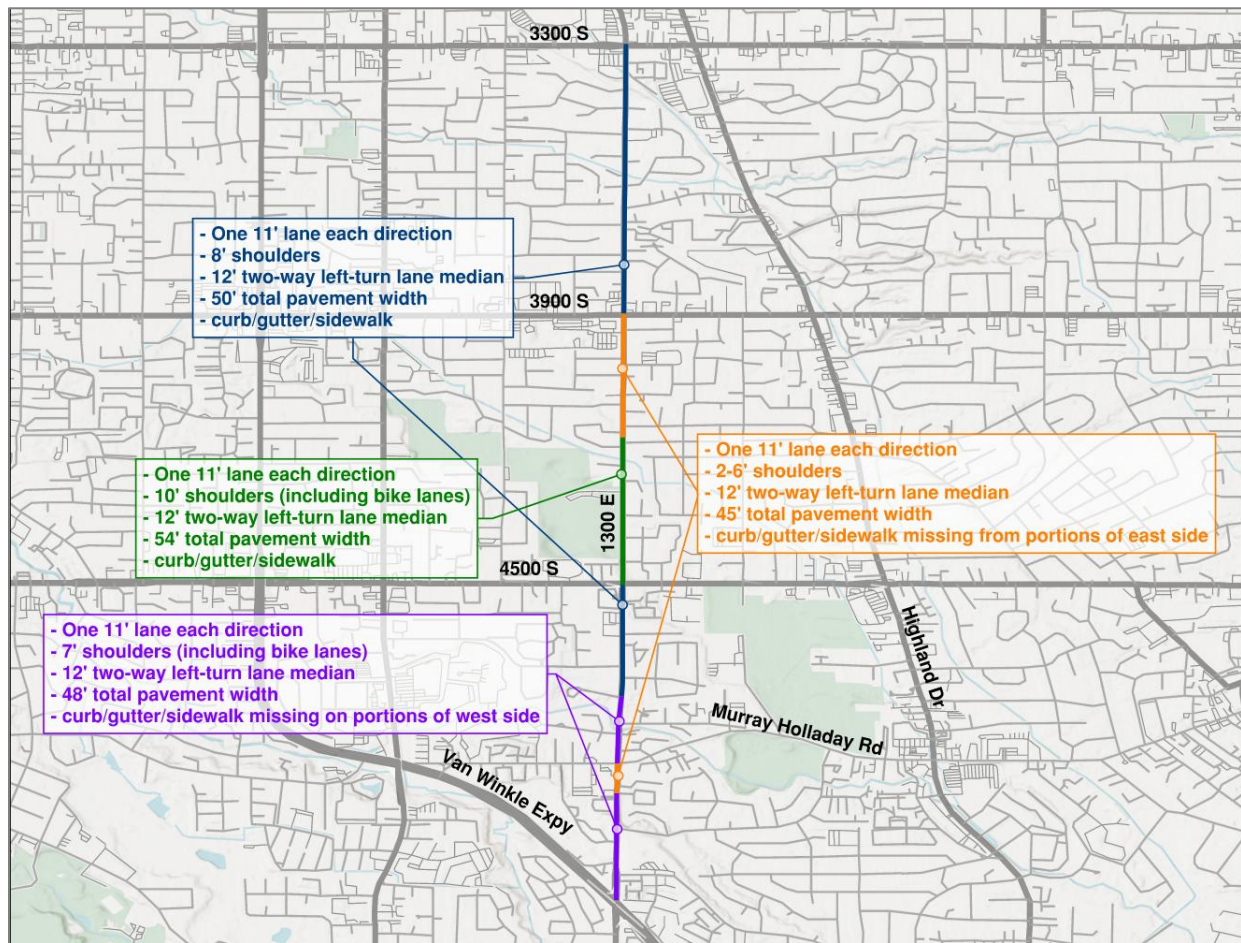


Figure 5: Existing Roadway Cross Sections

Volumes

The annual average daily traffic volume (AADT) ranged between 13,000 and 22,000 vehicles per day as reported by UDOT in 2024.

Speeds

The speed limit is 40 mph along the study corridor. Speed data was collected the day of the RSA site visit south of Lavon Drive and north of 4500 South during free flow conditions outside of peak hours. South of Lavon Drive, the 85th percentile speed was **42 mph** in the northbound direction and **43 mph** in the southbound direction. North of 4500 South, the 85th percentile speed was **44 mph** in both directions.

Sight Distance

Sight distance data was collected at the pedestrian crossings near College Street and the Softball Complex. There are vertical curves near these crossings that can restrict sight lines. Near College Street, sight lines were measured for northbound vehicles. 450 feet of sight distance was measured. Near the Softball Complex, sight lines were measured for southbound vehicles. 500 feet of sight distance was measured.

Crash Summary

Crash data was obtained from the UDOT Traffic and Safety Division. Crash data may be protected under 23 USC 407. Data from the most recent five full years (January 2020 to December 2024) was used. Crashes reported in 2025 and 2026 were also reviewed but may not be fully verified. Crashes summarized in [Table 2](#) are shown in [Figure 6](#).

Table 2: Crash Data Summary

Year	All Crashes	
	Total	Severe (Fatal or Serious Injury)
2020	83	2
2021	92	1
2022	93	4
2023	91	1
2024	78	2
2025*	76	3
2026*	8	0
Total:	521	13

*2025 and 2026 crash data may not be fully validated

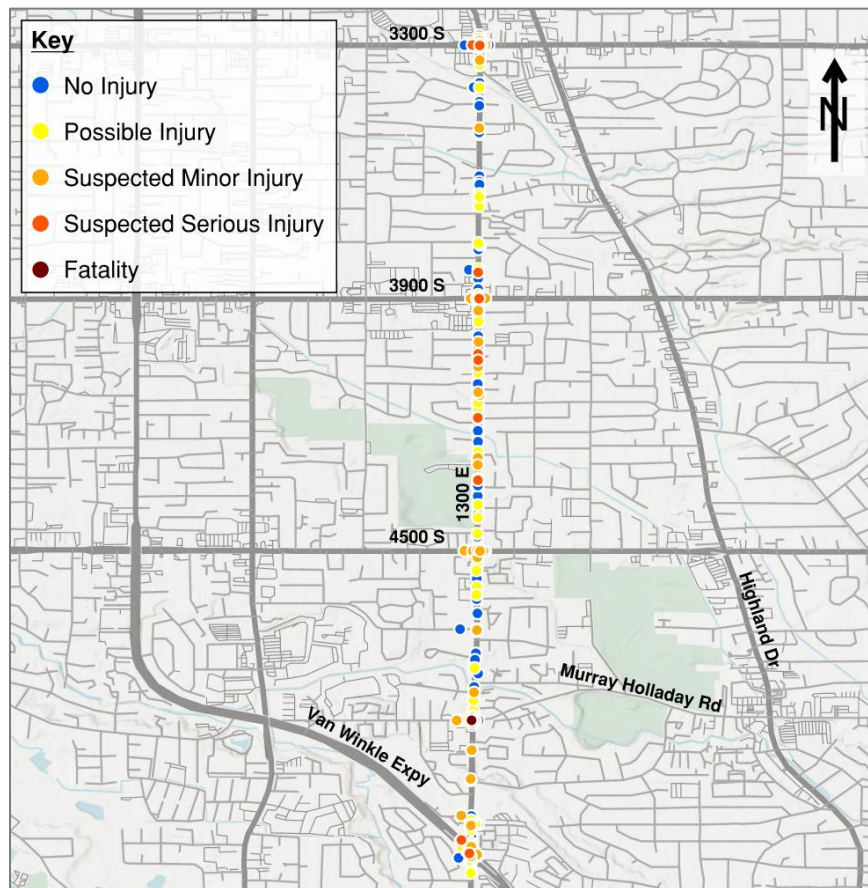


Figure 6: Crash Summary

Notable Crash History Findings Along the Study Corridor

- ♦ A total of 437 crashes were reported between 2020 and 2024 (the period of verified crash data), including nine serious injury crashes and one fatal crash.
 - Of the 6 severe crashes that did not involve a bicycle or pedestrian, two were reported at the intersection with 3300 S, three were reported between 3900 S and 4500 S, and one was reported at the intersection with Murray Holladay Road.
 - At 3300 S, one involved a vehicle leaving the road to the left into a fixed object, likely due to a medical event. The other involved a left-turning vehicle failing to yield and being hit by an eastbound through vehicle.
 - Between 3900 S and 4500 S, one severe crash involved a north bound vehicle leaving the road to the left into a power pole, likely due to DUI. A second severe crash involved a northbound vehicle leaving the road to the right, likely due to a medical event. The third severe crash involved a speeding vehicle losing control when traveling through a construction zone and entering oncoming traffic.
 - The fatal crash reported at Murray Holladay Road involved a westbound vehicle colliding with a southbound vehicle.
- ♦ Seventeen crashes were reported that involved a pedestrian or a bicycle. Four were serious injury crashes.
 - The ten pedestrian-involved crashes were spread throughout the corridor, with 1-2 at each signalized intersection and two at midblock locations.
 - The seven bicycle-involved crashes were located between 4085 S and Van Winkle Expressway
 - Of the serious injury crashes,
 - Approximately 450' north of 3900 S, a northbound vehicle hit a pedestrian crossing midblock in dark conditions. The narrative noted a streetlight was out.
 - Just north of 4325 S, a suspected DUI hit-and-run hit a pedestrian in dark conditions.
 - At Murray Holladay Road, a northbound right-turning vehicle hit a pedestrian in the crosswalk in dark conditions.
 - An eastbound vehicle on Van Winkle Expressway hit a bicyclist that crossed during a red phase.

