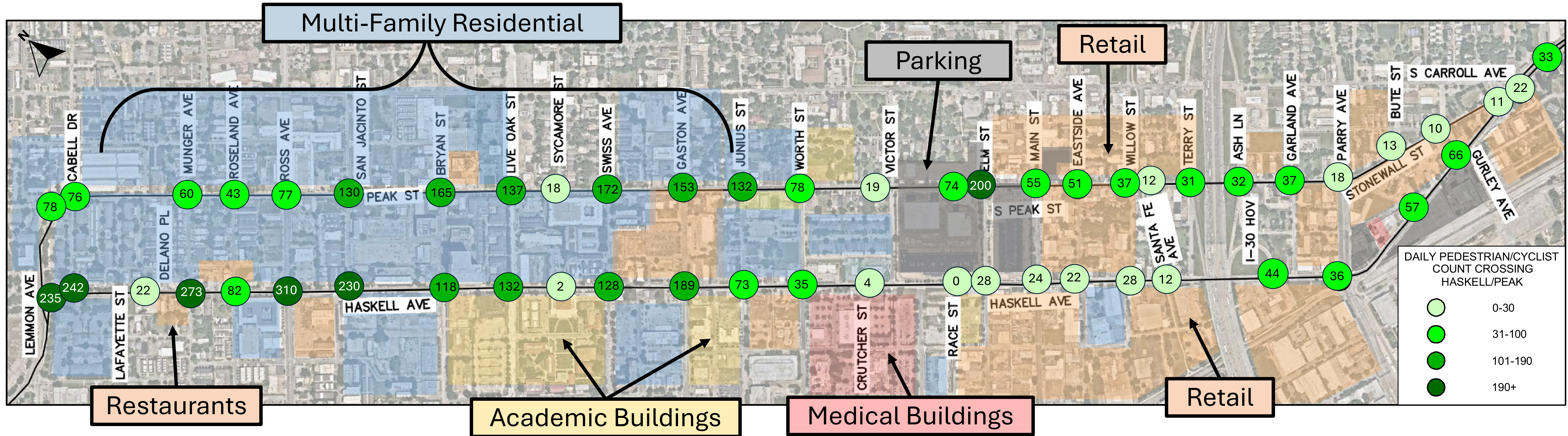




Pedestrian & Cyclist Volumes Crossing Haskell Ave. and Peak St.



General Information

4.6 mi
Total Length

~11,000
Daily Vehicles

26
Bus Stops

Posted Speed:
30 MPH
Speed Limit

NB (Peak) – 37.0 MPH
SB (Haskell) – 32.9 MPH
85th Percentile Speeds

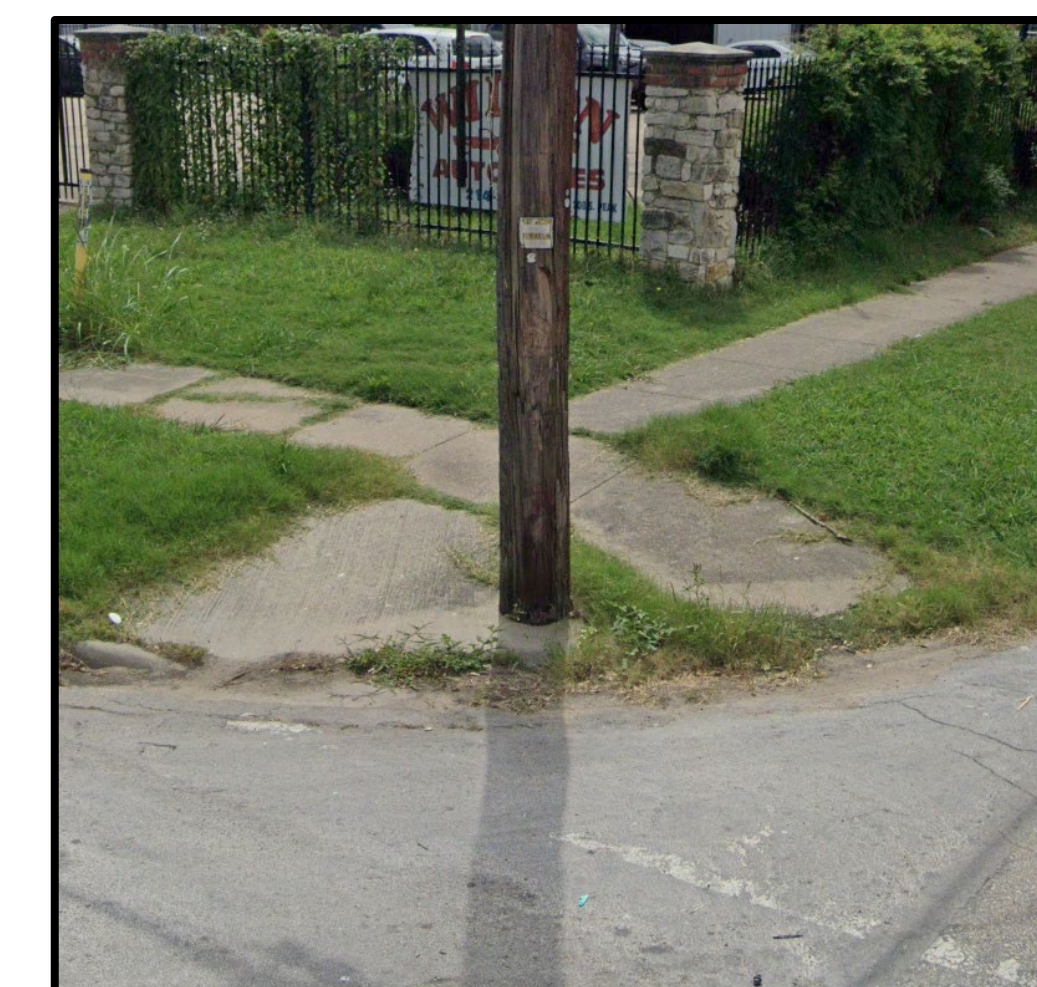
230+ Daily Pedestrians Crossings
*At Key Intersections

Where is the most critical need for pedestrian crossings?

Pedestrian counts show **heavy pedestrian and cyclist demand crossing Haskell/Peak corridors at unprotected locations** throughout the corridor. Most of these crossings are concentrated at the northern end of the Haskell/Peak corridors North of Junius St intersections such as Haskell at Munger and Haskell at Lemmon have pedestrian crossings of over 200 a day. This is due to the **numerous pedestrian generators in those areas**, such as an abundance of multi-family housing, restaurants and retail shops, and nearby academic buildings. There is a high severity tied to pedestrian/cyclist related crashes, with a few fatalities in the recent years. One of the primary goals of this project is to increase **walkability, visibility, and pedestrian safety** throughout the corridors, while mitigating the crash factors leading up to the event.



