



ROAD SAFETY AUDIT: GORDON AVENUE (HILL FIELD RD TO FAIRFIELD RD) IN LAYTON

8/24/2026

PREPARED FOR:



SUBMITTED BY:



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1. INTRODUCTION

Layton City, Utah, submitted a request to the Wasatch Front Regional Council (WFRC) to conduct a Road Safety Audit along Gordon Avenue from Hill Field Road to Fairfield Road. WFRC approved this request and retained METHODS Consulting as a third-party consultant to perform a Road Safety Audit with WFRC and staff from Layton in April 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 the 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:

- Fairfield Road
- King Elementary/Rainbow Drive
- Fort Lane
- Hill Boulevard/75 West
- Hill Field Road

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 Gordon Avenue RSA's team included 17 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.

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
Mindy Hunsaker	Layton City		X	X		X
Troy Blackner	Layton City		X	X		
Dakota Case	Layton City		X	X		
Mike Beavers	Layton City Police		X	X		
Brad Schaff	Layton City		X	X		X
JoEllen Grandy	Layton City		X	X		X
Jamie Senninger	Layton City		X	X		
Brad McIlrath	Layton City		X	X		X
Mike Calarino	Layton City		X	X		X
Joel Temple	WFRC					X
Fariba Soltani	WFRC		X	X		X
Wayne Bennion	WFRC		X	X		
Erica Wygonik (team leader)	METHODS (Consultant)	X	X	X	X	X
Scott Johnson	METHODS (Consultant)		X	X	X	
Dallas Wall	METHODS (Consultant)		X	X		
Jeremy Searle	METHODS (Consultant)		X	X		
Savanah Allen	METHODS (Consultant)					X

The team gathered for a stakeholder meeting at the Layton City Engineering conference room at 9:00 am, then held a field review, driving the corridor and making stops at key locations to discuss and observe together. METHODS also observed the corridor throughout the day, including during periods before and after school started. 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 0.8-mile segment between Hill Field Road and Fairfield Road. The project corridor is located to the east of I-15, west of the US-89.

Gordon Avenue is an east-west route and is a federal aid eligible road (1474)². Land use surrounding Gordon Avenue is mostly residential. However, King Elementary School is located along the corridor, and west of Hill Field Road is a commercial area.

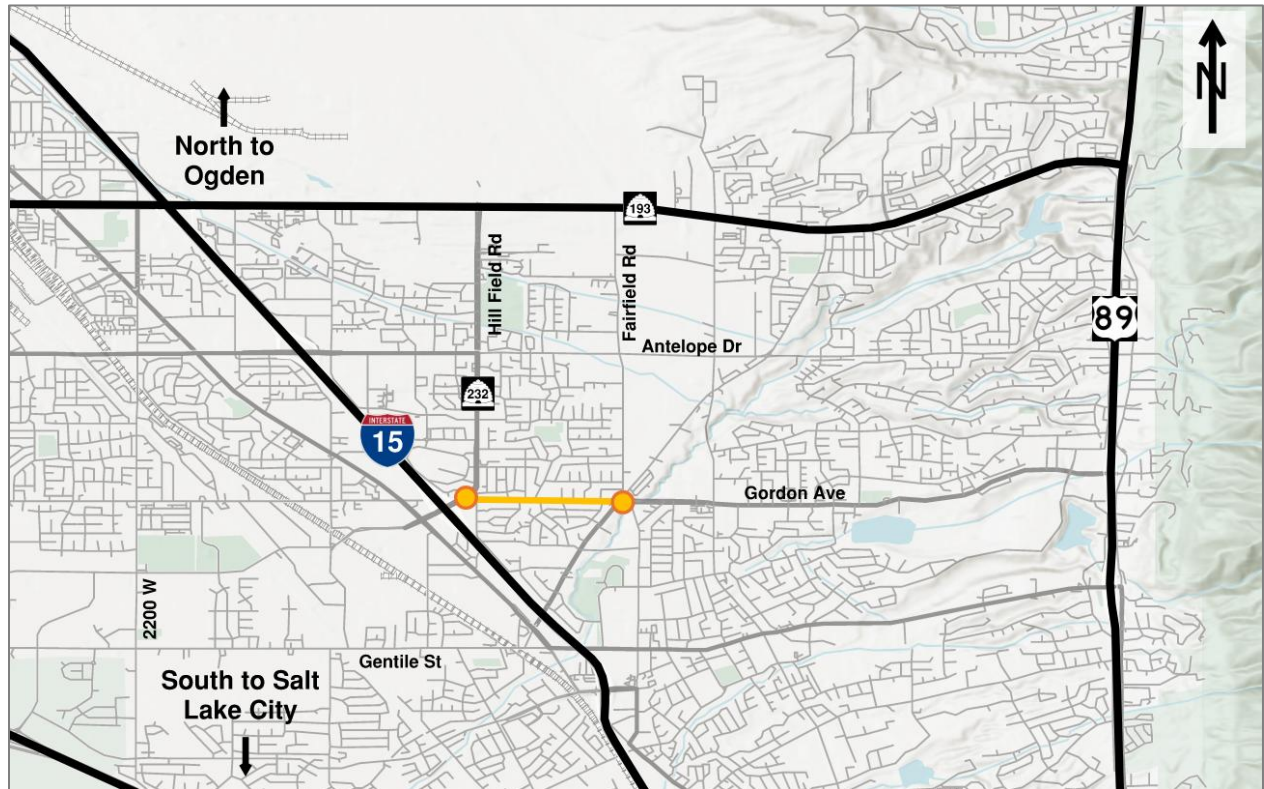


Figure 3: Project Location

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. Hill Field Road from Antelope Drive to Main Street was identified in the plan. The plan recommended updating signalized intersections within this segment to flashing yellow arrow phasing or leading pedestrian intervals. The intersection of Gordon Avenue & Hill Field Road already implements protected left turn phasing. Proximate safety measures identified in the plan are shown in *Figure 4*.

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>

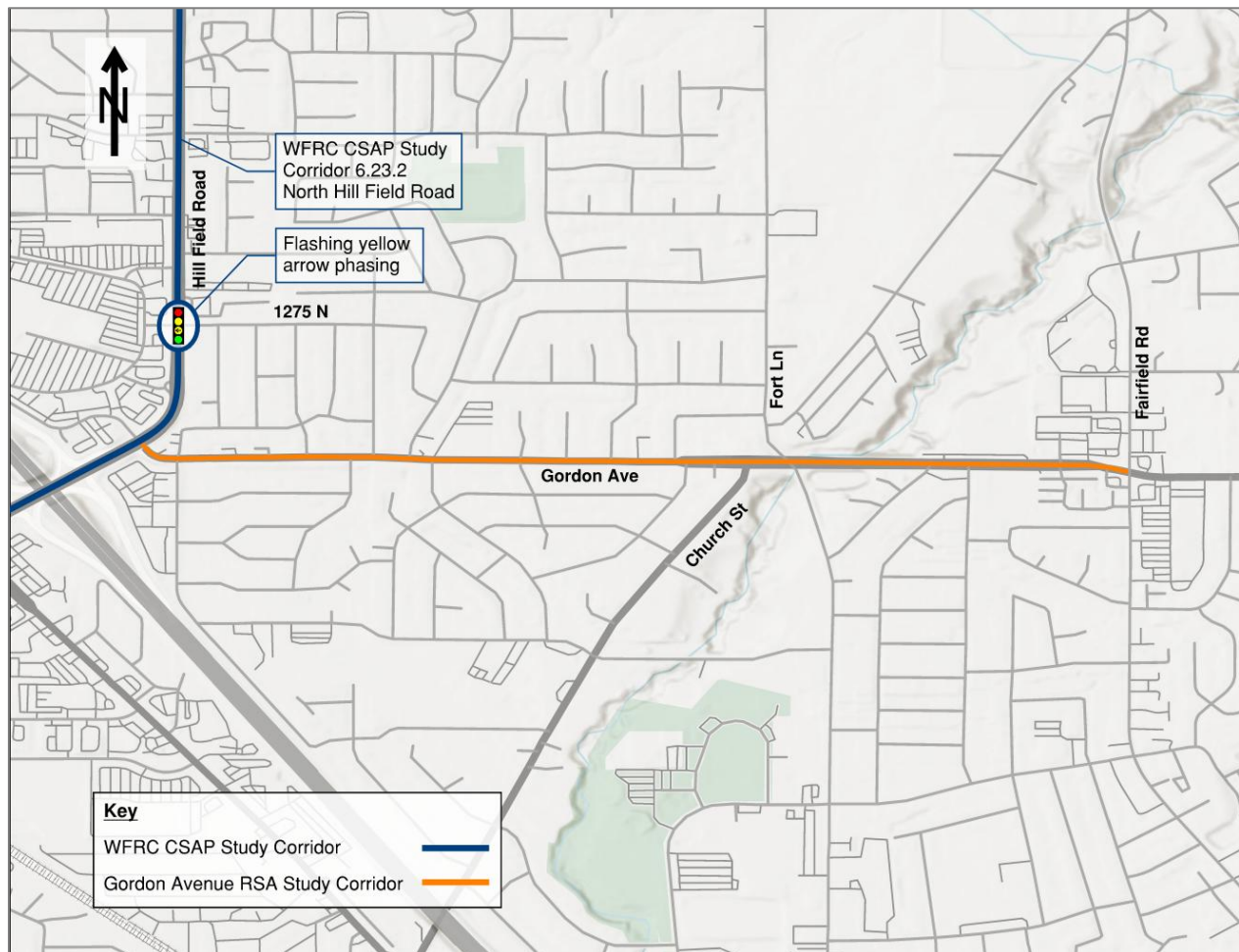


Figure 4: Safety Measures Identified in WFRC CSAP

3. EXISTING CONDITIONS

Roadway Cross Section

Gordon Avenue consists of a five-lane cross section throughout the study area. There are two 12-foot travel lanes in each direction separated by a 12-foot two-way left-turn lane (TWLTL). Shoulder widths vary between zero and ten feet. The corridor has curb, gutter, and sidewalk on both sides of the road. Most of the corridor also has a park strip between the road and the sidewalk. The pavement is approximately 76' wide, though it varies some throughout the corridor.