4. FINDINGS AND MEASURES FOR CONSIDERATION

During the RSA stakeholder meeting, field review, and intermediate results meetings, the project team members discussed their collective knowledge and experience with the corridor, observed the corridor together at various stopping points, and identified possible improvements. The following sections summarize these findings and measures for consideration, backed by data after a summary of corridor-wide findings and measures for consideration. Measures for consideration are identified as **short-**, **medium-**, or **long-term**.

All the included measures are nationally and locally vetted options to address the noted concerns. In some cases, multiple measures are recommended. Generally, when multiple measures are recommended all can be implemented, and they would work in tandem to address the concern. However, measures can be implemented individually as funding or resources allow or, in some cases, reflect options to choose between, as funding and resources allow.

A summary map of all location-specific insights and issues is shown in *Figure 7*. Insights are not necessarily safety concerns, but observations or background information that inform recommended safety measures. Issues are safety concerns which the suggested measures intend to address.

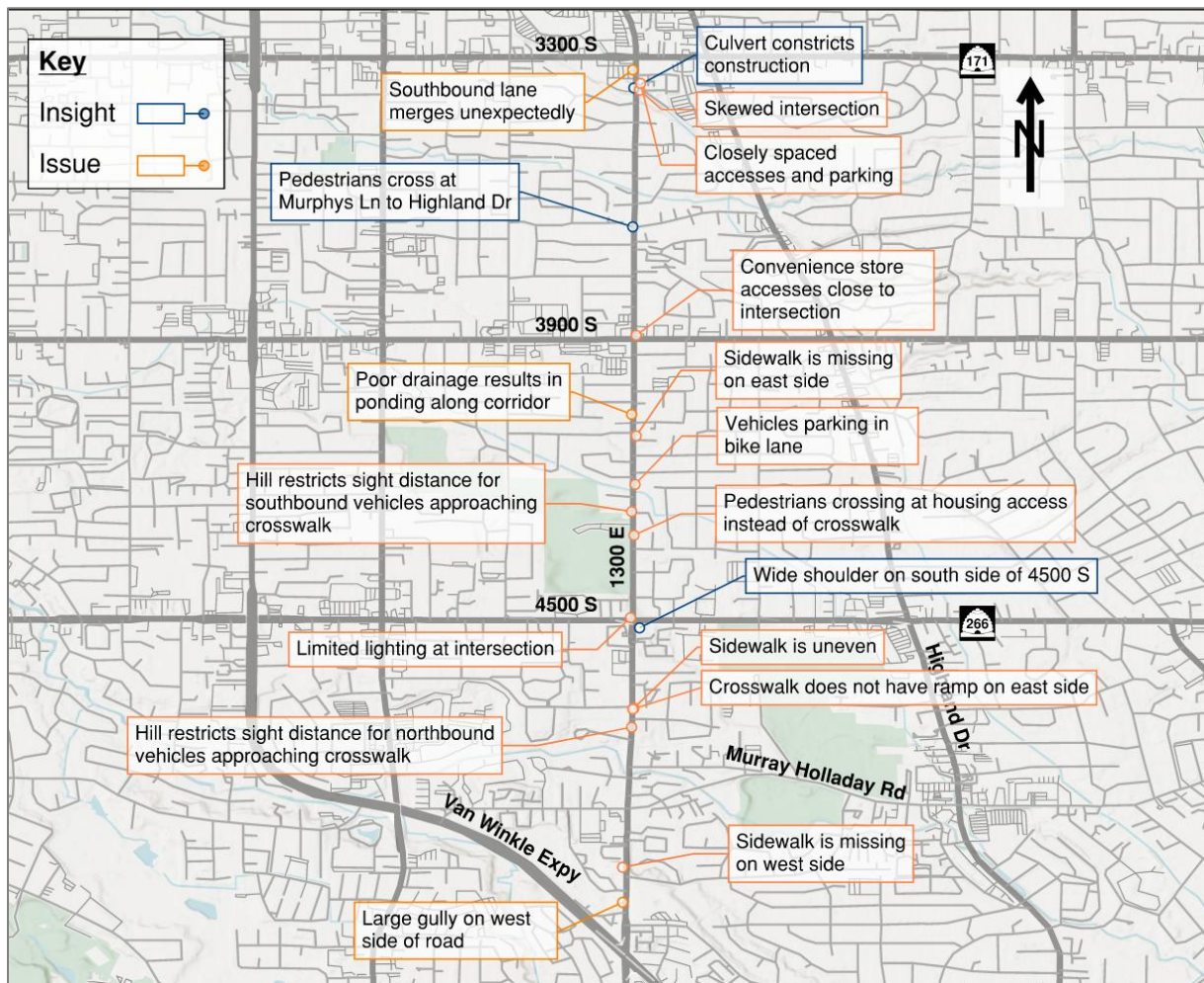


Figure 7: Insights and Issues Summary

Corridor-Wide

Insight: 1300 East is anticipated to remain a 3-lane roadway

Issue #1: 85th percentile observed speeds are higher than the speed limit, which is already high for a corridor with frequent pedestrians and bicyclists

Short-Term Measure:

- Enhance striping, signage, and speed feedback signs
- Evaluate speed limit reduction, considering appropriate speeds for the bicycle and pedestrian activity on the corridor (30 MPH is recommended in the WFRCSAP)³
- Install flex posts along bike lanes

Medium-Term Measure:

- Add bulb-outs at crosswalks

³ A 5 MPH reduction is evaluated in the benefit-cost analysis.

- Add pedestrian refuge islands

Long-Term Measure:

- Install landscape medians and pedestrian refuge islands
- Move curb to narrow roadway and provide wider tree lawn, sidewalks, or mixed-use path

Issue #2: Inadequate lighting

Short-Term Measure:

- Prune trees and replace bulbs as needed to improve lighting

Long-Term Measure:

- Improve lighting corridor-wide, including adding lighting where needed

Issue #3: Sidewalk is missing on certain portions

Medium-Term Measure:

- Pave sidewalks and address ADA compliance issues
- Install sidewalks at high priority locations when possible, such as proximate to bus stops, housing complexes, and other pedestrian generators

Long-Term Measure:

- Build-out a continuous sidewalk network

Issue #4: Vehicles park in bike lane



Short-Term Measure:

- Install “No Parking” signs and paint curbs red
- Enforce bike lane parking restrictions
- Install flex posts along bike lanes

Issue #5: Closely spaced driveways (south end)

Medium-Term Measure:

- Create an access management plan for this corridor

Long-Term Measure:

- Consolidate accesses as parcels redevelop

Issue #6: Drainage issues



Long-Term Measure:

- Address drainage issues

Issue #7: Poor accessibility to some UTA bus stops due to lack of sidewalks**Short-Term Measure:**

- Relocate bus stops to accessible locations

Medium-Term Measure:

- Pave sidewalks and address ADA compliance issues
- Install sidewalks proximate to bus stops when possible

Long-Term Measure:

- Build-out a continuous sidewalk network

Issue #8: Hills restrict sight distance in locations**Short-Term Measure:**

- Enhance striping, signage, and speed feedback signs

- Evaluate speed limit reduction, considering appropriate speeds for the bicycle and pedestrian activity on the corridor (30 MPH is recommended in the WFRC CSAP)⁴

3300 South

Issue #1: The southbound lanes merge abruptly south of the intersection

Short-Term Measure:

- Improve signage and markings
 - Install advance warning merge sign (MUTCD sign W9-4); could replace right lane ends sign with single lane transition sign (MUTCD sign W4-8)

Medium-Term Measure:

- Adjust lane configuration (e.g., reduce to one receiving lane and adjust southbound approach)

Issue #2: South of 3300 South, the intersection of 3345 South is skewed.