Example of “End of Useful Life” signal infrastructure – outdated mast arm and signal equipment. (Haskell Ave. at Lemmon Ave.)



Example of a ramp in poor condition – not ADA compliant and obstructed by utility pole. (Peak St. and Eastside Ave.)

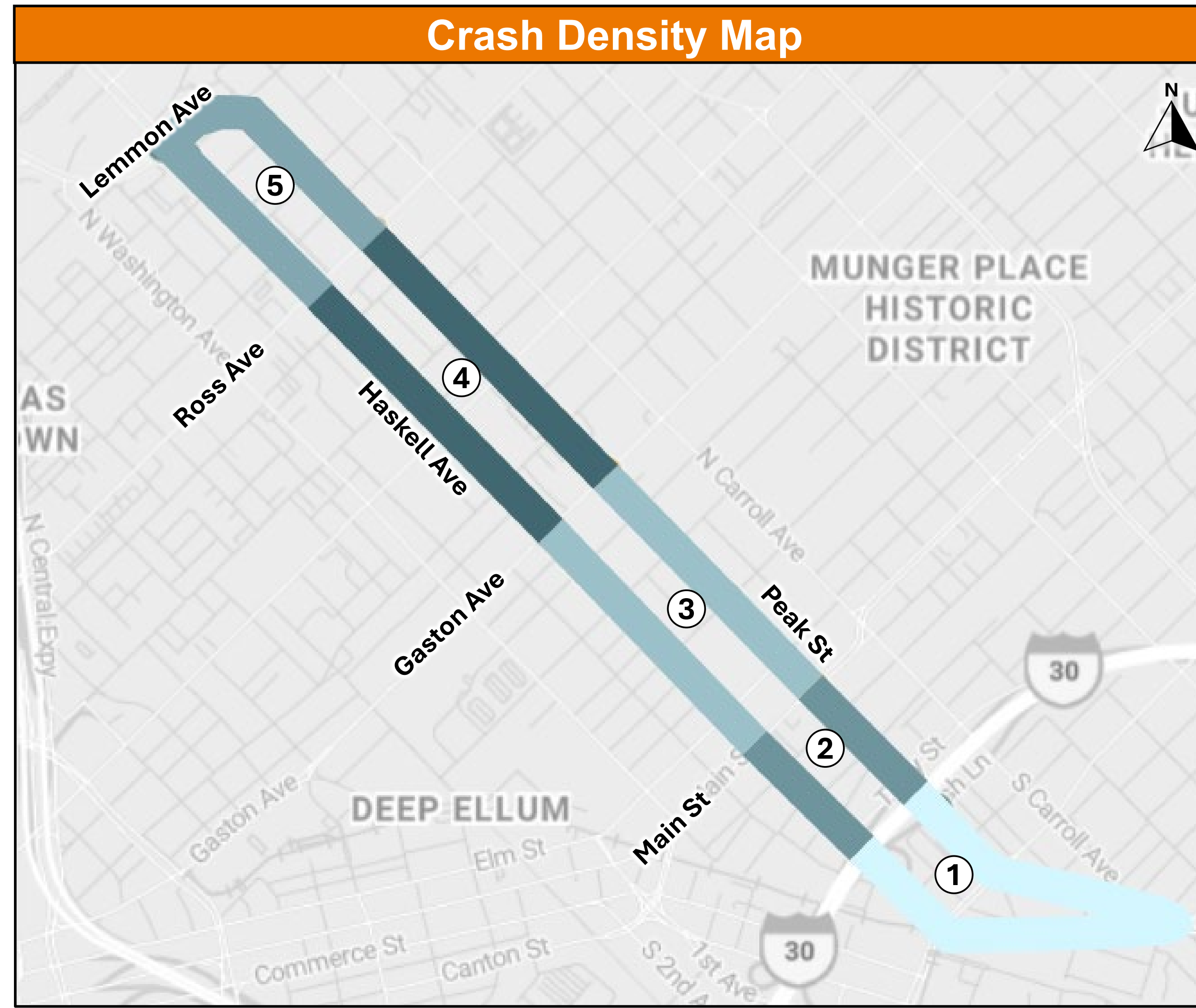
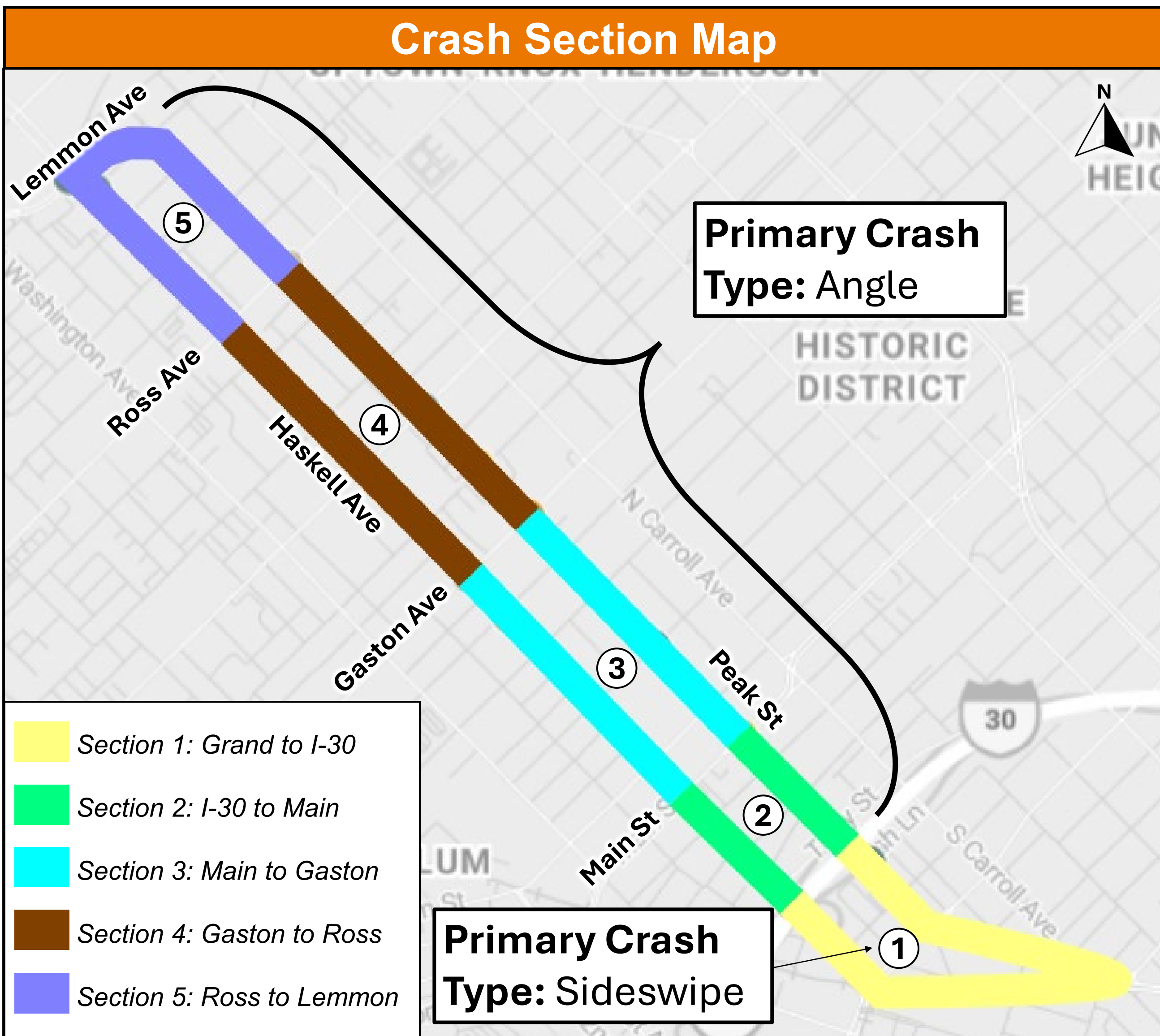