Volumes

The annual average daily traffic volumes along the study corridor range between 9,400 and 13,000 vehicles per day in 2024 as reported by UDOT. However, members of the RSA team noted that traffic volumes have appeared to increase in recent years since the completion of the Gordon Avenue interchange with US-89.

Speeds

The speed limit is 35 miles per hour (MPH) along the study corridor. Speed data was collected by METHODS at two locations on the study corridor. The 85th percentile speed near King Elementary School (601 East Gordon Avenue) was observed to be 40.8 MPH, and the 85th percentile speed near Hill Boulevard was observed to be 44.0 MPH.

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 they may not be fully verified. Crashes summarized in [Table 2](#) are shown in [Figure 5](#).

Table 2: Crash Data Summary

Year	All Crashes	
	Total	Severe (Fatal or Serious Injury)
2020	39	2
2021	37	2
2022	42	1
2023	41	1
2024	45	2
2025*	44	1
2026*	12	0
Total:	260	9

*2025 and 2026 crash data may not be fully validated

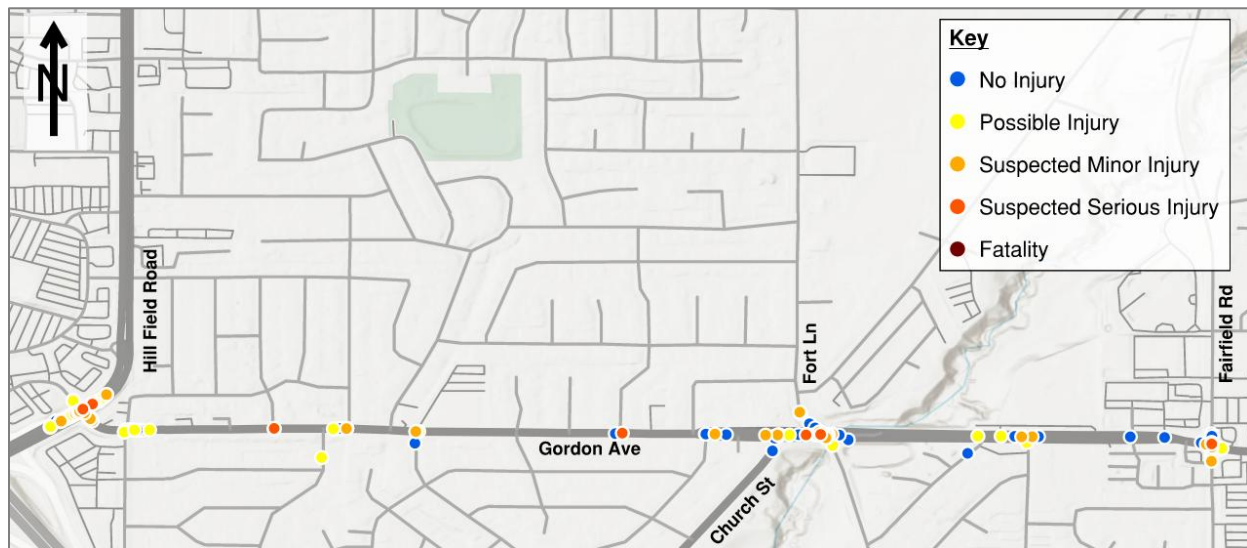


Figure 5: Crash Summary

Notable Crash History Findings Along the Study Corridor

- ♦ A total of 204 crashes were reported between 2020 and 2024, including eight serious injury crashes.
 - Three of the serious injury crashes were reported at Hill Field Road. One involved a vehicle traveling at a high speed (90+ MPH), one involved a motorcycle trying to travel straight from Gordon Avenue, and one involved a vehicle running a red light and hitting a pedestrian in the crosswalk.
 - One serious injury crash involved a westbound through vehicle hitting a southbound left-turning vehicle from 175 E, which was having trouble seeing due to parked cars and pulled out in front of the westbound vehicle.
 - Two serious injury crashes were reported at Fort Lane. One involved a motorcycle hitting a deer. The other serious injury crash involved a southbound left-turning vehicle turning in front of a northbound through vehicle.
 - Two serious injury crashes were reported at Fairfield Road. One involved a southbound left-turning vehicle with a flashing-yellow arrow signal indication hitting a pedestrian in the crosswalk. In the second serious injury crash, a northbound vehicle ran a red light and hit an eastbound vehicle.
- ♦ Sixteen crashes have been reported involving a pedestrian or a cyclist. Nine of these crashes occurred at the intersection with Hill Field Road.
 - Thirteen involved a bicyclist, all of which also involved an injury.
 - Eight of those crashes, including one serious injury crash, were at the Hill Field Road intersection.

- Five of the bicyclist-involved crashes at the Hill Field Road intersection involved right-turning vehicles.
- At Fort Lane, a bicyclist in the crosswalk was hit by a southbound left-turning vehicle, and a bicyclist in the crosswalk was hit by a vehicle which didn't stop in time backing up to the stop bar.
- A bicyclist was hit by an eastbound vehicle turning right into Rainbow Road.
- A bicyclist was hit using the crosswalk at King Elementary by a vehicle which failed to yield.
- A bicyclist in the bike lane was hit by a southbound vehicle on Fairfield Road turning right into the Arby's.
- Three crashes involved a pedestrian; all involved injuries.
 - A vehicle turning right from Gordon Avenue hit a pedestrian in the crosswalk.
 - A vehicle turning right from Church Street hit a pedestrian on a scooter crossing Church Street.
 - At Fairfield Road, a southbound left-turning vehicle with a flashing-yellow arrow signal indication hit a pedestrian in the crosswalk.

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 6**. 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.