Short-Term Measure:

- Install hatched striping to create more of a T intersection

Medium-Term Measure:

- Adjust curbs at 3345 S to create more of a T intersection

⁴ A 5 MPH reduction is evaluated in the benefit-cost analysis.

Issue #3: Parked vehicles back directly onto 1300 East out of parking lot near southeast corner of the intersection



Long-Term Measure:

- Reconfigure parking and access at 3320 S

Luck Spring Drive

Insight: South of this intersection (approximately 3630 South) pedestrians use the public utility easement to connect from Iris Lane to 1300 East and continue east on Murphy's Lane to Highland Drive and Siggard Drive.



Issue #1: Crosswalk leads directly to driveway on the west side



Short-Term Measure:

- Realign crosswalk

Issue #2: High vehicle speeds downhill



Short-Term Measure:

- Install speed feedback sign for southbound vehicles south of 3345 S

- Install pavement markings in advance of the crosswalk (speed limit on pavement, crossing ahead, or yield markings)

Medium-Term Measure:

- Add pedestrian refuge island and/or bulb-outs

Long-Term Measure:

- Consider landscape median between 3345 S and Lavon Dr – with no curb cuts a center two-way left-turn lane is unnecessary. A median can narrow the visual roadway and reduce speeding.

3900 South

Issue #1: Convenience store has multiple accesses close to 3900 South.



Short-Term Measure:

- Improve markings at convenience store

Medium-Term Measure:

- Remove convenience store accesses closest to intersection
- Update signal to flashing yellow arrow or protected left turns

Long-Term Measure:

- Consider raised median

Issue #2: Concerns with sight distance at hospital access south of intersection

Medium-Term Measure:

- Modify access configuration of the hospital parking lot
 - Right-in/Right-out or emergency-vehicle only at current location
 - Full access at southern end of property

3900 South to Softball Complex

Issue #1: Portions of missing sidewalk on east side

Medium-Term Measure:

- Fill sidewalk gaps

Long-Term Measure:

- Implement comprehensive multimodal corridor improvements

Issue #2: Drainage issues**Medium-Term Measure:**

- Improve drainage

Issue #3: Pedestrians/cyclists crossing midblock**Medium-Term Measure:**

- Conduct a pedestrian count study to identify locations for crosswalks
- Install crosswalks and supportive treatments (such as bulb-outs, refuge islands, or RRFBs)
- Develop a comprehensive active transportation plan for the corridor to guide phased implementation

Long-Term Measure:

- Implement comprehensive multimodal corridor improvements

Issue #4: Vehicles parking in the bike lane**Short-Term Measure:**

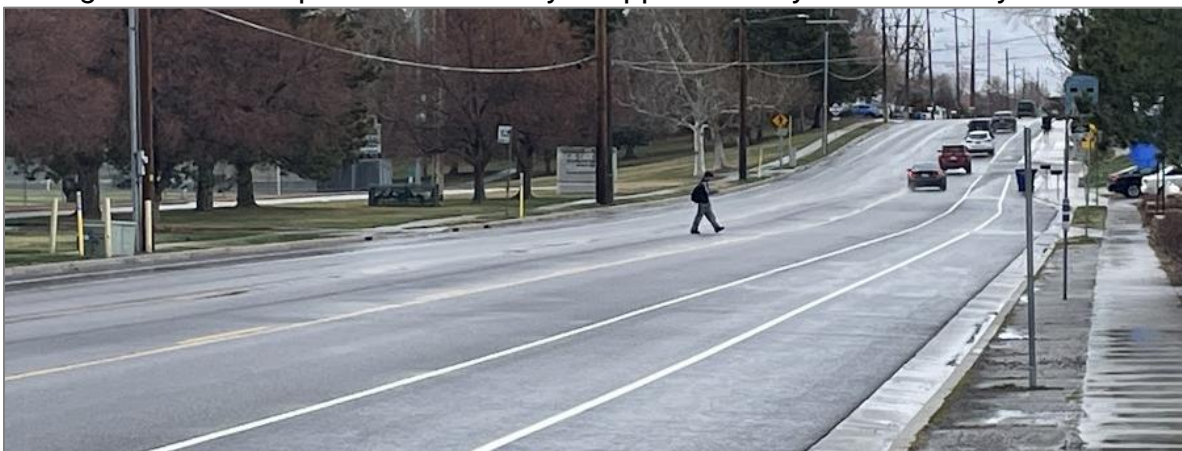
- Install “No Parking” signs and paint curbs red
- Enforce bike lane parking restrictions
- Install flex posts along bike lanes

Long-Term Measure:

- Implement comprehensive multimodal corridor improvements

Softball Complex

Issue #1: Pedestrians cross 1300 East at the midblock instead of the marked crossing. Crossings occur near apartment driveway at approximately 4325 S or Royal Troon Dr.



Short-Term Measure:

- Add warning signage

Medium-Term Measure:

- Add pedestrian crosswalk with supportive treatments (bulb-outs, refuge islands, RRFBs, lighting) at access to housing on east side
 - Consider removing existing crosswalk at 4325 South if crosswalk is installed at the housing development.

Issue #2: Limited sight distance for southbound vehicles approaching the existing crosswalk

Short-Term Measure:

- Add warning signage

Medium-Term Measure:

- Add pedestrian crosswalk with supportive treatments (bulb-outs, refuge islands, RRFBs, lighting) at access to housing on east side
 - Consider removing existing crosswalk at 4325 South if crosswalk is installed at the housing development.

4500 South (SR-266)

Insight: Improvements at this intersection will need to be coordinated with UDOT.

Issue #1: There is inadequate lighting at the intersection.

**Short-Term Measure:**

- Improve mast-arm lighting

Medium-Term Measure:

- Coordinate with UDOT to add more lighting at this intersection. Since there are utility wires over some of the mast arms, underarm mast lighting should be considered.

- Improve corridor lighting

Issue #2: Shoulder on south side of 4500 South is wide.

Short-Term Measure:

- South of the Wellington, convert wide shoulder to bicycle lane

Long-Term Measure:

- South of the Wellington, consider narrowing roadway with curbing to provide wider tree lawn, sidewalks, bicycle lane, or mixed-use path

Issue #3: Doghouse (Type V) signal heads on all approaches could be updated

Medium-Term Measure:

- Implement Flashing Yellow Arrow (FYA) signal phasing

College Street / 4700 South

Issue #1: Vehicles do not stop for pedestrians

Short-Term Measure:

- Add pavement striping ("pedestrian crossing ahead" or speed limit markings) and additional pedestrian signage

Medium-Term Measure:

- Add supportive treatments such as bulb-outs, refuge island, or RRFB

Issue #2: No ADA ramps at crossing on east side



Medium-Term Measure:

- Install ADA ramps

Issue #3: Sidewalk is uneven on east side



Medium-Term Measure:

- Address sidewalk conditions on east side

Issue #4: Missing sidewalk on west side south of crossing



Medium-Term Measure:

- Fill in sidewalk gaps on the west side

Issue #5: Northbound vehicles have limited sight distance

Short-Term Measure:

- Add pavement striping and additional pedestrian signage

Medium-Term Measure:

- Add supportive treatments such as bulb-outs, refuge island, or RRFB

Issue #6: Wide northbound right-turn lane

Long-Term Measure:

- Consider moving curb line to narrow roadway and provide tree lawn, wider sidewalks, bicycle lane, or mixed-use path

Issue #7: Shoulder is very wide, but parking is prohibited



Long-Term Measure:

- Consider moving curb line to narrow roadway and provide tree lawn, wider sidewalks, bicycle lane, or mixed-use path

Murray Holladay Road

Insight: Intersection improvements will require coordination with Holladay. East side of 1300 East is owned by Holladay.

Issue #1: WFRC CSAP recommends updating north-south left-turn phasing to permitted-protected

Short-Term Measure:

- Evaluate signal timing

Medium-Term Measure:

- Update phasing to permitted-protected as warranted

Issue #2: WFRC CSAP recommends curb extension to narrow the north leg

Medium-Term Measure:

- Add curb extensions

Van Winkle Expressway to 4500 South

Issue #1: Portions of missing sidewalk on west side north of the housing complex

Medium-Term Measure:

- Address gaps in sidewalk network, especially proximate to bus stops and pedestrian generators

Long-Term Measure:

- Fully connect pedestrian network

Issue #2: Bus stops in locations difficult for pedestrians to access

Short-Term Measure:

- Improve signage and markings near bus stops
- Evaluate bus stop locations

Medium-Term Measure:

- Address gaps in sidewalk network, especially proximate to bus stops and pedestrian generators

Long-Term Measure:

- Fully connect pedestrian network

Issue #3: Steep drop off on the west side of the road just north of the housing complex



Medium-Term Measure:

- Install barrier along drop off

Benefit-Cost Analysis

The following tables show the cost estimate, expected crash reduction, and benefit-cost ratio of each improvement. These are high-level estimates, based on the best available information. Cost estimates rely on current unit costs, available project estimates, or estimates from similar projects. METHODS estimated the safety costs in the study area using the observed crash data.