Example of lighting infrastructure in poor condition – leaning poles. (Haskell Ave. between Victor St. and Worth St).



Example of sidewalk in poor condition – deteriorating sidewalk with visual cracking. (Peak St. between Garland Ave. and Ash Ln.)

Existing Crash Data



General Information

- 915** Total Crashes
- 19** Pedestrian/Cyclist Crashes
- 183** Average Crashes per Year

Crash Density Along Haskell/Peak

Crash density describes the relationship between crash counts and total lane miles, indicating the concentration of crashes in a specific area; a higher crash density indicates a greater number of crashes per mile of road. Section 4 (Gaston to Ross) had the highest crash density with ~96 crashes per lane mile.

Top 5 Crash Types (Full Corridor):

1. Angle – 38%
2. Left Turn – 17%
3. Sideswipe – 16%
4. Single Vehicle – 9%
5. Rear End – 5%

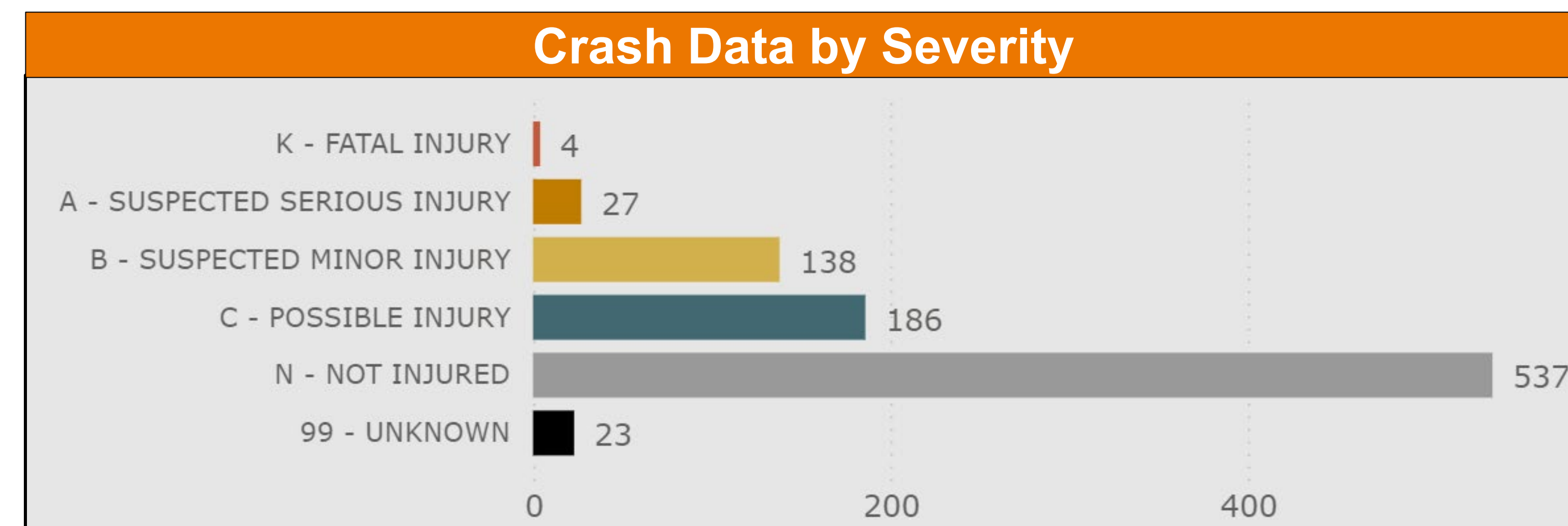
Crash Factors by Section

Primary Contributing Factor (groups)	1: Grand to I-30	2: I-30 to Main	3: Main to Gaston	4: Gaston to Ross	5: Ross to Lemmon	Total
DISREGARD OF SIGNAL/SIGNAGE/STRIPING	13	43	34	117	22	229
NOT DRIVING WITHIN TRAVEL LANE	34	11	34	50	44	173
UNSAFE TURNING	20	19	36	44	23	142
VEHICLE FAILED TO YIELD RIGHT OF WAY	9	16	31	27	30	113
FAILED TO STOP OR CONTROL SPEED	13	9	14	34	20	90
OTHER	10	9	12	30	6	67
DISTRACTED DRIVING	4	7	7	14	1	33
NONE	4	1	6	5	3	19
SPEEDING	1	2	1	1	9	14
WRONG WAY - ONE WAY ROAD	2		1	5	3	11
DRUGS AND ALCOHOL	1	1	2	2	2	8
FOLLOWED TOO CLOSELY	2	2		3	1	8
UNSAFE PASSING				2	2	6
FATIGUED OR ASLEEP					1	1
PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE			1			1
Total	115	120	179	334	167	915

Crash data from January 2019- December 2023

Crash type refers to the specific manner of collision such as head-on, sideswipe, or rear end. These types are influenced by crash factors, particularly driver behavior, which includes distracted driving, red light running, speeding. The top 5 crash types are shown in the figures to the left with “Angle” being the primary crash type. Over 36% of the total crashes occurred in Section 4 (Gaston to Ross) with “Disregard of Signal/Signage/Striping” being the main contributing crash factor. Furthermore, red light/ stop sign running contributed to 25% of the total crashes for the Haskell/Peak corridors