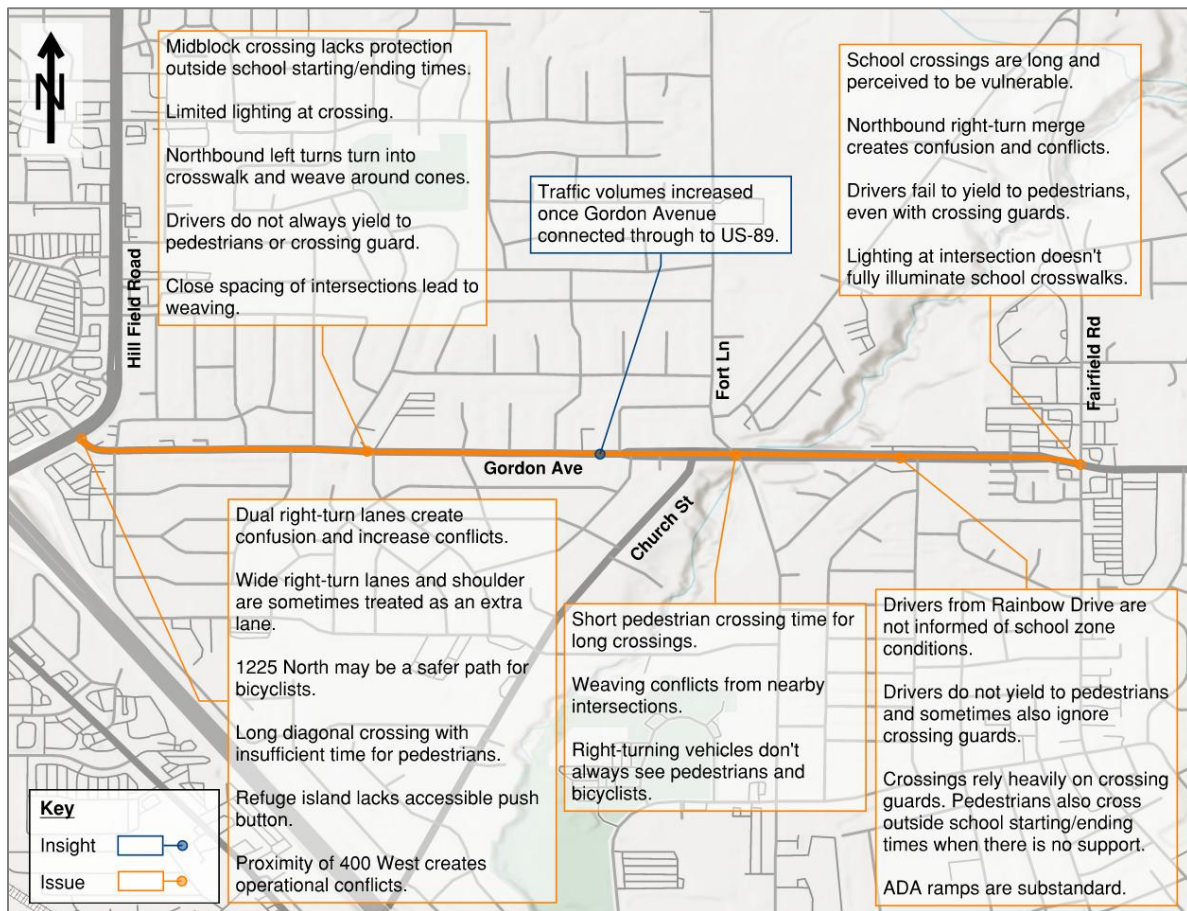


Figure 6: Insights and Issues Summary

Corridor-Wide

Insight: Traffic volumes increased once Gordon Ave connected through to US-89.

Issue #1: Long crossing distances and short pedestrian crossing times.

Short-Term Measure:

- Restripe travel lanes to 11'
- Install flex posts in the shoulder at crossing locations
- Ensure pedestrian crossing intervals are long enough to support crossing distance

Long-Term Measure:

- Convert to 3-lane cross-section; install buffered bikes lane or cycle track & bulb-outs with wider park strip

Issue #2: Pedestrian ramps do not meet ADA standards in several locations.



Medium-Term Measure:

- Update ADA ramps

Issue #3: Driver non-compliance with pedestrian right-of-way.

Short-Term Measure:

- Install flex posts in the shoulder at crossing locations
- Stripe crosswalks and stop bars across side streets

Medium-Term Measure:

- Install bulb-outs at crossing locations

Issue #4: Pedestrians have limited support crossing outside school times.

Short-Term Measure:

- Install flex posts in the shoulder at crossing locations

Medium-Term Measure:

- Add lighting as able
- Improve lighting at crosswalks
- Install bulb-outs at crossing locations
- Install allowable additional supportive treatments, such as PHB or RRFB, at crossing locations

Long-Term Measure:

- Convert to 3-lane cross-section; install buffered bikes lane or cycle track & bulb-outs with wider park strip

Issue #5: Limited lighting at multiple locations.

Medium-Term Measure:

- Add lighting as able
- Improve lighting at crosswalks

Issue #6: No protected space for bicyclists.

Long-Term Measure:

- Convert to 3-lane cross-section; install buffered bikes lane or cycle track & bulb-outs with wider park strip

Fairfield Road

Issue #1: School crossings are long and perceived to be vulnerable. Requires two crossing guards.

Short-Term Measure:

- Evaluate need for existing lane configuration

Long-Term Measure:

- Rebuild intersection to match required geometry & eliminate extra pavement

Issue #2: Northbound right-turn merge lane creates confusion and conflicts.



Short-Term Measure:

- Evaluate need for existing lane configuration

Long-Term Measure:

- Rebuild intersection to match required geometry & eliminate extra pavement

Issue #3: Drivers fail to yield to pedestrians, even with crossing guards.



Short-Term Measure:

- Evaluate need for existing lane configuration

Medium-Term Measure:

- Prohibit right turns during pedestrian phase or implement leading pedestrian interval

Long-Term Measure:

- Rebuild intersection to match required geometry & eliminate extra pavement

Issue #4: Right-turn movements are a key source of conflict.

Short-Term Measure:

- Evaluate need for existing lane configuration
- Install flex posts to guide or restrict right turns as indicated

Medium-Term Measure:

- Prohibit right turns during pedestrian phase or implement leading pedestrian interval

Long-Term Measure:

- Rebuild intersection to match required geometry & eliminate extra pavement

Issue #5: Lighting at the intersection doesn't fully illuminate school crosswalks.

Medium-Term Measure:

- Add luminaires on corners without them

King Elementary / Rainbow Drive

Issue #1: Drivers from Rainbow Drive are not informed of school zone conditions.

Short-Term Measure:

- Install School Crossing warning signage and/or striping on Rainbow Drive
- Restripe & install flex posts on Rainbow Dr approach to create a single lane and a T alignment

Medium-Term Measure:

- Install allowable additional supportive treatment, such as PHB or RRFB

Issue #2: Drivers do not yield to pedestrians and sometimes also ignore crossing guards.

Short-Term Measure:

- Evaluate crossing demand outside school arrival & departure times to identify allowable additional treatments (RRFB, PHB)
- Install flex posts in the shoulder at the crosswalk

Medium-Term Measure:

- Install bulb-outs at the crossing
- Install luminaires at the crosswalk
- Install allowable additional supportive treatment, such as PHB or RRFB
- Consider moving crosswalk to the west side of Valeria & install pedestrian refuge island

Issue #3: Crossings rely heavily on crossing guards.



Short-Term Measure:

- Evaluate crossing demand outside school arrival & departure times to identify allowable additional treatments (RRFB, PHB)
- Install flex posts in the shoulder at the crosswalk

Medium-Term Measure:

- Install bulb-outs at the crossing
- Install luminaires at the crosswalk
- Install allowable additional supportive treatment, such as PHB or RRFB
- Consider moving crosswalk to the west side of Valeria & install pedestrian refuge island

Issue #4: Pedestrians also cross outside school starting/ending times when there is no support.

**Short-Term Measure:**

- Install flex posts in the shoulder at crossing locations
- Evaluate crossing demand outside school arrival & departure times to identify allowable additional treatments (RRFB, PHB)

Medium-Term Measure:

- Install bulb-outs at the crossing
- Install luminaires at the crosswalk
- Install allowable additional supportive treatment, such as PHB or RRFB
- Consider moving crosswalk to the west side of Valeria & install pedestrian refuge island

Issue #5: ADA ramps are substandard.

Medium-Term Measure:

- Update ADA ramps

Issue #6: Parking is allowed on Valeria Drive proximate to the intersection.

Short-Term Measure:

- Prohibit parking between the driveway and intersection on the east side of Valeria Drive

Fort Lane

Insight: High number of left-turn-related crashes. Future Kay's Creek Trail crossing (part of UTN) will go from SW to NE corners.

Issue #1: Short pedestrian crossing time for long crossings.



Short-Term Measure:

- Implement leading pedestrian interval and evaluate No Turn on Red during pedestrian phase
- Ensure pedestrian crossing interval is long enough to support crossing distance

Long-Term Measure:

- Eliminate additional through lanes, if possible, and reduce intersection size (if left turns are protected, offset can also be removed)
- Consider a roundabout

Issue #2: Weaving conflicts from nearby intersections.

Long-Term Measure:

- Eliminate additional through lanes, if possible, and reduce intersection size (if left turns are protected, offset can also be removed)

- Consider a roundabout

Issue #3: Right-turning vehicles don't always see pedestrians and bicyclists.

Short-Term Measure:

- Implement leading pedestrian interval and evaluate No Turn on Red during pedestrian phase

Long-Term Measure:

- Consider a roundabout

Hill Boulevard / 75 West

Issue #1: Midblock crossing lacks protection outside school starting/ending times.



Short-Term Measure:

- Install flex posts in the shoulder at crosswalk
- Evaluate crossing demand outside school arrival & departure times to identify allowable additional treatments (PHB or RRFB)

Medium-Term Measure:

- Install bulb-outs at the crossing
- Install luminaire on north side of the crosswalk
- Consider installing pedestrian refuge island
- Install raised median to convert 75 W and Hill Boulevard to right-in/right-out
- Install allowable additional supportive treatment, such as PHB or RRFB

Issue #2: Limited lighting at crossing.

Medium-Term Measure:

- Install luminaire on north side of the crosswalk

Issue #3: Northbound left turns turn into crosswalk and weave around cones.



Medium-Term Measure:

- Consider installing pedestrian refuge island
- Install raised median and convert 75 W and Hill Boulevard to right-in/right-out

Issue #4: Drivers do not always yield to pedestrians or crossing guard.