To estimate how the suggested safety measures may impact the number of crashes, crash modification factors (CMFs) were used. CMFs from the Utah CMF database, the WFRC CSAP, and CMF Clearinghouse were applied to each measure when there was an applicable equivalent countermeasure. Not all measures have an equivalent countermeasure for various reasons. The lower the CMF, the greater reduction in crashes a countermeasure is expected to produce.

The following table summarizes the improvements with their CMF, cost estimate, and benefit-cost ratio. A benefit-cost ratio (B/C) above 1 means the benefit of a countermeasure is greater than the cost of that countermeasure. The benefit values used to determine the final B/C ratio are based on a 20-year analysis. The cost of a countermeasure is factored based on its service life. Complete calculations for each improvement are included in the Appendix.

Measures are prioritized in terms of their relative ease of implementation (short-, medium-, and long-term). Short-term measures can generally be addressed within regular maintenance and operations budgets; medium-term measures may require some advanced planning but can generally be addressed within a CIP; long-term measures require more substantial planning or funding and may require grants or bonds to implement. In general, treatments with a higher benefit-cost ratio have a higher return on investment.

Table 3: Benefit-Cost Analysis^{5,6}

ID	Location	Measure	CMF	20-Year Benefit	20-Year Cost	Benefit-Cost Ratio (B/C)
SHORT TERM						
S-1	Corridor Wide	Install stop bars on side streets	0.950	\$13,856,000	\$8,000	1732.00
S-2	Corridor Wide	Edge & centerline striping	0.917	\$59,233,000	\$96,000	617.01
S-3	Corridor Wide	Driver feedback signs	0.950	\$13,856,000	\$316,000	43.85
S-4	Corridor Wide	Install "No Parking" signs or paint curbs red	0.988	\$3,436,000	\$169,000	20.33
S-5	Corridor Wide	Enforce bike lane parking restrictions	0.988	\$3,436,000	\$444,000	7.74
S-6	Corridor Wide	Install flex posts along bike lanes	0.988	\$3,436,000	\$395,000	8.70
S-7	Corridor Wide	Prune trees to improve lighting	0.996	\$1,020,000	\$1,195,000	0.85
S-8	Corridor Wide	Relocate bus stops to accessible locations	0.996	\$1,247,000	\$860,000	1.45
S-9	Corridor Wide	Lower posted speed limit by 5 mph	1.000	\$1,962,000	\$49,000	40.04
S-10	3300 South	Improve signage and markings	0.902	\$420,000	\$11,000	38.18
S-11	3300 South	Restripe the 3345 S approach to create more of a T	0.950	\$70,000	\$5,300	13.21
S-12	Luck Spring Drive	Realign crosswalk	0.990	\$13,000	\$17,000	0.76
S-13	Luck Spring Drive	Install speed feedback sign for southbound vehicles south of 3345 S	0.950	\$66,000	\$52,600	1.25
S-14	Luck Spring Drive	Install pavement markings in advance of the crosswalk	0.990	\$13,000	\$5,300	2.45
S-15	3900 South	Improve markings at convenience store	0.950	\$144,000	\$5,300	27.17
S-16	3900 South to Softball Complex	Enforce bike lane parking	0.988	\$226,000	\$91,900	2.46
S-17	Softball Complex	Add warning signage	0.996	\$178,000	\$9,700	18.35
S-18	4500 South	Improve mast-arm lighting	0.982	\$1,603,000	\$49,800	32.19
S-19	4500 South	Convert wide shoulder to bicycle lane	0.988	\$433,000	\$10,500	41.24
S-20	College Street / 4700 South	Add pavement striping and additional pedestrian signage	0.990	\$39,000	\$19,500	2.00
S-21	Murray Holladay Road	Evaluate signal timing	0.948	\$2,347,000	\$21,000	111.76
S-22	Van Winkle Expressway to 4500 South	Improve signage and markings near bus stops	0.996	\$863,000	\$68,200	12.65

⁵ Lower CMFs indicate a countermeasure is expected to result in a larger reduction in crashes.

⁶ Because bicycle and pedestrian crashes are relatively infrequent, available methodologies do not accurately reflect the value of these improvements. Although the benefit-cost ratio for many of these treatments is low – and sometimes below 1, protecting the most vulnerable users is beneficial from both a human life and financial perspective. In Utah the average cost of a pedestrian-involved crash is 5-6 times higher than the average cost of a vehicle crash. (Utah's Crash Costs Memo March 16, 2026)

ID	Location	Measure	CMF	20-Year Benefit	20-Year Cost	Benefit-Cost Ratio (B/C)
S-23	Van Winkle Expressway to 4500 South	Evaluate bus stop locations	0.996	\$676,000	\$280,000	2.41
MEDIUM TERM						
M-1	Corridor Wide	Pave sidewalks and address ADA compliance issues	0.995	\$1,441,000	\$210,000	6.86
M-2	Corridor Wide	Add bulb-outs at intersections	0.680	\$88,679,000	\$4,480,000	19.79
M-3	Corridor Wide	Install sidewalks proximate to bus stops when possible	0.995	\$1,441,000	\$70,000	20.59
M-4	Corridor Wide	Create an access management plan for the corridor	0.903	\$32,374,000	\$244,000	132.68
M-5	3300 South	Adjust lane configuration (e.g., reduce to one receiving lane and adjust southbound approach	0.962	\$237,000	\$5,000	47.40
M-6	3300 South	Adjust curbs at 3345 S to create more of a T	0.800	\$281,000	\$49,800	5.64
M-7	Luck Spring Drive	Add pedestrian refuge island and/or bulb-outs	0.680	\$421,000	\$49,800	8.45
M-8	3900 South	Modify access configuration of the hospital parking lot	0.903	\$889,000	\$14,000	63.50
M-9	3900 South	Remove convenience store accesses closest to intersection	0.903	\$1,060,000	\$14,000	75.71
M-10	3900 South	Update signal to FYA or protected left turns	0.972	\$1,064,000	\$55,800	19.07
M-11	3900 South to Softball Complex	Fill sidewalk gaps	0.974	\$474,000	\$63,000	7.52
M-12	3900 South to Softball Complex	Improve drainage	0.917	\$1,512,000	\$758,000	1.99
M-13	3900 South to Softball Complex	Install crosswalks and supportive treatments (bulb-outs, refuge islands, RRFBs)	0.990	\$520,000	\$89,700	5.80
M-14	Softball Complex	Add pedestrian crosswalk with supportive treatments at access to housing on east side	0.990	\$315,000	\$44,900	7.02
M-15	4500 South	Improve intersection lighting	0.982	\$1,603,000	\$49,800	32.19
M-16	4500 South	Consider converting signal to FYA	0.972	\$995,000	\$55,800	17.83
M-17	College Street / 4700 South	Install ADA ramps	0.990	\$39,000	\$18,700	2.09
M-18	College Street / 4700 South	Add supportive treatments such as bulb-outs, refuge island, RRFB	0.990	\$39,000	\$99,700	0.39
M-19	College Street / 4700 South	Address sidewalk conditions on east side	0.974	\$177,000	\$77,000	2.30
M-20	College Street / 4700 South	Fill in sidewalk gaps on the west side	0.974	\$177,000	\$77,000	2.30
M-21	Murray Holladay Road	Update phasing to permitted-protected	0.972	\$1,287,000	\$55,800	23.06

ID	Location	Measure	CMF	20-Year Benefit	20-Year Cost	Benefit-Cost Ratio (B/C)
M-22	Murray Holladay Road	Add curb extensions	0.680	\$14,446,000	\$160,000	90.29
M-23	Van Winkle Expressway to 4500 South	Address gaps in sidewalk network, especially proximate to bus stops and pedestrian generators	0.974	\$3,805,000	\$154,000	24.71
M-24	Van Winkle Expressway to 4500 South	Install barrier near gully	0.920	\$0	\$249,000	0.00
LONG TERM						
L-1	Corridor Wide	Lighting	0.957	\$13,964,000	\$1,296,000	10.77
L-2	Corridor Wide	Implement median / refuge island treatments	0.815	\$51,157,000	\$2,672,000	19.15
L-3	Corridor Wide	Build-out a continuous sidewalk network	0.995	\$1,441,000	\$426,000	3.38
L-4	Corridor Wide	Address drainage issues	0.917	\$23,001,000	\$3,600,000	6.39
L-5	Corridor Wide	Consolidate accesses as parcels redevelop	0.903	\$32,374,000	\$280,000	115.62
L-6	3300 South	Reconfigure parking and access at 3320 S	0.903	\$710,000	\$14,000	50.71
L-7	Luck Spring Drive	Consider landscape median between 3345 S and Lavon Dr	0.290	\$500,000	\$93,000	5.38
L-8	3900 South	Consider raised median	0.903	\$9,750,000	\$91,000	107.14
L-9	3900 South to Softball Complex	Implement comprehensive multimodal corridor improvements	0.962	\$1,976,000	\$125,000	15.81
L-10	4500 South	Consider moving curb line to narrow roadway	0.962	\$1,326,000	\$200,000	6.63
L-11	4500 South	Could use extra space for wider tree lawn or mixed use path	0.969	\$1,075,000	\$140,000	7.68
L-12	College Street / 4700 South	Consider moving curb line to provide for tree lawn and wider sidewalks or bicycle lane	0.969	\$209,000	\$42,000	4.98
L-13	Van Winkle Expressway to 4500 South	Fully connect pedestrian network	0.974	\$3,805,000	\$154,000	24.71

5. RECOMMENDATIONS

The following is a summary of recommendations based on known operations, safety, and geometry along the study corridor and the preliminary evaluation of the measures described above.