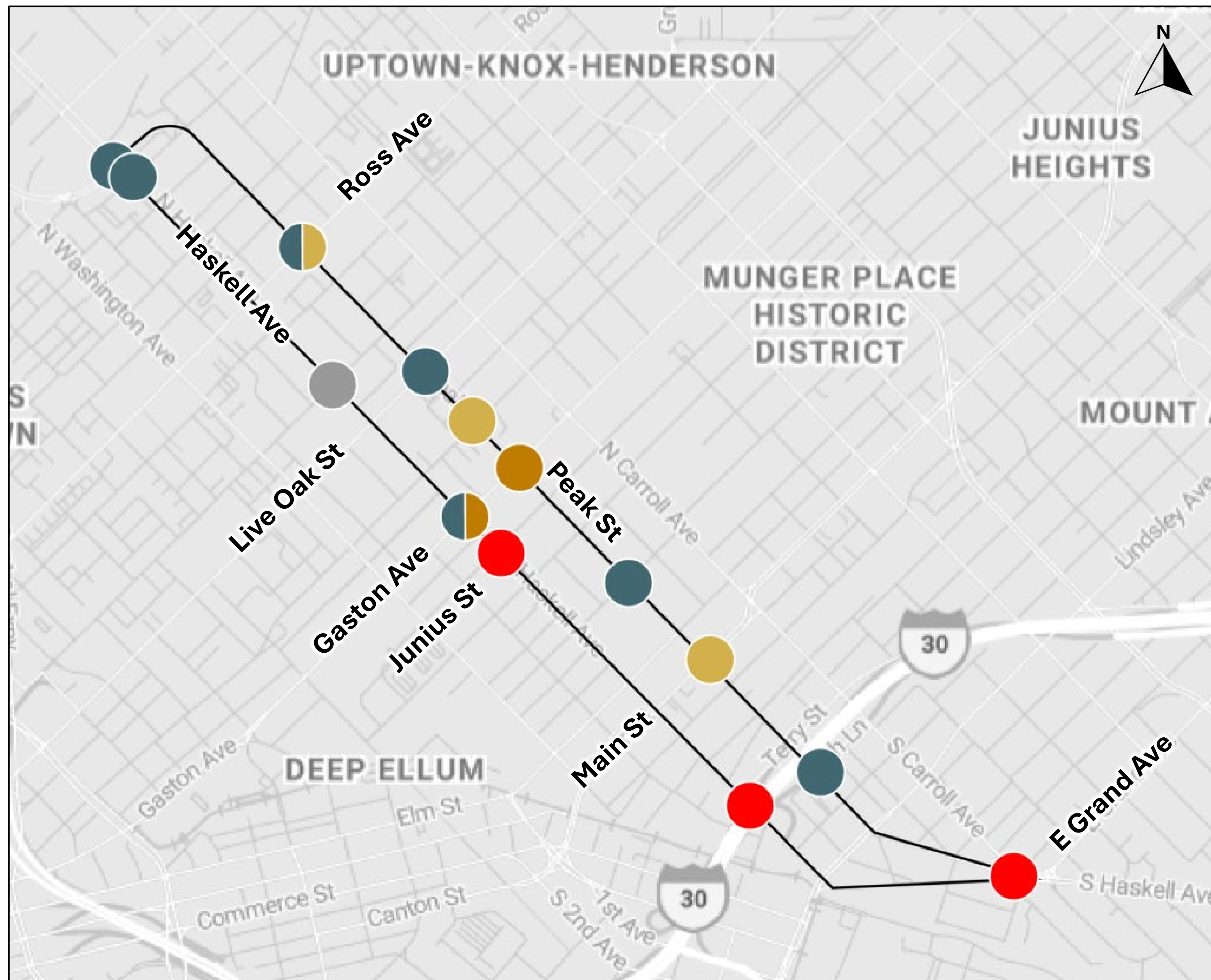
Section	Crash Count	Sum of Lane Miles	Sum of Crashes divided by Sum of Lane Miles
1: Grand to I-30	115	3.3120	34.72
2: I-30 to Main	120	1.5540	77.22
3: Main to Gaston	179	3.0720	58.27
4: Gaston to Ross	334	3.4710	96.23
5: Ross to Lemmon	167	2.4360	68.56
Total	915	13.8450	66.09



Between January 2019 and December 2023, there were a total of 915 recorded crashes along the corridor. Of these, over half resulted in property damage only, 138 resulted in minor or possible injuries, 27 resulted in severe injury, and 4 resulted in fatality.



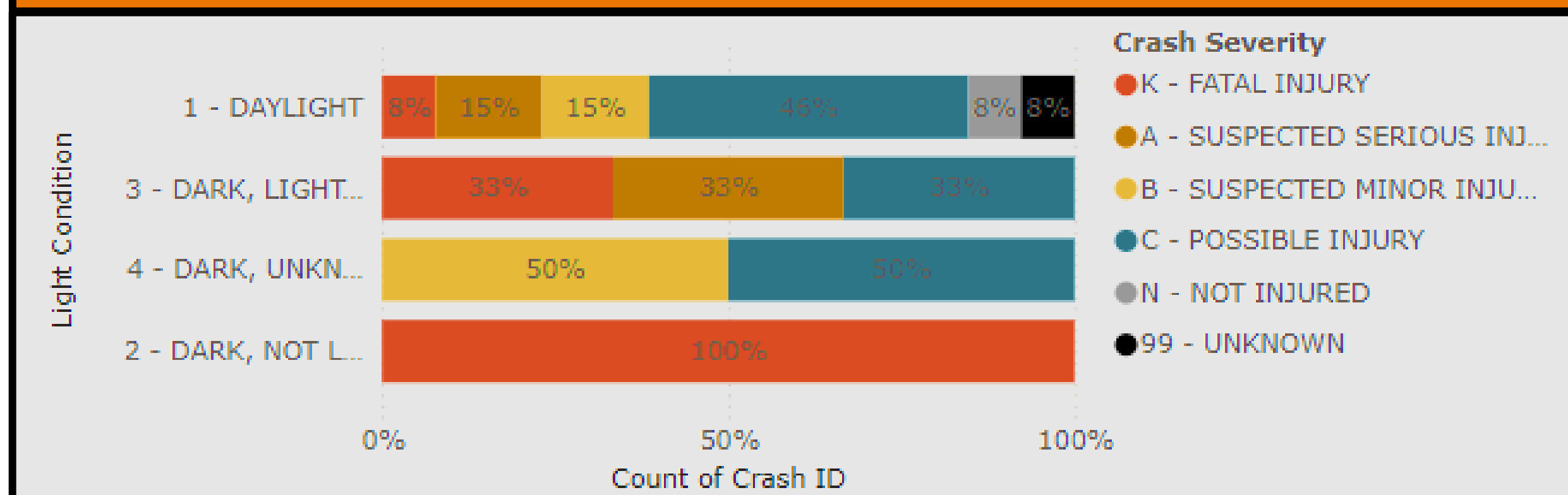
Pedestrian & Cyclist Crashes Along Haskell/Peak Corridors