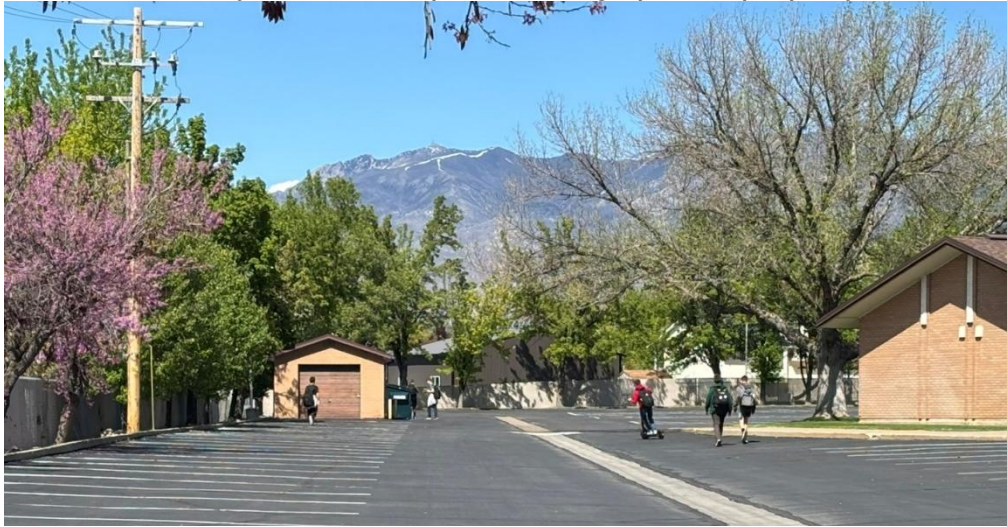
Short-Term Measure:

- Install flex posts in the shoulder at crossing locations
- Evaluate crossing demand outside school arrival & departure times to identify allowable additional treatments (PHB or RRFB)

Medium-Term Measure:

- Install bulb-outs at the crossing
- Install luminaire on north side of the crosswalk
- Consider installing pedestrian refuge island
- Install raised median and convert 75 W and Hill Boulevard to right-in/right-out
- Install allowable additional supportive treatment, such as PHB or RRFB

Issue #5: Pedestrians rely on informal paths through private property.



Long-Term Measure:

- Work with church to extend sidewalk from 1150 N to Gordon Ave

Issue #6: Close spacing of intersections leads to weaving.

Medium-Term Measure:

- Install raised median and convert 75 W and Hill Boulevard to right-in/right-out

Hill Field Road

Insight #1: Various legs of the intersection have different responsible parties leading to complex jurisdiction responsibility and authority.

Issue #1: Dual right-turn lanes create confusion and increase conflicts.

Short-Term Measure:

- Eliminate dual right turn if possible

Issue #2: Wide right-turn lanes and shoulder are sometimes treated as an extra lane.

Short-Term Measure:

- Restripe lanes & shoulder hatching
- Eliminate dual right turn if possible
- Install flex posts to reduce shoulder space

Medium-Term Measure:

- Install bulb-outs on the Gordon Avenue approach

Issue #3: 1225 N might be a safer path for bicyclists

Medium-Term Measure:

- Evaluate bicycle routes; consider rerouting bicycles to 1225 N to access Hill Field Road or developing protected bicycle infrastructure through to Hill Field Road

Issue #4: Long diagonal crossing with insufficient time for pedestrians and refuge island lacks accessible push button.



Short-Term Measure:

- Ensure pedestrian crossing interval is long enough for crossing distance

Medium-Term Measure:

- Install accessible push button in refuge island, put pedestrian phase on auto recall, or implement video detection for pedestrians

Issue #5: Proximity of 400 W creates operational conflicts.

Long-Term Measure:

- Install raised median; convert 400 W to right-in/left-in/right-out (south leg), right-in/right-out (north leg)
- Move curb to narrow wide shoulders and eliminate unnecessary lanes

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 WFRM 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^{3,4}

ID	Location	Measure	CMF	20-Year Benefit	20-Year Cost	Benefit-Cost Ratio (B/C)
SHORT TERM						
S-1	Corridor Wide	Restripe travel lanes to 11'	0.680	\$35,876,000	\$263,000	136.41
S-2	Corridor Wide	Install flex posts in the shoulder at crossing locations	0.920	\$8,969,000	\$132,000	67.95
S-3	Corridor Wide	Stripe crosswalks and stop bars across side streets	0.950	\$5,606,000	\$5,300	1057.74
S-4	King Elementary / Rainbow Drive	Install flex posts in the shoulder at crosswalk	0.920	\$323,000	\$26,000	12.42
S-5	King Elementary / Rainbow Drive	Consider extending No Parking on the east side of Valeria Dr. to the driveway	0.931	\$757,000	\$13,000	58.23
S-6	King Elementary / Rainbow Drive	Install School Crossing warning signage and/or striping on Rainbow Drive	0.990	\$40,000	\$19,000	2.11
S-7	King Elementary / Rainbow Drive	Restripe & install flex posts on Rainbow Dr approach to create a single lane and a T alignment	0.920	\$323,000	\$26,000	12.42
S-9	King Elementary / Rainbow Drive	Evaluate crossing demand outside school arrival & departure times to identify allowable additional treatments (RRFB, PHB)	0.990	\$40,000	\$46,000	0.87
S-10	Fort Lane	Evaluate protected left-turn phasing	0.972	\$1,371,000	\$56,000	24.48
S-11	Fort Lane	Implement leading pedestrian interval and evaluate No Turn on Red during pedestrian phase	0.995	\$250,000	\$7,000	35.71
S-12	Fort Lane	Ensure pedestrian crossing interval is sufficient for crossing distance	0.948	\$2,502,000	\$13,000	192.46
S-13	Fort Lane	Add retroreflective backplates to the signal heads	0.850	\$7,217,000	\$3,500	2062.00
S-14	Hill Boulevard / 75 West	Install flex posts in the shoulder at crossing locations	0.920	\$208,000	\$26,000	8.00
S-15	Hill Boulevard / 75 West	Install bicycle-safe grate	0.984	\$41,000	\$7,500	5.47
S-16	Hill Field Road	Restripe lanes & hatching	0.962	\$702,000	\$5,300	132.45
S-17	Hill Field Road	Ensure pedestrian crossing interval is sufficient for crossing distance	0.948	\$4,087,000	\$13,000	314.38
S-18	Hill Field Road	Eliminate dual right turn if possible	0.962	\$694,000	\$26,000	26.69
S-19	Hill Field Road	Install flex posts to narrow shoulder	0.920	\$1,462,000	\$26,000	56.23

³ Lower CMFs indicate a countermeasure is expected to result in a larger reduction in crashes.

⁴ 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)
MEDIUM TERM						
M-1	Corridor Wide	Update ADA ramps	0.990	\$1,729,000	\$255,000	6.78
M-2	Corridor Wide	Add lighting as able	0.982	\$8,803,000	\$593,000	14.84
M-3	Corridor Wide	Improve lighting at crosswalks	0.990	\$1,729,000	\$50,000	34.58
M-4	Corridor Wide	Install bulb-outs at crossing locations	0.680	\$35,876,000	\$80,000	448.45
M-5	Fairfield Road	Add luminaires on corners w/o them	0.982	\$1,845,000	\$50,000	36.90
M-6	King Elementary / Rainbow Drive	Install bulb-outs at the crossing	0.680	\$1,292,000	\$40,000	32.30
M-7	King Elementary / Rainbow Drive	Install luminaires at the crosswalk	0.990	\$40,000	\$25,000	1.60
M-8	King Elementary / Rainbow Drive	Install allowable additional supportive treatment (PHB or RRFB)	0.990	\$40,000	\$46,000	0.87
M-9	King Elementary / Rainbow Drive	Consider moving crosswalk to the west side of Valeria & install pedestrian refuge island	0.994	\$90,000	\$37,000	2.43
M-10	King Elementary / Rainbow Drive	Update ADA ramps	0.990	\$40,000	\$30,000	1.33
M-11	Fort Lane	Implement all way pedestrian crossing to support trail crossing	0.986	\$674,000	\$87,000	7.75
M-12	Fort Lane	Install barrier along the southwestern corner to protect from the ravine	0.920	\$1,132,000	\$75,000	15.09
M-13	Fort Lane	Implement left-turn phasing, as warranted	0.972	\$1,371,000	\$56,000	24.48
M-14	Hill Boulevard / 75 West	Install bulb-outs at the crossing	0.680	\$831,000	\$40,000	20.78
M-15	Hill Boulevard / 75 West	Install luminaire on north side of the crosswalk	0.990	\$26,000	\$25,000	1.04
M-16	Hill Boulevard / 75 West	Consider installing pedestrian refuge island	0.994	\$58,000	\$37,000	1.57
M-17	Hill Boulevard / 75 West	Convert 75 W and Hill Boulevard to right-in/right-out	0.604	\$2,039,000	\$60,000	33.98
M-18	Hill Boulevard / 75 West	Update ADA ramps	0.990	\$26,000	\$30,000	0.87
M-19	Hill Boulevard / 75 West	Install allowable additional supportive treatment (PHB or RRFB)	0.981	\$49,000	\$46,000	1.07
M-20	Hill Field Road	Install accessible push button in refuge island or put pedestrian phase on auto recall	0.986	\$1,100,000	\$14,000	78.57