Table 4: Recommendations

ID	Location	Measure	Details
SHORT TERM			
S-1	Corridor Wide	Stop bars on side streets	
S-2	Corridor Wide	Edge & centerline striping	
S-3	Corridor Wide	Driver feedback signs	

ID	Location	Measure	Details
S-4	Corridor Wide	Install "No Parking" signs or paint curbs red	
S-5	Corridor Wide	Enforce bike lane parking restrictions	
S-6	Corridor Wide	Install flex posts along bike lanes	
S-7	Corridor Wide	Prune trees to improve lighting	
S-8	Corridor Wide	Relocate bus stops to accessible locations	
S-9	Corridor Wide	Evaluate speed limit reduction, implement as appropriate	
S-10	3300 South	Improve signage and markings	
S-11	3300 South	Restripe the 3345 S approach to create more of a T	
S-12	Luck Spring Drive	Realign crosswalk	
S-13	Luck Spring Drive	Install speed feedback sign for southbound vehicles south of 3345 S	
S-14	Luck Spring Drive	Install pavement markings in advance of the crosswalk	
S-15	3900 South	Improve markings at convenience store	
S-16	3900 South to Softball Complex	Enforce bike lane parking	
S-17	Softball Complex	Add warning signage	
S-18	4500 South	Improve mast-arm lighting	
S-19	4500 South	Convert wide shoulder to bicycle lane	First responders use this space frequently; can implement south of the Wellington
S-20	College Street / 4700 South	Add pavement striping and additional pedestrian signage	
S-21	Murray Holladay Road	Evaluate signal timing	
S-22	Van Winkle Expressway to 4500 South	Improve signage and markings near bus stops	
S-23	Van Winkle Expressway to 4500 South	Evaluate bus stop locations	
MEDIUM TERM			
M-1	Corridor Wide	Repave sidewalks and address ADA compliance issues	
M-2	Corridor Wide	Add bulb-outs at intersections	
M-3	Corridor Wide	Install sidewalks proximate to bus stops when possible	
M-4	Corridor Wide	Create an access management plan for the corridor	
M-5	3300 South	Adjust lane configuration (e.g., reduce to one receiving lane and adjust southbound approach	
M-6	3300 South	Adjust curbs at 3345 S to create more of a T	
M-7	Luck Spring Drive	Add pedestrian refuge island and/or bulb-outs	

ID	Location	Measure	Details
M-8	3900 South	Modify access configuration of the hospital parking lot	
M-9	3900 South	Remove convenience store accesses closest to intersection	
M-10	3900 South	Update signal to FYA or protected left turns	
M-11	3900 South to Softball Complex	Fill sidewalk gaps	
M-12	3900 South to Softball Complex	Improve drainage	
M-13	3900 South to Softball Complex	Install crosswalks and supportive treatments (bulb-outs, refuge islands, RRFBs)	
M-14	Softball Complex	Add pedestrian crosswalk with supportive treatments at access to housing on east side	
M-15	4500 South	Improve intersection lighting	
M-16	4500 South	Consider converting signal to FYA	
M-17	College Street / 4700 South	Install ADA ramps	
M-18	College Street / 4700 South	Add supportive treatments such as bulb-outs, refuge island, RRFB	
M-19	College Street / 4700 South	Address sidewalk conditions on east side	
M-20	College Street / 4700 South	Fill in sidewalk gaps on the west side	
M-21	Murray Holladay Road	Update phasing to permitted-protected	
M-22	Murray Holladay Road	Add curb extensions	
M-23	Van Winkle Expressway to 4500 South	Address gaps in sidewalk network, especially proximate to bus stops and pedestrian generators	
M-24	Van Winkle Expressway to 4500 South	Install barrier near gully	No recent crash history, but barrier is justified
LONG TERM			
L-1	Corridor Wide	Lighting	
L-2	Corridor Wide	Implement median / refuge island treatments	
L-3	Corridor Wide	Build-out a continuous sidewalk network	
L-4	Corridor Wide	Address drainage issues	
L-5	Corridor Wide	Consolidate accesses as parcels redevelop	
L-6	3300 South	Reconfigure parking and access at 3320 S	
L-7	Luck Spring Drive	Consider landscape median between 3345 S and Lavon Dr	
L-8	3900 South	Consider raised median	
L-9	3900 South to Softball Complex	Implement comprehensive multimodal corridor improvements	

ID	Location	Measure	Details
L-10	4500 South	Consider moving curb line to narrow roadway	First responders use this space frequently; can implement south of the Wellington
L-11	4500 South	Could use extra space for wider tree lawn or mixed use path	First responders use this space frequently; can implement south of the Wellington
L-12	College Street / 4700 South	Consider moving curb line to provide for tree lawn and wider sidewalks or bicycle lane	
L-13	Van Winkle Expressway to 4500 South	Fully connect pedestrian network	

6. APPENDIX

A: Summary of Issues

B: Detailed Benefit-Cost Calculation Table

APPENDIX A: SUMMARY OF ISSUES

The following list of issues are a compilation of the project team's observations during the RSA field review on March 5, 2026, the experience of City officials, and the crash history and volumes.

Entire Corridor

- Poor lighting in sections
- Drainage issues
- Missing sidewalk
- Vehicles parking in the bike lane
- Corridor has closely spaced driveways towards the south end
- Speeds and speed limit perceived as too high (40 mph)
 - WFRM CSAP recommends lowering to 30 mph
- Some UTA bus stops are in inaccessible/unfriendly areas, such as locations with no sidewalk
- Desire to keep 1300 East as a 3-lane roadway
- There is not a large number of heavy vehicles that use 1300 East
- Very wide shoulders in places

3300 South

- The southbound merge lane ends abruptly
 - Canal crossing is the reason the road narrows
 - Potentially idea is to reduce this to one receiving lane, and modify the southbound approach lane at the 3300 S intersection
- 1300 East has a skew intersection with 3345 South
- Housing development southeast corner of 3300 South has some messy parking. Vehicles are parked very close to the roadway.

Luck Springs Drive

- Vehicles travel at high speeds downhill
- Crosswalk leads directly into driveway, can potentially be relocated or aligned differently

3900 South

- Convenience store accesses are very close to intersection
- Potential sight distance issues at hospital access south of intersection

- Comment about sight distance restrictions pulling out of the hospital parking lot onto 1300 East. Field observations do not indicate sight distance constraints.
 - Comment about potentially relocating the hospital parking lot access to the south side of the lot. This would space the access further from the 3900 South intersection.
- Could potentially update phasing to be FYA or protected left turns. Current configuration is doghouse

3900 South to Softball Complex

- Sidewalk gaps, particularly on the east side
- Drainage issues
- Significant midblock crossing
- Vehicles parking in the bike lanes

Softball Complex

- Pedestrians crossing at the midblock, specifically at the driveway to the apartments
 - Observed three just in the morning
- Southbound vehicles may not have enough sight distance at the existing crosswalk
 - Field measurements indicated ~500' available. For 40 mph, the required distance is 305'

4500 South

- Poor intersection lighting. Only light is on SE corner. Due to utility lines, lights that are installed may need to be under arm mast lighting
- North of this intersection is perceived as dark in the evening
- Left turns are all permitted protected
- Very wide shoulder on south side of roadway, first responders park here to serve the Wellington
- Coordination with UDOT will be required for improvements at this intersection

4700 South

- Vehicles do not stop for pedestrians
- Sidewalk is very uneven on east side, no ADA ramps
- Shoulder is very wide and parking is prohibited
 - Parking is prohibited because the city felt like it
- Northbound vehicles may not have sufficient sight distance

- Field measurements indicated > 400' available. For 40 mph, the required distance is 305'
- Wide northbound right-turn lane
- No sidewalk on west side south of crosswalk, which is likely why crossing is installed here. Potentially remove the crosswalk on College Street and instead continue the sidewalk on the west side? No notable large pedestrian generators that would necessitate a crossing here

Murray Holladay Road

- WFRCSAP recommends
 - Updating north-south left turn phasing to permitted-protected
 - Curb extension to narrow north leg
- Improvements at this intersection may need to be coordinated with Holladay. The segment of 1300 East between Holladay and Van Winkle is owned by Holladay on the east side.