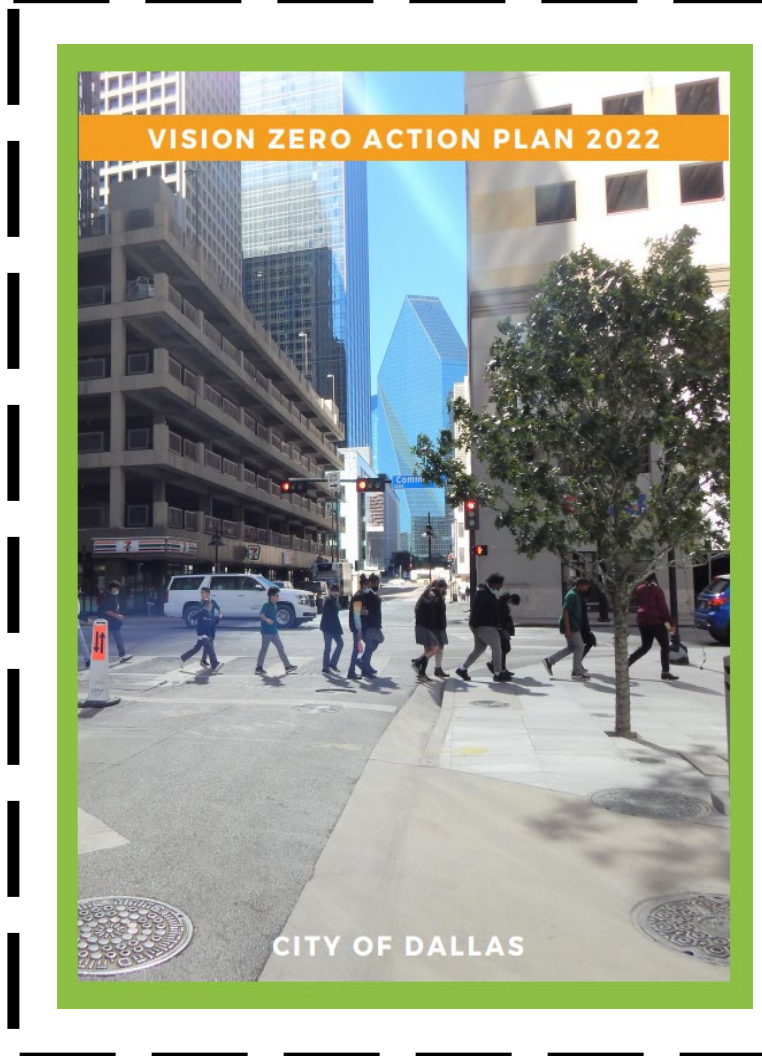
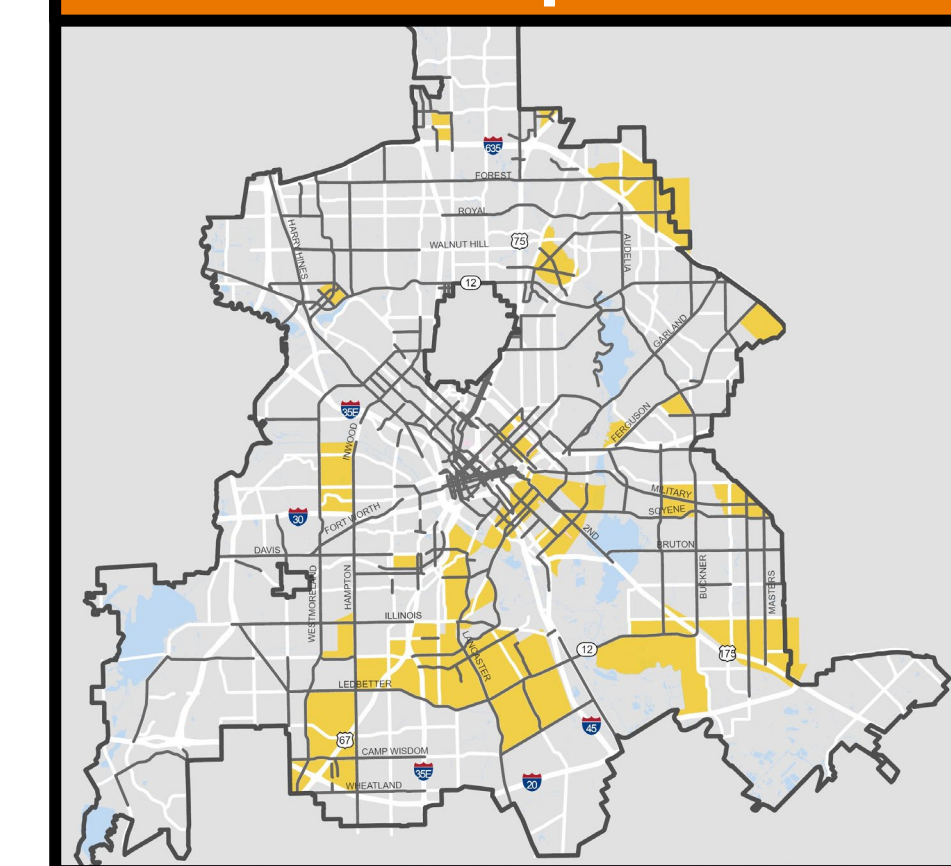
Pedestrian & Cyclist Crash Data

Pedestrian and cyclist related crashes from January 2019 to December 2023 were collected along the corridor using data from TxDOT and the City. There were a **total of 19 pedestrian/cyclist crashes** (12 pedestrian crashes and 7 cyclist crashes). Of these, **30% resulted in severe injuries, 3 of which were fatal. All pedestrian/cyclist fatalities occurred on Haskell Avenue, with 2 of those crashes occurring during dark conditions.** The majority of the pedestrian/cyclist crashes were due to the vehicle failing to yield right of way to a pedestrian. Furthermore, Haskell Ave and Peak St are part of the **Vehicle High Injury Network** in the **2022 Vision Zero Action Plan**, which plans to eliminate all fatal crashes within the city and reduce severe injuries by 50%. The **high density of apartments, retail shops, and other cyclist generators such as Dallas Theological Seminary** significantly contributes to the high pedestrian crossing demand.