ID	Location	Measure	CMF	20-Year Benefit	20-Year Cost	Benefit-Cost Ratio (B/C)
M-21	Hill Field Road	Evaluate bicycle routes; consider rerouting bicycles to 1225 N to access Hill Field Road or developing protected bicycle infrastructure through to Hill Field Road	0.975	\$1,981,000	\$100,000	19.81
M-22	Hill Field Road	Install bulb-outs	0.680	\$5,847,000	\$160,000	36.54
LONG TERM						
L-1	Corridor Wide	Convert to 3-lane cross-section; install buffered bikes lane or cycle track & bulb-outs w/ wider park strip	0.810	\$21,301,000	\$5,499,000	3.87
L-2	Corridor Wide	Improve lighting corridor-wide	0.957	\$8,775,000	\$593,000	14.80
L-3	Fairfield Road	Rebuild intersection to match required geometry & eliminate extra pavement	0.680	\$11,444,000	\$160,000	71.53
L-4	King Elementary / Rainbow Drive	Move Rainbow Drive curb to create a single lane and a T alignment	0.680	\$1,292,000	\$40,000	32.30
L-5	Fort Lane	Eliminate additional through lanes, if possible, and reduce intersection size (if left-turns are protected, offset can also be removed)	0.680	\$15,396,000	\$160,000	96.23
L-6	Fort Lane	Consider a roundabout	0.737	\$25,938,000	\$1,708,000	15.19
L-7	Hill Boulevard / 75 West	Work w/ church to extend sidewalk from 1150 N to Gordon Ave	0.974	\$68,000	\$21,000	3.24
L-8	Hill Field Road	Install raised median; convert 400 W to right- & left-in/right-out (south leg), right-in/right-out (north leg)	0.903	\$718,000	\$14,000	51.29
L-9	Hill Field Road	Move curb to narrow wide shoulders and eliminate unnecessary lanes on Gordon Ave	0.920	\$1,462,000	\$40,000	36.55

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	Recommended?	Details
SHORT TERM				
S-1	Corridor Wide	Restripe travel lanes to 11'	Yes	
S-2	Corridor Wide	Install flex posts in the shoulder at crossing locations	Yes	
S-3	Corridor Wide	Stripe crosswalks and stop bars across side streets	Yes	
S-4	King Elementary / Rainbow Drive	Install flex posts in the shoulder at crosswalk	Yes	
S-5	King Elementary / Rainbow Drive	Consider extending No Parking on the east side of Valeria Dr. to the driveway	Yes	
S-6	King Elementary / Rainbow Drive	Install School Crossing warning signage and/or striping on Rainbow Drive	Yes	
S-7	King Elementary / Rainbow Drive	Restripe & install flex posts on Rainbow Dr approach to create a single lane and a T alignment	Yes	
S-9	King Elementary / Rainbow Drive	Evaluate crossing demand outside school arrival & departure times to identify allowable additional treatments (RRFB, PHB)	Yes	
S-10	Fort Lane	Evaluate protected left-turn phasing	Yes	
S-11	Fort Lane	Implement leading pedestrian interval and evaluate No Turn on Red during pedestrian phase	Yes	
S-12	Fort Lane	Ensure pedestrian crossing interval is sufficient for crossing distance	Yes	
S-13	Fort Lane	Add retroreflective backplates to the signal heads	Yes	
S-14	Hill Boulevard / 75 West	Install flex posts in the shoulder at crossing locations	Yes	
S-15	Hill Boulevard / 75 West	Install bicycle-safe grate	Yes	
S-16	Hill Field Road	Restripe lanes & hatching	Yes	
S-17	Hill Field Road	Ensure pedestrian crossing interval is sufficient for crossing distance	Yes	
S-18	Hill Field Road	Eliminate dual right turn if possible	Yes	
S-19	Hill Field Road	Install flex posts to reduce shoulder space	Yes	Gordon Avenue approach
S-20	Fairfield Road	Evaluate need for existing lane configuration	Yes	
S-21	Hill Boulevard / 75 West	Evaluate crossing demand outside school arrival & departure times to identify allowable additional treatments (RRFB)	Yes	
MEDIUM TERM				
M-1	Corridor Wide	Update ADA ramps	Yes	
M-2	Corridor Wide	Add lighting as able	Yes	
M-3	Corridor Wide	Improve lighting at crosswalks	Yes	
M-4	Corridor Wide	Install bulb-outs at crossing locations	Yes	
M-5	Fairfield Road	Add luminaires on corners without them	Yes	
M-6	King Elementary / Rainbow Drive	Install bulb-outs at the crossing	Yes	

ID	Location	Measure	Recommended?	Details
M-7	King Elementary / Rainbow Drive	Install luminaires at the crosswalk	Yes	
M-8	King Elementary / Rainbow Drive	Install allowable additional supportive treatment, such as PHB or RRFB	Yes	
M-9	King Elementary / Rainbow Drive	Consider moving crosswalk to the west side of Valeria & install pedestrian refuge island	Yes	
M-10	King Elementary / Rainbow Drive	Update ADA ramps	Yes	
M-11	Fort Lane	Implement all way pedestrian crossing to support trail crossing	Yes	
M-12	Fort Lane	Install barrier along the southwestern corner to protect from the ravine	Yes	
M-13	Fort Lane	Implement left-turn phasing, as warranted	Yes	
M-14	Hill Boulevard / 75 West	Install bulb-outs at the crossing	Yes	
M-15	Hill Boulevard / 75 West	Install luminaire on north side of the crosswalk	Yes	
M-16	Hill Boulevard / 75 West	Consider installing pedestrian refuge island	Yes	
M-17	Hill Boulevard / 75 West	Convert 75 W and Hill Boulevard to right-in/right-out	Yes	
M-18	Hill Boulevard / 75 West	Update ADA ramps	Yes	
M-19	Hill Boulevard / 75 West	Install allowable additional supportive treatment (PHB or RRFB)	Yes	
M-20	Hill Field Road	Install accessible push button in refuge island, implement video detection, or put pedestrian phase on auto recall	Yes	
M-21	Hill Field Road	Evaluate bicycle routes; consider rerouting bicycles to 1225 N to access Hill Field Road or developing protected bicycle infrastructure through to Hill Field Road	Yes	
M-22	Hill Field Road	Install bulb-outs	Yes	Gordon Avenue approach
LONG TERM				
L-1	Corridor Wide	Convert to 3-lane cross-section; install buffered bikes lane or cycle track & bulb-outs with wider park strip	Yes	
L-2	Corridor Wide	Improve lighting corridor-wide	Yes	
L-3	Fairfield Road	Rebuild intersection to match required geometry & eliminate extra pavement	Yes	
L-4	King Elementary / Rainbow Drive	Move Rainbow Drive curb to create a single lane and a T alignment	Yes	
L-5	Fort Lane	Eliminate additional through lanes, if possible, and reduce intersection size (if left-turns are protected, offset can also be removed)	Yes	
L-6	Fort Lane	Consider a roundabout	Yes	Ideally w/ a lane reduction
L-7	Hill Boulevard / 75 West	Work with church to extend sidewalk from 1150 N to Gordon Ave	Yes	
L-8	Hill Field Road	Install raised median; convert 400 W to right- & left-in/right-out (south leg), right-in/right-out (north leg)	Yes	
L-9	Hill Field Road	Move curb to narrow wide shoulders and eliminate unnecessary lanes	Yes	Gordon Avenue approach

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 April 9, 2026, the experience of City officials, and the crash history and volumes discussed in Section 3.0.

Entire Corridor

- Traffic volumes increased once Gordon Ave connected through to US-89
- Buffered bicycle lanes are planned along Gordon Avenue
- Maintenance team is proactive maintaining signs and striping
- Crossing spacing along the corridor encourages midblock or alternative crossing behavior
- Corridor is transitioning toward a multimodal facility, but existing infrastructure is not well-suited for pedestrians and bicyclists
- Intersections are wide with long crossing distances and short pedestrian crossing times
- Limited lighting at multiple locations reduces nighttime visibility and safety
- Existing pedestrian ramps do not meet ADA standards in several locations
- Inconsistent or unclear driver expectations due to complex geometry and multiple decision points

Fairfield Road

- School crossing is long and perceived as vulnerable, especially for children
- Requires two crossing guards. If the crosswalk at the school was improved, they might only need a school crosswalk on the south leg.
- Northbound right-turn acceleration/merge lane creates confusion and unsafe turning behavior
- Drivers (particularly northbound right-turning vehicles) fail to yield even when crossing guards are present
- Limited lighting at the intersection reduces visibility
- Sense there is a steady pedestrian flow all day (kid observed riding through at 10:50)

King Elementary / Rainbow Drive Area

- High number of decisions required in a short distance due to nearby intersections and school activity
- ADA pedestrian ramps are substandard
- Minimal infrastructure at bus stops

- The crossing is also used outside school starting/ending times
- Rainbow Drive functions as a shortcut, with drivers not recognizing school zone controls
- School crossings rely heavily on crossing guards and temporary controls; Unsafe pedestrian conditions outside of school crossing times
- Complaints drivers don't stop outside of school times
- There isn't anywhere for police to wait for enforcement
- Car parked in red curb area south of Gordon too close to Gordon
- Pedestrians observed crossing outside designated locations, including near bus stops