Van Winkle

- There is a very steep gully on the west side of the road just north of the housing complex. No barrier and very narrow shoulder
- There is no sidewalk on the west side north of the complex, but there is a bus stop at this location

Appendix B: Detailed Benefit-Cost Calculation Table

			CMF					Observed										
ID	Location	Measure	Fatal	SI	Minor Injury	Possible Injury	PDO	Overall CMF	Fatal	SI	Minor Injury	Possible Injury	PDO	# of Crashes	Fatal w/ Treatment	SI w/ Treatment	Minor Injury w/ Treatment	Possible Injury w/ Treatment
SHORT TERM																		
S-1	Corridor Wide	Stop bars on side streets	0.950	0.950	0.950	0.950	0.950	0.950	0.2	1.8	12.4	17	56	87.4	0.19	1.71	11.78	16.15
S-2	Corridor Wide	Edge & centerline striping	1.000	0.760	0.760	0.760	1.000	0.917	0.2	1.8	12.4	17	56	87.4	0.20	1.37	9.42	12.92
S-3	Corridor Wide	Driver feedback signs	0.950	0.950	0.950	0.950	0.950	0.950	0.2	1.8	12.4	17	56	87.4	0.19	1.71	11.78	16.15
S-4	Corridor Wide	Install "No Parking" signs or paint curbs red	0.988	0.988	0.988	0.988	0.988	0.988	0.2	1.8	12.4	17	56	87.4	0.20	1.78	12.25	16.79
S-5	Corridor Wide	Enforce bike lane parking restrictions	0.988	0.988	0.988	0.988	0.988	0.988	0.2	1.8	12.4	17	56	87.4	0.20	1.78	12.25	16.79
S-6	Corridor Wide	Install flex posts along bike lanes	0.988	0.988	0.988	0.988	0.988	0.988	0.2	1.8	12.4	17	56	87.4	0.20	1.78	12.25	16.79
S-7	Corridor Wide	Prune trees to improve lighting	0.996	0.996	0.996	0.996	0.996	0.996	0.2	1.8	12.4	17	56	87.4	0.20	1.79	12.35	16.94
S-8	Corridor Wide	Relocate bus stops to accessible locations	0.996	0.996	0.996	0.996	0.996	0.996	0.2	1.8	12.4	17	56	87.4	0.20	1.79	12.34	16.92
S-9	Corridor Wide	Lowering posted speed limit by 5 mph	0.990	0.984	1.000	1.000	1.000	1.000	0.2	1.8	12.4	17	56	87.4	0.20	1.77	12.40	17.00
S-10	3300 South	Improve signage and markings	0.850	0.850	0.850	0.850	0.930	0.902	0	0	0.2	0.4	1.8	2.4	0.00	0.00	0.17	0.34
S-11	3300 South	Restripe the 3345 S approach to create more of a T	0.950	0.950	0.950	0.950	0.950	0.950	0	0	0	0.4	0.4	0.8	0.00	0.00	0.00	0.38
S-12	Luck Springs Drive	Realign crosswalk	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.2	0	0.2	0.4	0.00	0.00	0.20	0.00
S-13	Luck Springs Drive	Install speed feedback sign for southbound vehicles so	0.950	0.950	0.950	0.950	0.950	0.950	0	0	0.2	0	0.2	0.4	0.00	0.00	0.19	0.00
S-14	Luck Springs Drive	Install pavement markings in advance of the crosswalk	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.2	0	0.2	0.4	0.00	0.00	0.20	0.00
S-15	3900 South	Improve markings at convenience store	0.950	0.950	0.950	0.950	0.950	0.950	0	0	0.4	0	1.2	1.6	0.00	0.00	0.38	0.00
S-16	3900 South to Softball Comple	Enforce bike lane parking	0.988	0.988	0.988	0.988	0.988	0.988	0	0.2	0.6	0.4	1.4	2.6	0.00	0.20	0.59	0.40
S-17	Softball Complex	Add warning signage	0.994	0.994	0.994	0.994	0.997	0.996	0	0.4	0.4	0.4	3	4.2	0.00	0.40	0.40	0.40
S-18	4500 South	Improve mast-arm lighting	0.947	0.947	0.947	0.947	1.000	0.982	0	0	2.8	4	14.5	21.3	0.00	0.00	2.65	3.79
S-19	4500 South	Convert wide shoulder to bicycle lane	0.988	0.988	0.988	0.988	0.988	0.988	0	0	2.8	4	14.5	21.3	0.00	0.00	2.77	3.95
S-20	College Street / 4700 South	Add pavement striping and additional pedestrian signag	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.6	0	0.6	1.2	0.00	0.00	0.59	0.00
S-21	Murray Holladay Road	Evaluate signal timing	0.948	0.948	0.948	0.948	0.948	0.948	0.2	0.2	2	1.6	6.4	10.4	0.19	0.19	1.90	1.52
S-22	Van Winkle Expressway to 45	Improve signage and markings near bus stops	0.994	0.994	0.994	0.994	0.997	0.996	0.2	0.6	8.4	10.8	38.6	58.6	0.20	0.60	8.35	10.74
S-23	Van Winkle Expressway to 45	Evaluate bus stop locations	0.996	0.996	0.996	0.996	0.996	0.996	0.2	0.6	8.4	10.8	38.6	58.6	0.20	0.60	8.36	10.75
MEDIUM TERM																		
M-1	Corridor Wide	Repave sidewalks and address ADA compliance issues	0.995	0.995	0.995	0.995	0.995	0.995	0.2	1.8	12.4	17	56	87.4	0.20	1.79	12.34	16.91
M-2	Corridor Wide	Add bulb-outs at intersections	0.680	0.680	0.680	0.680	0.680	0.680	0.2	1.8	12.4	17	56	87.4	0.14	1.22	8.43	11.56
M-3	Corridor Wide	Install sidewalks proximate to bus stops when possible	0.995	0.995	0.995	0.995	0.995	0.995	0.2	1.8	12.4	17	56	87.4	0.20	1.79	12.34	16.91
M-4	Corridor Wide	Create an access management plan for the corridor	0.720	0.720	0.720	0.720	1.000	0.903	0	1.2	3.8	4.8	18	27.8	0.00	0.86	2.74	3.46
M-5	3300 South	Adjust lane configuration (e.g., reduce to one receiving	0.962	0.962	0.962	0.962	0.962	0.962	0	0	0.2	1.2	3.6	5	0.00	0.00	0.19	1.15