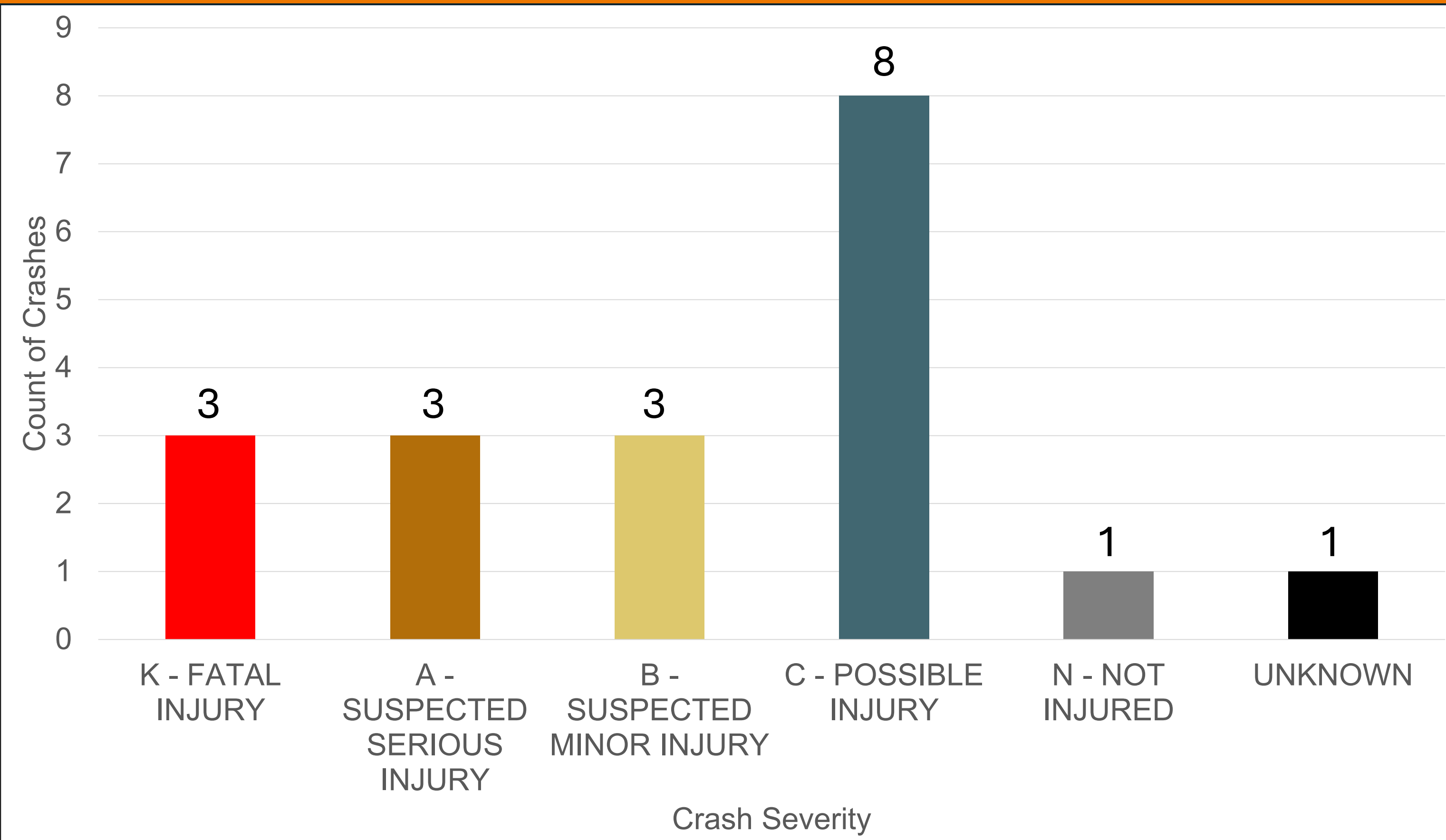
Crash Severity by Light Condition



High Injury Network Map

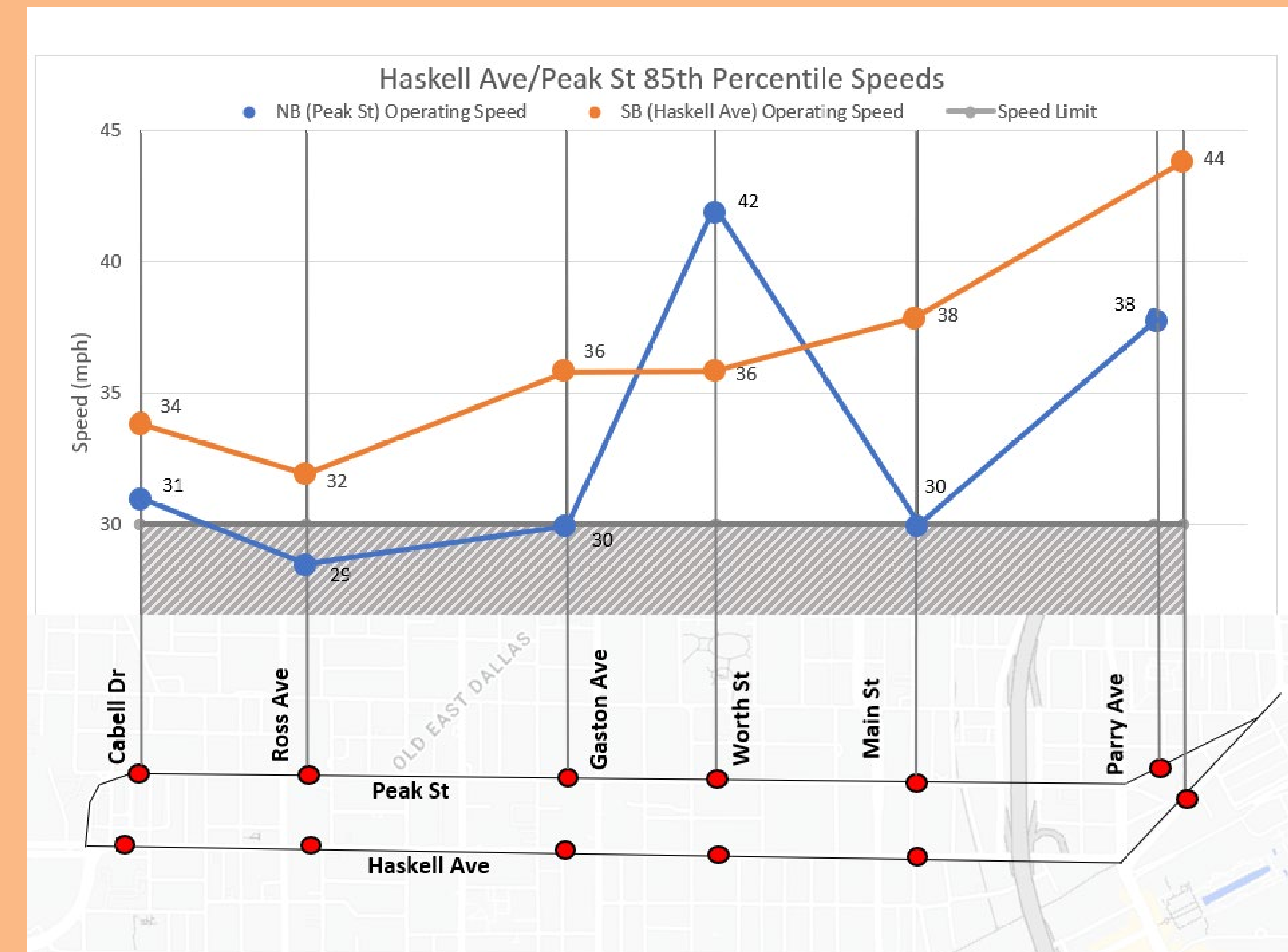


Pedestrian & Cyclist Crash Counts by Severity



Operating Speeds

The **85th percentile operating speeds** along Haskell Ave/Peak St were analyzed. With a posted speed of 30 MPH, **operating speeds were consistently higher for southbound travel (Haskell) with an average operating speed of 37 MPH.** Northbound travel (Peak) had an average operating speed of 32.9 MPH with higher speeds on Peak at Worth St and Parry Ave. With high-speed crashes being associated to **increased severity injuries**, it's important to address operating speeds throughout the corridors.



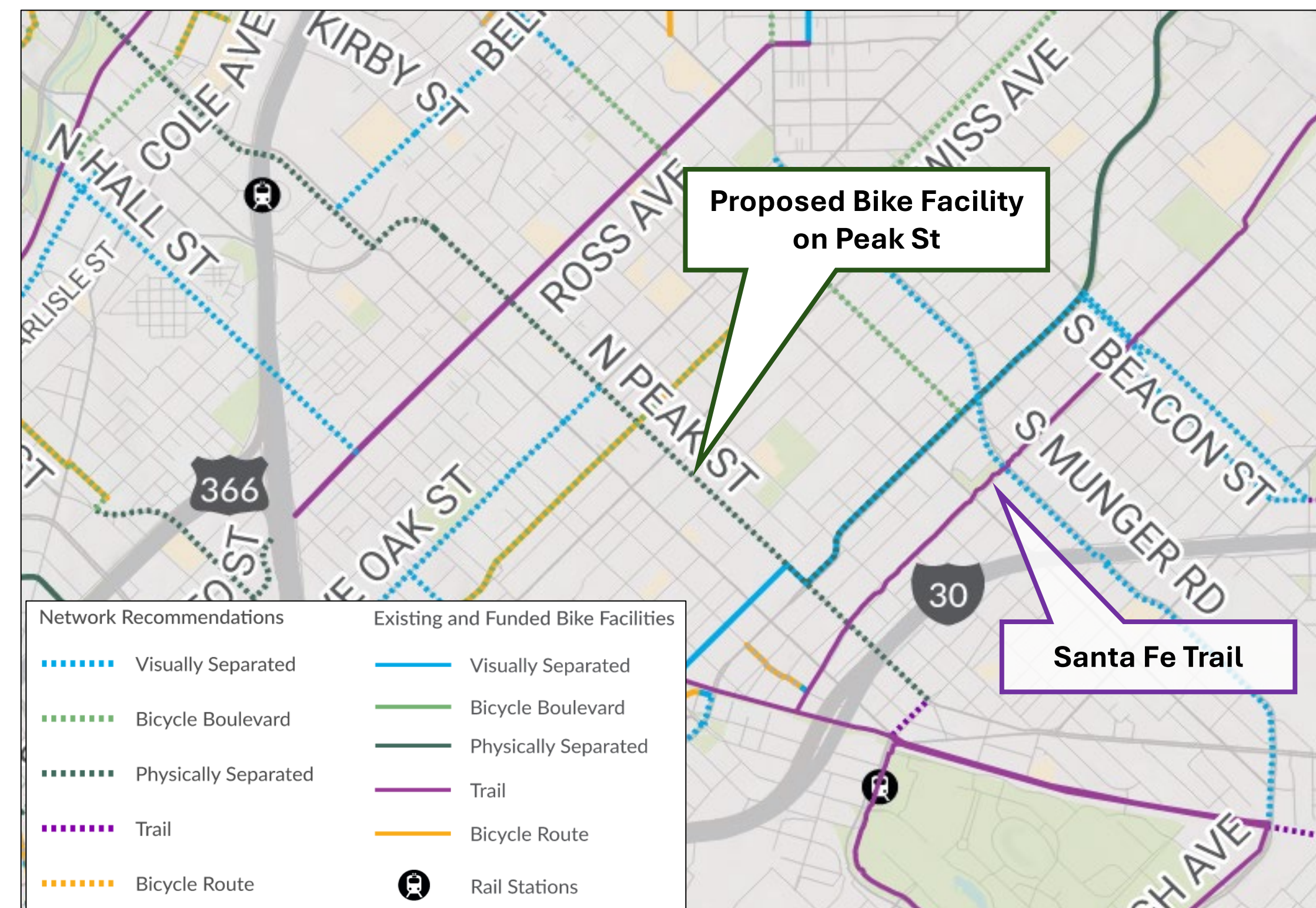


Sidewalk, Curb, Lighting and Signal Infrastructure Improvements

Some improvements that will provide safer and more continuous routes for cyclists and pedestrians include **widening and repairing sidewalks, filling in gaps, and installing ADA compliant ramps**. Installing additional lighting will increase visibility on streets and sidewalks, making pedestrians more visible to drivers and making hazards more visible to all road users. The installation of **new signal infrastructure and signal timing adjustments** can reduce crashes at congested intersections and manage traffic more efficiently. The addition of **PHBs and RRFBs at key pedestrian crossings** can also improve the safety of the corridor. Other solutions to some of the problems along Haskell Ave/Peak St are general curb and median improvements, **additional parking** with bulb outs at intersection corners, and **the removal or relocation of under-utilized bus stops**. The combination of these improvements allow for safer mobility and strengthens the connectivity of the community.

Bike Facilities

In the **2023 Dallas Draft Bike Plan Update**, Peak St is listed as a priority corridor for **“Physically Separated” bike facilities**. This bike facility separates cyclists from vehicular traffic and provides for stronger community connectivity to nearby trails and businesses.



Two-Way Cycle Track

A **two-way cycle track** is a bi-directional bike lane that is separated from vehicular traffic. Typically located alongside the road, these tracks help provide an increased level of comfort by providing a clear space for biking, reducing conflict from vehicles. While a two-way cycle track can **help connect community destinations** such as parks, schools, and commercial areas, it can also encourage more people to cycle, promoting healthier lifestyles.