Fort Lane

- High frequency of left-turn-related crashes, consider protected left-turns
- Future Kay's Creek Trail crossing (part of UTN) will go from SW corner to NE corner
- Weaving conflicts to/from nearby intersections (e.g., Church Street to Fort Lane)
- Skewed geometry may reduce sight distance for certain approaches (checked in field and was ok)
- Short pedestrian crossing time relative to crossing distance
- Ravine along southwest quadrant
- Adding an offset to the eastbound left-turn might improve visibility
- Right-turning vehicles often conflict with pedestrians and bicyclists because they are looking left
- Sense pedestrian demand is relatively low as Fort Lane is a school boundary
- Church Street is an important connection for the police

Hill Boulevard / 75 West Area

- Students and parents rely on dedicated pedestrian infrastructure, and pass through church parking lot
- School bus weaving from southbound left turn on 75 West to an immediate left turn on Hill Boulevard (dentist office driveway also results in similar complexity)
- Lighting is minimal, with only a single light at crossing location
- Midblock crossing serves both school and non-school pedestrians but lacks protection
- Bicycle infrastructure is incomplete; existing features (e.g., grates) are not bicycle-friendly
- Bus stops operate in shoulders that are not wide enough, interrupting traffic flow

- Westbound vehicles are more compliant with the RSSZ than eastbound vehicles, crossing guard thinks eastbound is also faster
- Police stop more westbound in the AM and eastbound in the PM
- Northbound left-turns turn into crosswalk & weave around the cones the crossing guards use

Hill Field Road

- Gordon Avenue dual right-turn lanes create confusion and increase pedestrian and bicycle conflict risk
- The Gordon Avenue shoulder and dual right-turn lanes are wide enough to function as 3 lanes, causing issues
- Diagonal crossing is long and may not provide sufficient time for pedestrians
- Bicycles use the diagonal crossing; some question if 1225 N is a safer path
- Refuge island lacks accessible push button, creating challenges for slower pedestrians (could be resolved with signal phasing, auto recall)
- Users do not fully understand or like the “thru-turn” (R-CUT) configuration, but it has improved operations considerably
- 400 West proximity creates operational conflicts
- No ADA access at 400 West
- Complex jurisdictional responsibilities (City, UDOT, private property) complicate improvements

Appendix B: Detailed Benefit-Cost Calculation Table

						CMF												
ID	Location	Measure	ID	Location	Measure	Fatal	SI	Minor Injury	Possible Injury	PDO	Overall CMF	Fatal	SI	Minor Injury	Possible Injury	PDO	# of Crashes	Fatal w/ Treatment
SHORT TERM			SHORT TERM															
S-1	Corridor Wide	Restripe travel lanes to 11'	S-1	Corridor Wide	Restripe travel lanes to 11'	0.680	0.680	0.680	0.680	0.680	0.680	0	1	4.6	5	11.4	22	0.00
S-2	Corridor Wide	Install flex posts in the shoulder at crossing locations	S-2	Corridor Wide	Install flex posts in the shoulder at crossing locations	0.920	0.920	0.920	0.920	0.920	0.920	0	1	4.6	5	11.4	22	0.00
S-3	Corridor Wide	Stripe crosswalks and stop bars across side streets	S-3	Corridor Wide	Stripe crosswalks and stop bars across side streets	0.950	0.950	0.950	0.950	0.950	0.950	0	1	4.6	5	11.4	22	0.00
S-4	King Elementary / Rainbr	Install flex posts in the shoulder at crosswalk	S-4	King Elementary / Rainbr	Install flex posts in the shoulder at crosswalk	0.920	0.920	0.920	0.920	0.920	0.920	0	0	0.4	0.4	0.8	1.6	0.00
S-5	King Elementary / Rainbr	Consider extending No Parking on the east side of Vale	S-5	King Elementary / Rainbr	Consider extending No Parking on the east side of Vale	1.000	0.800	0.800	0.800	1.000	0.931	0	0	0.4	0.4	0.8	1.6	0.00
S-6	King Elementary / Rainbr	Install School Crossing warning signage and/or striping	S-6	King Elementary / Rainbr	Install School Crossing warning signage and/or striping	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.4	0.4	0.8	1.6	0.00
S-7	King Elementary / Rainbr	Restripe & install flex posts on Rainbow Dr approach to	S-7	King Elementary / Rainbr	Restripe & install flex posts on Rainbow Dr approach to	0.920	0.920	0.920	0.920	0.920	0.920	0	0	0.4	0.4	0.8	1.6	0.00
S-8	King Elementary / Rainbr	Evaluate crossing demand outside school arrival & dep	S-8	King Elementary / Rainbr	Evaluate crossing demand outside school arrival & dep	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.4	0.4	0.8	1.6	0.00
S-9	Fort Lane	Evaluate protected left-turn phasing	S-9	Fort Lane	Evaluate protected left-turn phasing	0.972	0.972	0.972	0.972	0.972	0.972	0	0.4	2.4	2	3.8	8.6	0.00
S-10	Fort Lane	Implement leading pedestrian interval and evaluate No	S-10	Fort Lane	Implement leading pedestrian interval and evaluate No	0.995	0.995	0.995	0.995	0.995	0.995	0	0.4	2.4	2	3.8	8.6	0.00
S-11	Fort Lane	Ensure pedestrian crossing interval is long enough to s	S-11	Fort Lane	Ensure pedestrian crossing interval is long enough to s	0.948	0.948	0.948	0.948	0.948	0.948	0	0.4	2.4	2	3.8	8.6	0.00
S-12	Fort Lane	Add retroreflective backplates to the signal heads	S-12	Fort Lane	Add retroreflective backplates to the signal heads	0.850	0.850	0.850	0.850	0.850	0.850	0	0.4	2.4	2	3.8	8.6	0.00
S-13	Hill Boulevard / 75 West	Install flex posts in the shoulder at crossing locations	S-13	Hill Boulevard / 75 West	Install flex posts in the shoulder at crossing locations	0.920	0.920	0.920	0.920	0.920	0.920	0	0	0.2	0.4	0.2	0.8	0.00
S-15	Hill Boulevard / 75 West	Install bicycle-safe grate	S-15	Hill Boulevard / 75 West	Install bicycle-safe grate	0.984	0.984	0.984	0.984	0.984	0.984	0	0	0.2	0.4	0.2	0.8	0.00
S-16	Hill Field Road	Restripe lanes & hatching	S-16	Hill Field Road	Restripe lanes & hatching	0.962	0.962	0.962	0.962	0.962	0.962	0	0	2.4	0.6	4.2	7.2	0.00
S-17	Hill Field Road	Ensure pedestrian crossing interval is long enough for c	S-17	Hill Field Road	Ensure pedestrian crossing interval is long enough for c	0.948	0.948	0.948	0.948	0.948	0.948	0	0.6	4.4	3	10.2	18.2	0.00
S-18	Hill Field Road	Eliminate dual right turn if possible	S-18	Hill Field Road	Eliminate dual right turn if possible	0.962	0.962	0.962	0.962	0.962	0.962	0	0	2.4	0.6	4.2	7.2	0.00