M-6	3300 South	Adjust curbs at 3345 S to create more of a T	0.800	0.800	0.800	0.800	0.800	0.800	0	0	0	0.4	0.4	0.8	0.00	0.00	0.00	0.32
M-7	Luck Springs Drive	Add pedestrian refuge island and/or bulb-outs	0.680	0.680	0.680	0.680	0.680	0.680	0	0	0.2	0	0.2	0.4	0.00	0.00	0.14	0.00
M-8	3900 South	Modify access configuration of the hospital parking lot	0.720	0.720	0.720	0.720	1.000	0.903	0	0	0.2	0.6	0.6	1.4	0.00	0.00	0.14	0.43
M-9	3900 South	Remove convenience store accesses closest to interse	0.720	0.720	0.720	0.720	1.000	0.903	0	0	0.4	0.4	2	2.8	0.00	0.00	0.29	0.29
M-10	3900 South	Update signal to FYA or protected left turns	0.972	0.972	0.972	0.972	0.972	0.972	0	0.2	2.4	2.2	8	12.8	0.00	0.19	2.33	2.14
M-11	3900 South to Softball Comple	Fill sidewalk gaps	0.974	0.974	0.974	0.974	0.974	0.974	0	0.2	0.6	0.4	1.4	2.6	0.00	0.19	0.58	0.39
M-12	3900 South to Softball Comple	Improve drainage	0.917	0.917	0.917	0.917	0.917	0.917	0	0.2	0.6	0.4	1.4	2.6	0.00	0.18	0.55	0.37
M-14	3900 South to Softball Comple	Install crosswalks and supportive treatments (bulb-outs	0.990	0.990	0.990	0.990	0.990	0.990	0	0.6	1.2	1.6	3.6	7	0.00	0.59	1.19	1.58
M-16	Softball Complex	Add pedestrian crosswalk with supportive treatments at	0.990	0.990	0.990	0.990	0.990	0.990	0	0.4	0.6	0.4	3.2	4.6	0.00	0.40	0.59	0.40
M-17	4500 South	Improve intersection lighting	0.947	0.947	0.947	0.947	1.000	0.982	0	0	2.8	4	14.5	21.3	0.00	0.00	2.65	3.79
M-18	4500 South	Consider converting signal to FYA	0.972	0.972	0.972	0.972	0.972	0.972	0	0	2.8	4	14.5	21.3	0.00	0.00	2.72	3.89
M-19	College Street / 4700 South	Install ADA ramps	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.6	0	0.6	1.2	0.00	0.00	0.59	0.00
M-20	College Street / 4700 South	Add supportive treatments such as bulb-outs, refuge isl	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.6	0	0.6	1.2	0.00	0.00	0.59	0.00
M-21	College Street / 4700 South	Address sidewalk conditions on east side	0.974	0.974	0.974	0.974	0.974	0.974	0	0	0.8	0.4	1.6	2.8	0.00	0.00	0.78	0.39
M-22	College Street / 4700 South	Fill in sidewalk gaps on the west side	0.974	0.974	0.974	0.974	0.974	0.974	0	0	0.8	0.4	1.6	2.8	0.00	0.00	0.78	0.39
M-23	Murray Holladay Road	Update phasing to permitted-protected	0.972	0.972	0.972	0.972	0.972	0.972	0.2	0.2	2	1.6	6.4	10.4	0.19	0.19	1.94	1.55
M-24	Murray Holladay Road	Add curb extensions	0.680	0.680	0.680	0.680	0.680	0.680	0.2	0.2	2	1.6	6.4	10.4	0.14	0.14	1.36	1.09
M-25	Van Winkle Expressway to 45	Address gaps in sidewalk network, especially proximate	0.974	0.974	0.974	0.974	0.974	0.974	0.2	0.6	7.8	10.8	38	57.4	0.19	0.58	7.60	10.52
M-26	Van Winkle Expressway to 45	Install barrier near gully	0.920	0.920	0.920	0.920	0.920	0.920	0	0	0	0	0	0	0.00	0.00	0.00	0.00
LONG TERM																		
L-1	Corridor Wide	Lighting	0.949	0.949	0.949	0.949	0.962	0.957	0.2	1.8	12.4	17	56	87.4	0.19	1.71	11.77	16.13
L-2	Corridor Wide	Implement median / refuge island treatments	0.815	0.815	0.815	0.815	0.815	0.815	0.2	1.8	12.4	17	56	87.4	0.16	1.47	10.11	13.86
L-3	Corridor Wide	Build-out a continuous sidewalk network	0.995	0.995	0.995	0.995	0.995	0.995	0.2	1.8	12.4	17	56	87.4	0.20	1.79	12.34	16.91
L-4	Corridor Wide	Address drainage issues	0.917	0.917	0.917	0.917	0.917	0.917	0.2	1.8	12.4	17	56	87.4	0.18	1.65	11.37	15.59
L-5	Corridor Wide	Consolidate accesses as parcels redevelop	0.720	0.720	0.720	0.720	1.000	0.903	0	1.2	3.8	4.8	18	27.8	0.00	0.86	2.74	3.46
L-6	3300 South	Reconfigure parking and access at 3320 S	0.720	0.720	0.720	0.720	1.000	0.903	0	0	0.2	0.4	2.6	3.2	0.00	0.00	0.14	0.29
L-7	Luck Springs Drive	Consider landscape median between 3345 S and Lavo	0.290	0.290	0.290	0.290	0.290	0.290	0	0	0	0.2	0.2	0.4	0.00	0.00	0.00	0.06
L-8	3900 South	Consider raised median	0.720	0.720	0.720	0.720	1.000	0.903	0	0.2	2.4	2.2	8	12.8	0.00	0.14	1.73	1.58
L-9	3900 South to Softball Comple	Implement comprehensive multimodal corridor improve	0.962	0.962	0.962	0.962	0.962	0.962	0	0.6	1.2	1.6	3.6	7	0.00	0.58	1.15	1.54
L-10	4500 South	Consider moving curb line to narrow roadway	0.962	0.962	0.962	0.962	0.962	0.962	0	0	2.8	4	14.5	21.3	0.00	0.00	2.69	3.85
L-11	4500 South	Could use extra space for wider tree lawn or mixed use	0.969	0.969	0.969	0.969	0.969	0.969	0	0	2.8	4	14.5	21.3	0.00	0.00	2.71	3.88
L-12	College Street / 4700 South	Consider moving curb line to provide for tree lawn and v	0.969	0.969	0.969	0.969	0.969	0.969	0	0	0.8	0.4	1.6	2.8	0.00	0.00	0.78	0.39
L-13	Van Winkle Expressway to 45	Fully connect pedestrian network	0.974	0.974	0.974	0.974	0.974	0.974	0.2	0.6	7.8	10.8	38	57.4	0.19	0.58	7.60	10.52