S-19	Hill Field Road	Install flex posts to reduce shoulder space	S-19	Hill Field Road	Install flex posts to reduce shoulder space	0.920	0.920	0.920	0.920	0.920	0.920	0	0	2.4	0.6	4.2	7.2	0.00
MEDIUM TERM			MEDIUM TERM															
M-1	Corridor Wide	Update ADA ramps	M-1	Corridor Wide	Update ADA ramps	0.990	0.990	0.990	0.990	0.990	0.990	0	1.4	8.8	7	19.8	37	0.00
M-2	Corridor Wide	Add lighting as able	M-2	Corridor Wide	Add lighting as able	0.947	0.947	0.947	0.947	1.000	0.982	0	1.4	8.8	7	19.8	37	0.00
M-3	Corridor Wide	Improve lighting at crosswalks	M-3	Corridor Wide	Improve lighting at crosswalks	0.990	0.990	0.990	0.990	0.990	0.990	0	1.4	8.8	7	19.8	37	0.00
M-4	Corridor Wide	Install bulb-outs at crossing locations	M-4	Corridor Wide	Install bulb-outs at crossing locations	0.680	0.680	0.680	0.680	0.680	0.680	0	1	4.6	5	11.4	22	0.00
M-5	Fairfield Road	Add luminaires on corners without them	M-5	Fairfield Road	Add luminaires on corners without them	0.947	0.947	0.947	0.947	1.000	0.982	0	0.4	1	1	2.6	5	0.00
M-6	King Elementary / Rainbr	Install bulb-outs at the crossing	M-6	King Elementary / Rainbr	Install bulb-outs at the crossing	0.680	0.680	0.680	0.680	0.680	0.680	0	0	0.4	0.4	0.8	1.6	0.00
M-7	King Elementary / Rainbr	Install luminaires at the crosswalk	M-7	King Elementary / Rainbr	Install luminaires at the crosswalk	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.4	0.4	0.8	1.6	0.00
M-8	King Elementary / Rainbr	Install allowable additional supportive treatment, such a	M-8	King Elementary / Rainbr	Install allowable additional supportive treatment, such a	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.4	0.4	0.8	1.6	0.00
M-9	King Elementary / Rainbr	Consider moving crosswalk to the west side of Valeria &	M-9	King Elementary / Rainbr	Consider moving crosswalk to the west side of Valeria &	0.978	0.978	0.978	0.978	0.978	0.994	0	0	0.4	0.4	0.8	1.6	0.00
M-10	King Elementary / Rainbr	Update ADA ramps	M-10	King Elementary / Rainbr	Update ADA ramps	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.4	0.4	0.8	1.6	0.00
M-11	Fort Lane	Implement Barnes Dance pedestrian crossing to support	M-11	Fort Lane	Implement Barnes Dance pedestrian crossing to support	0.986	0.986	0.986	0.986	0.986	0.986	0	0.4	2.4	2	3.8	8.6	0.00
M-12	Fort Lane	Install barrier along the southwestern corner to protect f	M-12	Fort Lane	Install barrier along the southwestern corner to protect f	0.920	0.920	0.920	0.920	0.920	0.920	0	0.2	0	0.4	0.4	1	0.00
M-13	Fort Lane	Implement left-turn phasing, as warranted	M-13	Fort Lane	Implement left-turn phasing, as warranted	0.972	0.972	0.972	0.972	0.972	0.972	0	0.4	2.4	2	3.8	8.6	0.00
M-14	Hill Boulevard / 75 West	Install bulb-outs at the crossing	M-14	Hill Boulevard / 75 West	Install bulb-outs at the crossing	0.680	0.680	0.680	0.680	0.680	0.680	0	0	0.2	0.4	0.2	0.8	0.00
M-15	Hill Boulevard / 75 West	Install luminaire on north side of the crosswalk	M-15	Hill Boulevard / 75 West	Install luminaire on north side of the crosswalk	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.2	0.4	0.2	0.8	0.00
M-16	Hill Boulevard / 75 West	Consider installing pedestrian refuge island	M-16	Hill Boulevard / 75 West	Consider installing pedestrian refuge island	0.978	0.978	0.978	0.978	0.978	0.994	0	0	0.2	0.4	0.2	0.8	0.00
M-17	Hill Boulevard / 75 West	Convert 75 W and Hill Boulevard to right-in/right-out	M-17	Hill Boulevard / 75 West	Convert 75 W and Hill Boulevard to right-in/right-out	0.200	0.200	0.200	0.200	0.820	0.604	0	0	0.2	0.4	0.2	0.8	0.00
M-18	Hill Boulevard / 75 West	Update ADA ramps	M-18	Hill Boulevard / 75 West	Update ADA ramps	0.990	0.990	0.990	0.990	0.990	0.990	0	0	0.2	0.4	0.2	0.8	0.00
M-19	Hill Boulevard / 75 West	Install allowable additional supportive treatment, such a	M-19	Hill Boulevard / 75 West	Install allowable additional supportive treatment, such a	0.981	0.981	0.981	0.981	0.981	0.981	0	0	0.2	0.4	0.2	0.8	0.00
M-20	Hill Field Road	Install accessible push button in refuge island or put pe	M-20	Hill Field Road	Install accessible push button in refuge island or put pe	0.986	0.986	0.986	0.986	0.986	0.986	0	0.6	4.4	3	10.2	18.2	0.00
M-21	Hill Field Road	Evaluate bicycle routes; consider rerouting bicycles to f	M-21	Hill Field Road	Evaluate bicycle routes; consider rerouting bicycles to f	0.975	0.975	0.975	0.975	0.975	0.975	0	0.6	4.4	3	10.2	18.2	0.00
M-22	Hill Field Road	Install bulb-outs	M-22	Hill Field Road	Install bulb-outs	0.680	0.680	0.680	0.680	0.680	0.680	0	0	2.4	0.6	4.2	7.2	0.00
LONG TERM			LONG TERM															
L-1	Corridor Wide	Convert to 3-lane cross-section; install buffered bikes la	L-1	Corridor Wide	Convert to 3-lane cross-section; install buffered bikes la	0.810	0.810	0.810	0.810	0.810	0.810	0	1	4.6	5	11.4	22	0.00
L-2	Corridor Wide	Improve lighting corridor-wide	L-2	Corridor Wide	Improve lighting corridor-wide	0.949	0.949	0.949	0.949	0.962	0.957	0	1.4	8.8	7	19.8	37	0.00
L-3	Fairfield Road	Rebuild intersection to match required geometry & elim	L-3	Fairfield Road	Rebuild intersection to match required geometry & elim	0.680	0.680	0.680	0.680	0.680	0.680	0	0.4	1	1	2.6	5	0.00
L-4	King Elementary / Rainbr	Move Rainbow Drive curb to create a single lane and a	L-4	King Elementary / Rainbr	Move Rainbow Drive curb to create a single lane and a	0.680	0.680	0.680	0.680	0.680	0.680	0	0	0.4	0.4	0.8	1.6	0.00
L-5	Fort Lane	Eliminate additional through lanes, if possible, and redu	L-5	Fort Lane	Eliminate additional through lanes, if possible, and redu	0.680	0.680	0.680	0.680	0.680	0.680	0	0.4	2.4	2	3.8	8.6	0.00
L-6	Fort Lane	Consider a roundabout	L-6	Fort Lane	Consider a roundabout	0.450	0.450	0.450	0.450	0.890	0.737	0	0.4	2.4	2	3.8	8.6	0.00
L-7	Hill Boulevard / 75 West	Work with church to extend sidewalk from 1150 N to Gd	L-7	Hill Boulevard / 75 West	Work with church to extend sidewalk from 1150 N to Gd	0.974	0.974	0.974	0.974	0.974	0.974	0	0	0.2	0.4	0.2	0.8	0.00
L-8	Hill Field Road	Install raised median; convert 400 W to right- & left-in/r	L-8	Hill Field Road	Install raised median; convert 400 W to right- & left-in/r	0.720	0.720	0.720	0.720	1.000	0.903	0	0	0	0.8	1.4	2.2	0.00
L-9	Hill Field Road	Move curb to narrow wide shoulders and eliminate unn	L-9	Hill Field Road	Move curb to narrow wide shoulders and eliminate unn	0.920	0.920	0.920	0.920	0.920	0.920	0	0	2.4	0.6	4.2	7.2	0.00