Appendix B: Detailed Benefit-Cost Calculation Table (continued)

ID	Location	Measure	PDO w/ Treatment	# w/ Treatment	Crashes Avoided	Annual Crash Costs	Annual Crash Cost w/ Treatment	Safety Benefit per Year	20-year analysis period, % rate	Service Life (Years)	20-year Cost	Benefit-Cost Ratio (B/C)
SHORT TERM												
S-1	Corridor Wide	Stop bars on side streets	53.20	83.03	4.37	\$18,627,000	\$17,695,650	\$931,350	\$13,856,000	3	\$8,000	1732.00
S-2	Corridor Wide	Edge & centerline striping	56.00	79.91	7.49	\$18,627,000	\$14,645,621	\$3,981,379	\$59,233,000	3	\$96,000	617.01
S-3	Corridor Wide	Driver feedback signs	53.20	83.03	4.37	\$18,627,000	\$17,695,650	\$931,350	\$13,856,000	3	\$316,000	43.85
S-4	Corridor Wide	Install "No Parking" signs or paint curbs red	55.31	86.32	1.08	\$18,627,000	\$18,396,025	\$230,975	\$3,436,000	1	\$169,000	20.33
S-5	Corridor Wide	Enforce bike lane parking restrictions	55.31	86.32	1.08	\$18,627,000	\$18,396,025	\$230,975	\$3,436,000	1	\$444,000	7.74
S-6	Corridor Wide	Install flex posts along bike lanes	55.31	86.32	1.08	\$18,627,000	\$18,396,025	\$230,975	\$3,436,000	3	\$395,000	8.70
S-7	Corridor Wide	Prune trees to improve lighting	55.79	87.08	0.32	\$18,627,000	\$18,568,453	\$68,547	\$1,020,000	1	\$1,195,000	0.85
S-8	Corridor Wide	Relocate bus stops to accessible locations	55.75	87.01	0.39	\$18,627,000	\$18,543,179	\$83,821	\$1,247,000	20	\$860,000	1.45
S-9	Corridor Wide	Lowering posted speed limit by 5 mph	56.00	87.37	0.03	\$18,627,000	\$18,495,127	\$131,873	\$1,962,000	5	\$49,000	40.04
S-10	3300 South	Improve signage and markings	1.67	2.18	0.22	\$208,340	\$180,127	\$28,213	\$420,000	3	\$11,000	38.18
S-11	3300 South	Restripe the 3345 S approach to create more of a T	0.38	0.76	0.04	\$94,600	\$89,870	\$4,730	\$70,000	3	\$5,300	13.21
S-12	Luck Springs Drive	Realign crosswalk	0.20	0.40	0.00	\$88,420	\$87,536	\$884	\$13,000	20	\$17,000	0.76
S-13	Luck Springs Drive	Install speed feedback sign for southbound vehicles	0.19	0.38	0.02	\$88,420	\$83,999	\$4,421	\$66,000	3	\$52,600	1.25
S-14	Luck Springs Drive	Install pavement markings in advance of the crosswalk	0.20	0.40	0.00	\$88,420	\$87,536	\$884	\$13,000	3	\$5,300	2.45
S-15	3900 South	Improve markings at convenience store	1.14	1.52	0.08	\$193,720	\$184,034	\$9,686	\$144,000	3	\$5,300	27.17
S-16	3900 South to Softball Complex	Enforce bike lane parking	1.38	2.57	0.03	\$1,224,620	\$1,209,435	\$15,185	\$226,000	1	\$91,900	2.46
S-17	Softball Complex	Add warning signage	2.99	4.18	0.02	\$2,030,500	\$2,018,520	\$11,980	\$178,000	5	\$9,700	18.35
S-18	4500 South	Improve mast-arm lighting	14.50	20.94	0.36	\$2,346,350	\$2,238,617	\$107,733	\$1,603,000	15	\$49,800	32.19
S-19	4500 South	Convert wide shoulder to bicycle lane	14.32	21.04	0.26	\$2,346,350	\$2,317,255	\$29,095	\$433,000	3	\$10,500	41.24
S-20	College Street / 4700 South	Add pavement striping and additional pedestrian signage	0.59	1.19	0.01	\$265,260	\$262,607	\$2,653	\$39,000	5	\$19,500	2.00
S-21	Murray Holladay Road	Evaluate signal timing	6.07	9.86	0.54	\$3,034,320	\$2,876,535	\$157,785	\$2,347,000	3	\$21,000	111.76
S-22	Van Winkle Expressway to 45	Improve signage and markings near bus stops	38.49	58.37	0.23	\$10,102,460	\$10,044,452	\$58,008	\$863,000	5	\$68,200	12.65
S-23	Van Winkle Expressway to 45	Evaluate bus stop locations	38.43	58.34	0.26	\$10,102,460	\$10,056,999	\$45,461	\$676,000	20	\$280,000	2.41
MEDIUM TERM												
M-1	Corridor Wide	Repave sidewalks and address ADA compliance issues	55.71	86.95	0.45	\$18,627,000	\$18,530,140	\$96,860	\$1,441,000	20	\$210,000	6.86
M-2	Corridor Wide	Add bulb-outs at intersections	38.08	59.43	27.97	\$18,627,000	\$12,666,360	\$5,960,640	\$88,679,000	20	\$4,480,000	19.79
M-3	Corridor Wide	Install sidewalks proximate to bus stops when possible	55.71	86.95	0.45	\$18,627,000	\$18,530,140	\$96,860	\$1,441,000	20	\$70,000	20.59
M-4	Corridor Wide	Create an access management plan for the corridor	18.00	25.06	2.74	\$8,151,440	\$5,975,381	\$2,176,059	\$32,374,000	5	\$244,000	132.68
M-5	3300 South	Adjust lane configuration (e.g., reduce to one receiving	3.46	4.81	0.19	\$418,640	\$402,732	\$15,908	\$237,000	15	\$5,000	47.40
M-6	3300 South	Adjust curbs at 3345 S to create more of a T	0.32	0.64	0.16	\$94,600	\$75,680	\$18,920	\$281,000	15	\$49,800	5.64
M-7	Luck Springs Drive	Add pedestrian refuge island and/or bulb-outs	0.14	0.27	0.13	\$88,420	\$60,126	\$28,294	\$421,000	15	\$49,800	8.45
M-8	3900 South	Modify access configuration of the hospital parking lot	0.60	1.18	0.22	\$226,100	\$166,337	\$59,763	\$889,000	20	\$14,000	63.50
M-9	3900 South	Remove convenience store accesses closest to intersection	2.00	2.58	0.22	\$296,760	\$225,483	\$71,277	\$1,060,000	20	\$14,000	75.71
M-10	3900 South	Update signal to FYA or protected left turns	7.77	12.44	0.36	\$2,509,400	\$2,437,882	\$71,518	\$1,064,000	10	\$55,800	19.07
M-11	3900 South to Softball Complex	Fill sidewalk gaps	1.36	2.53	0.07	\$1,224,620	\$1,192,780	\$31,840	\$474,000	20	\$63,000	7.52
M-12	3900 South to Softball Complex	Improve drainage	1.28	2.38	0.22	\$1,224,620	\$1,122,977	\$101,643	\$1,512,000	20	\$758,000	1.99
M-14	3900 South to Softball Complex	Install crosswalks and supportive treatments (bulb-outs	3.56	6.93	0.07	\$3,494,760	\$3,459,812	\$34,948	\$520,000	15	\$89,700	5.80
M-16	Softball Complex	Add pedestrian crosswalk with supportive treatments at	3.17	4.55	0.05	\$2,118,920	\$2,097,731	\$21,189	\$315,000	15	\$44,900	7.02
M-17	4500 South	Improve intersection lighting	14.50	20.94	0.36	\$2,346,350	\$2,238,617	\$107,733	\$1,603,000	15	\$49,800	32.19
M-18	4500 South	Consider converting signal to FYA	14.09	20.69	0.61	\$2,346,350	\$2,279,479	\$66,871	\$995,000	10	\$55,800	17.83
M-19	College Street / 4700 South	Install ADA ramps	0.59	1.19	0.01	\$265,260	\$262,607	\$2,653	\$39,000	15	\$18,700	2.09
M-20	College Street / 4700 South	Add supportive treatments such as bulb-outs, refuge island	0.59	1.19	0.01	\$265,260	\$262,607	\$2,653	\$39,000	15	\$99,700	0.39
M-21	College Street / 4700 South	Address sidewalk conditions on east side	1.56	2.73	0.07	\$456,720	\$444,845	\$11,875	\$177,000	20	\$77,000	2.30
M-22	College Street / 4700 South	Fill in sidewalk gaps on the west side	1.56	2.73	0.07	\$456,720	\$444,845	\$11,875	\$177,000	20	\$77,000	2.30
M-23	Murray Holladay Road	Update phasing to permitted-protected	6.22	10.10	0.30	\$3,034,320	\$2,947,842	\$86,478	\$1,287,000	10	\$55,800	23.06
M-24	Murray Holladay Road	Add curb extensions	4.35	7.07	3.33	\$3,034,320	\$2,063,338	\$970,982	\$14,446,000	20	\$160,000	90.29
M-25	Van Winkle Expressway to 45	Address gaps in sidewalk network, especially proximate	37.01	55.91	1.49	\$9,837,200	\$9,581,433	\$255,767	\$3,805,000	20	\$154,000	24.71
M-26	Van Winkle Expressway to 45	Install barrier near gully	0.00	0.00	0.00	\$0	\$0	\$0	\$0	15	\$249,000	0.00
LONG TERM												
L-1	Corridor Wide	Lighting	53.85	83.64	3.76	\$18,627,000	\$17,688,422	\$938,578	\$13,964,000	15	\$1,296,000	10.77
L-2	Corridor Wide	Implement median / refuge island treatments	45.66	71.27	16.13	\$18,627,000	\$15,188,456	\$3,438,544	\$51,157,000	20	\$2,672,000	19.15
L-3	Corridor Wide	Build-out a continuous sidewalk network	55.71	86.95	0.45	\$18,627,000	\$18,530,140	\$96,860	\$1,441,000	20	\$426,000	3.38
L-4	Corridor Wide	Address drainage issues	51.35	80.15	7.25	\$18,627,000	\$17,080,959	\$1,546,041	\$23,001,000	20	\$3,600,000	6.39
L-5	Corridor Wide	Consolidate accesses as parcels redevelop	18.00	25.06	2.74	\$8,151,440	\$5,975,381	\$2,176,059	\$32,374,000	20	\$280,000	115.62
L-6	3300 South	Reconfigure parking and access at 3320 S	2.60	3.03	0.17	\$225,220	\$177,519	\$47,701	\$710,000	20	\$14,000	50.71
L-7	Luck Springs Drive	Consider landscape median between 3345 S and Lavo	0.06	0.12	0.28	\$47,300	\$13,717	\$33,583	\$500,000	20	\$93,000	5.38
L-8	3900 South	Consider raised median	8.00	11.46	1.34	\$2,509,400	\$1,854,032	\$655,368	\$9,750,000	20	\$91,000	107.14
L-9	3900 South to Softball Complex	Implement comprehensive multimodal corridor improve	3.46	6.73	0.27	\$3,494,760	\$3,361,959	\$132,801	\$1,976,000	20	\$125,000	15.81
L-10	4500 South	Consider moving curb line to narrow roadway	13.95	20.49	0.81	\$2,346,350	\$2,257,189	\$89,161	\$1,326,000	20	\$200,000	6.63
L-11	4500 South	Could use extra space for wider tree lawn or mixed use	14.05	20.64	0.66	\$2,346,350	\$2,274,082	\$72,268	\$1,075,000	20	\$140,000	7.68
L-12	College Street / 4700 South	Consider moving curb line to provide for tree lawn and	1.55	2.71	0.09	\$456,720	\$442,653	\$14,067	\$209,000	20	\$42,000	4.98
L-13	Van Winkle Expressway to 45	Fully connect pedestrian network	37.01	55.91	1.49	\$9,837,200	\$9,581,433	\$255,767	\$3,805,000	20	\$154,000	24.71