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

			Observed												
ID	Location	Measure	SI w/ Treatment	Minor Injury w/ Treatment	Possible Injury w/ Treatment	PDO w/ Treatment	# w/ Treatment	Crashes Avoided	Annual Crash Costs	Annual Crash Cost w/ Treatment	Safety Benefit per Year	20-year analysis period, 3% rate	Service Life (Years)	20-year Cost	Benefit-Cost Ratio (B/C)
SHORT TERM															
S-1	Corridor Wide	Restripe travel lanes to 11'	0.68	3.13	3.40	7.75	14.96	7.04	\$7,535,740	\$5,124,303	\$2,411,437	\$35,876,000	3	\$263,000	136.41
S-2	Corridor Wide	Install flex posts in the shoulder at crossing locations	0.92	4.23	4.60	10.49	20.24	1.76	\$7,535,740	\$6,932,881	\$602,859	\$8,969,000	3	\$132,000	67.95
S-3	Corridor Wide	Stripe crosswalks and stop bars across side streets	0.95	4.37	4.75	10.83	20.90	1.10	\$7,535,740	\$7,158,953	\$376,787	\$5,606,000	3	\$5,300	1057.74
S-4	King Elementary / Rainb	Install flex posts in the shoulder at crosswalk	0.00	0.37	0.37	0.74	1.47	0.13	\$271,440	\$249,725	\$21,715	\$323,000	3	\$26,000	12.42
S-5	King Elementary / Rainb	Consider extending No Parking on the east side of Vale	0.00	0.32	0.32	0.80	1.44	0.16	\$271,440	\$220,528	\$50,912	\$757,000	5	\$13,000	58.23
S-6	King Elementary / Rainb	Install School Crossing warning signage and/or striping	0.00	0.40	0.40	0.79	1.58	0.02	\$271,440	\$268,726	\$2,714	\$40,000	15	\$19,000	2.11
S-7	King Elementary / Rainb	Restripe & install flex posts on Rainbow Dr approach to	0.00	0.37	0.37	0.74	1.47	0.13	\$271,440	\$249,725	\$21,715	\$323,000	3	\$26,000	12.42
S-8	King Elementary / Rainb	Evaluate crossing demand outside school arrival & dep	0.00	0.40	0.40	0.79	1.58	0.02	\$271,440	\$268,726	\$2,714	\$40,000	15	\$46,000	0.87
S-9	Fort Lane	Evaluate protected left-turn phasing	0.39	2.33	1.94	3.69	8.35	0.25	\$3,234,020	\$3,141,850	\$92,170	\$1,371,000	10	\$56,000	24.48
S-10	Fort Lane	Implement leading pedestrian interval and evaluate No	0.40	2.39	1.99	3.78	8.56	0.04	\$3,234,020	\$3,217,203	\$16,817	\$250,000	10	\$7,000	35.71
S-11	Fort Lane	Ensure pedestrian crossing interval is long enough to s	0.38	2.28	1.90	3.60	8.15	0.45	\$3,234,020	\$3,065,851	\$168,169	\$2,502,000	5	\$13,000	192.46
S-12	Fort Lane	Add retroreflective backplates to the signal heads	0.34	2.04	1.70	3.23	7.31	1.29	\$3,234,020	\$2,748,917	\$485,103	\$7,217,000	10	\$3,500	2062.00
S-13	Hill Boulevard / 75 West	Install flex posts in the shoulder at crossing locations	0.00	0.18	0.37	0.18	0.74	0.06	\$174,580	\$160,614	\$13,966	\$208,000	3	\$26,000	8.00
S-15	Hill Boulevard / 75 West	Install bicycle-safe grate	0.00	0.20	0.39	0.20	0.79	0.01	\$174,580	\$171,857	\$2,723	\$41,000	15	\$7,500	5.47
S-16	Hill Field Road	Restripe lanes & hatching	0.00	2.31	0.58	4.04	6.92	0.28	\$1,228,260	\$1,181,095	\$47,165	\$702,000	3	\$5,300	132.45
S-17	Hill Field Road	Ensure pedestrian crossing interval is long enough for c	0.57	4.17	2.84	9.67	17.25	0.95	\$5,282,780	\$5,008,075	\$274,705	\$4,087,000	5	\$13,000	314.38
S-18	Hill Field Road	Eliminate dual right turn if possible	0.00	2.31	0.58	4.04	6.93	0.27	\$1,228,260	\$1,181,586	\$46,674	\$694,000	3	\$26,000	26.69
S-19	Hill Field Road	Install flex posts to reduce shoulder space	0.00	2.21	0.55	3.86	6.62	0.58	\$1,228,260	\$1,129,999	\$98,261	\$1,462,000	3	\$26,000	56.23
MEDIUM TERM															
M-1	Corridor Wide	Update ADA ramps	1.39	8.71	6.93	19.60	36.63	0.37	\$11,624,620	\$11,508,374	\$116,246	\$1,729,000	20	\$255,000	6.78
M-2	Corridor Wide	Add lighting as able	1.33	8.34	6.63	19.80	36.09	0.91	\$11,624,620	\$11,032,899	\$591,721	\$8,803,000	15	\$593,000	14.84
M-3	Corridor Wide	Improve lighting at crosswalks	1.39	8.71	6.93	19.60	36.63	0.37	\$11,624,620	\$11,508,374	\$116,246	\$1,729,000	15	\$50,000	34.58
M-4	Corridor Wide	Install bulb-outs at crossing locations	0.68	3.13	3.40	7.75	14.96	7.04	\$7,535,740	\$5,124,303	\$2,411,437	\$35,876,000	20	\$80,000	448.45
M-5	Fairfield Road	Add luminaires on corners without them	0.38	0.95	0.95	2.60	4.87	0.13	\$2,403,900	\$2,279,871	\$124,029	\$1,845,000	15	\$50,000	36.90
M-6	King Elementary / Rainb	Install bulb-outs at the crossing	0.00	0.27	0.27	0.54	1.09	0.51	\$271,440	\$184,579	\$86,861	\$1,292,000	20	\$40,000	32.30
M-7	King Elementary / Rainb	Install luminaires at the crosswalk	0.00	0.40	0.40	0.79	1.58	0.02	\$271,440	\$268,726	\$2,714	\$40,000	15	\$25,000	1.60
M-8	King Elementary / Rainb	Install allowable additional supportive treatment, such a	0.00	0.40	0.40	0.79	1.58	0.02	\$271,440	\$268,726	\$2,714	\$40,000	15	\$46,000	0.87
M-9	King Elementary / Rainb	Consider moving crosswalk to the west side of Valeria &	0.00	0.39	0.39	0.78	1.56	0.04	\$271,440	\$265,360	\$6,080	\$90,000	20	\$37,000	2.43
M-10	King Elementary / Rainb	Update ADA ramps	0.00	0.40	0.40	0.79	1.58	0.02	\$271,440	\$268,726	\$2,714	\$40,000	20	\$30,000	1.33
M-11	Fort Lane	Implement Barnes Dance pedestrian crossing to suppo	0.39	2.37	1.97	3.75	8.48	0.12	\$3,234,020	\$3,188,744	\$45,276	\$674,000	10	\$87,000	7.75
M-12	Fort Lane	Install barrier along the southwestern corner to protect f	0.18	0.00	0.37	0.37	0.92	0.08	\$950,920	\$874,846	\$76,074	\$1,132,000	15	\$75,000	15.09
M-13	Fort Lane	Implement left-turn phasing, as warranted	0.39	2.33	1.94	3.69	8.35	0.25	\$3,234,020	\$3,141,850	\$92,170	\$1,371,000	10	\$56,000	24.48
M-14	Hill Boulevard / 75 West	Install bulb-outs at the crossing	0.00	0.14	0.27	0.14	0.54	0.26	\$174,580	\$118,714	\$55,866	\$831,000	20	\$40,000	20.78
M-15	Hill Boulevard / 75 West	Install luminaire on north side of the crosswalk	0.00	0.20	0.40	0.20	0.79	0.01	\$174,580	\$172,834	\$1,746	\$26,000	15	\$25,000	1.04
M-16	Hill Boulevard / 75 West	Consider installing pedestrian refuge island	0.00	0.20	0.39	0.20	0.78	0.02	\$174,580	\$170,669	\$3,911	\$58,000	20	\$37,000	1.57
M-17	Hill Boulevard / 75 West	Convert 75 W and Hill Boulevard to right-in/right-out	0.00	0.04	0.08	0.16	0.28	0.52	\$174,580	\$37,532	\$137,048	\$2,039,000	20	\$60,000	33.98
M-18	Hill Boulevard / 75 West	Update ADA ramps	0.00	0.20	0.40	0.20	0.79	0.01	\$174,580	\$172,834	\$1,746	\$26,000	20	\$30,000	0.87
M-19	Hill Boulevard / 75 West	Install allowable additional supportive treatment, such a	0.00	0.20	0.39	0.20	0.78	0.02	\$174,580	\$171,270	\$3,310	\$49,000	15	\$46,000	1.07
M-20	Hill Field Road	Install accessible push button in refuge island or put pe	0.59	4.34	2.96	10.06	17.95	0.25	\$5,282,780	\$5,208,821	\$73,959	\$1,100,000	10	\$14,000	78.57
M-21	Hill Field Road	Evaluate bicycle routes; consider rerouting bicycles to f	0.58	4.29	2.92	9.94	17.74	0.46	\$5,282,780	\$5,149,654	\$133,126	\$1,981,000	20	\$100,000	19.81
M-22	Hill Field Road	Install bulb-outs	0.00	1.63	0.41	2.86	4.90	2.30	\$1,228,260	\$835,217	\$393,043	\$5,847,000	20	\$160,000	36.54
LONG TERM															
L-1	Corridor Wide	Convert to 3-lane cross-section; install buffered bikes la	0.81	3.73	4.05	9.23	17.82	4.18	\$7,535,740	\$6,103,949	\$1,431,791	\$21,301,000	25	\$5,499,000	3.87
L-2	Corridor Wide	Improve lighting corridor-wide	1.33	8.35	6.64	19.04	35.36	1.64	\$11,624,620	\$11,034,787	\$589,833	\$8,775,000	15	\$593,000	14.80
L-3	Fairfield Road	Rebuild intersection to match required geometry & elim	0.27	0.68	0.68	1.77	3.40	1.60	\$2,403,900	\$1,634,652	\$769,248	\$11,444,000	20	\$160,000	71.53
L-4	King Elementary / Rainb	Move Rainbow Drive curb to create a single lane and a	0.00	0.27	0.27	0.54	1.09	0.51	\$271,440	\$184,579	\$86,861	\$1,292,000	20	\$40,000	32.30
L-5	Fort Lane	Eliminate additional through lanes, if possible, and redu	0.27	1.63	1.36	2.58	5.85	2.75	\$3,234,020	\$2,199,134	\$1,034,886	\$15,396,000	20	\$160,000	96.23
L-6	Fort Lane	Consider a roundabout	0.18	1.08	0.90	3.38	5.54	3.06	\$3,234,020	\$1,490,588	\$1,743,432	\$25,938,000	25	\$1,708,000	15.19
L-7	Hill Boulevard / 75 West	Work with church to extend sidewalk from 1150 N to Gc	0.00	0.19	0.39	0.19	0.78	0.02	\$174,580	\$170,041	\$4,539	\$68,000	20	\$21,000	3.24
L-8	Hill Field Road	Install raised median; convert 400 W to right- & left-in/r	0.00	0.00	0.58	1.40	1.98	0.22	\$201,860	\$153,610	\$48,250	\$718,000	20	\$14,000	51.29
L-9	Hill Field Road	Move curb to narrow wide shoulders and eliminate unn	0.00	2.21	0.55	3.86	6.62	0.58	\$1,228,260	\$1,129,999	\$98,261	\$1,462,000	20	\$40,000	36.55