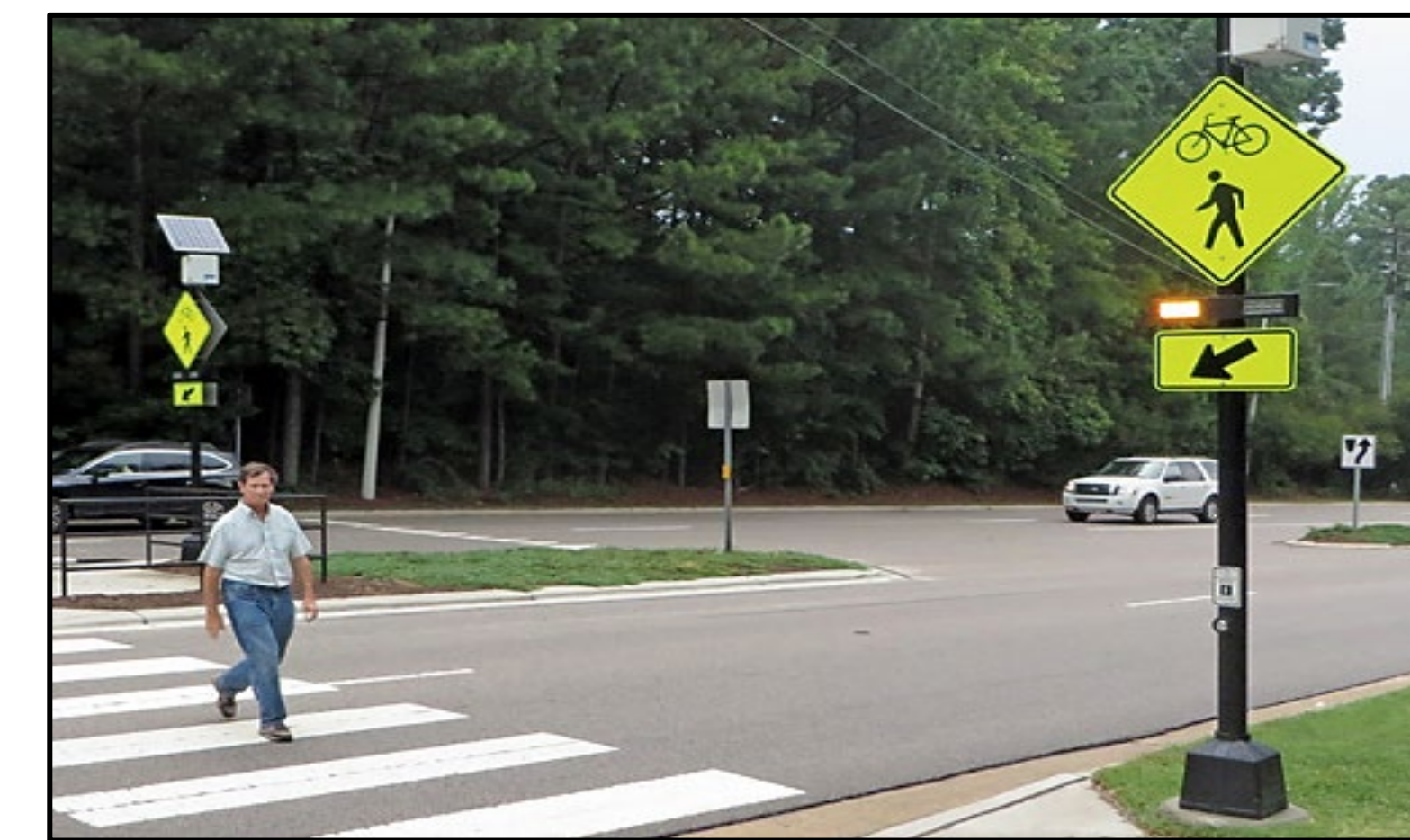


Example of a Two-Way Cycle Track

Source: NYC DOT

What is a Rectangular Rapid Flashing Beacon? (RRFB)

A **Rectangular Rapid Flashing Beacon (RRFB)** is a traffic warning device which alerts drivers to pedestrians. When activated, yellow flashing lights turn on, prompting drivers to yield to pedestrians. They are used to increase pedestrian safety at a crossing, while minimizing the disruption to traffic flow.



Source: Texas A&M Transportation Institute



47% Reduction of Pedestrian Crashes*

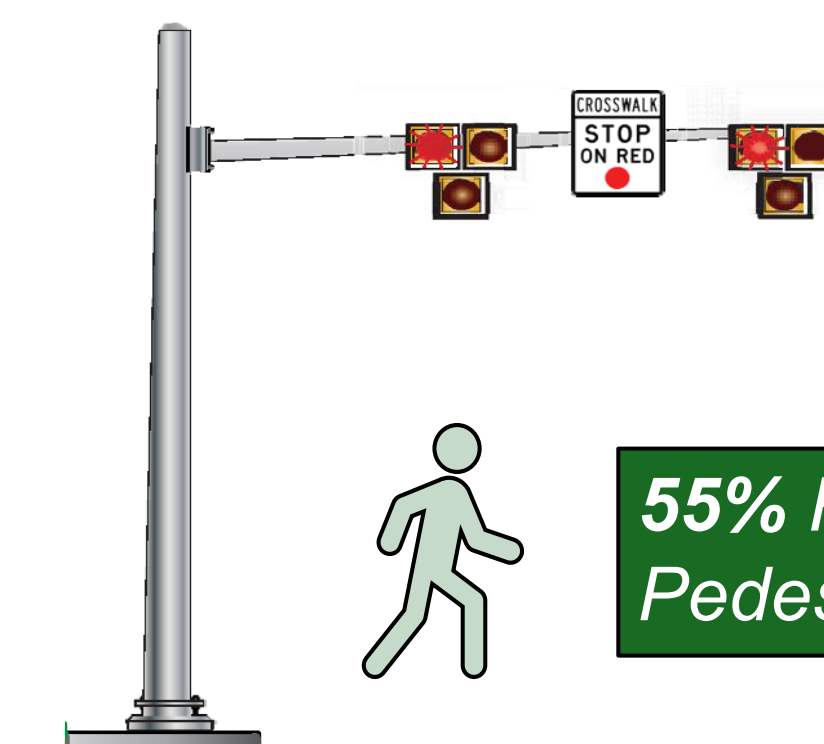
*Source: NCHRP Research Report 841

What is a Pedestrian Hybrid Beacon? (PHB)

A **Pedestrian Hybrid Beacon (PHB)** is a traffic control device that provides a protected crossing for pedestrians. The beacon remains dark until activated by a pedestrian, after which it will light up and direct drivers to stop and yield to pedestrians. PHB's are less expensive and less disruptive to traffic than a full traffic signal, while still providing a fully protected crossing to pedestrians.



Source: FHWA



55% Reduction of Pedestrian Crashes*

*Source: NCHRP Research Report 841

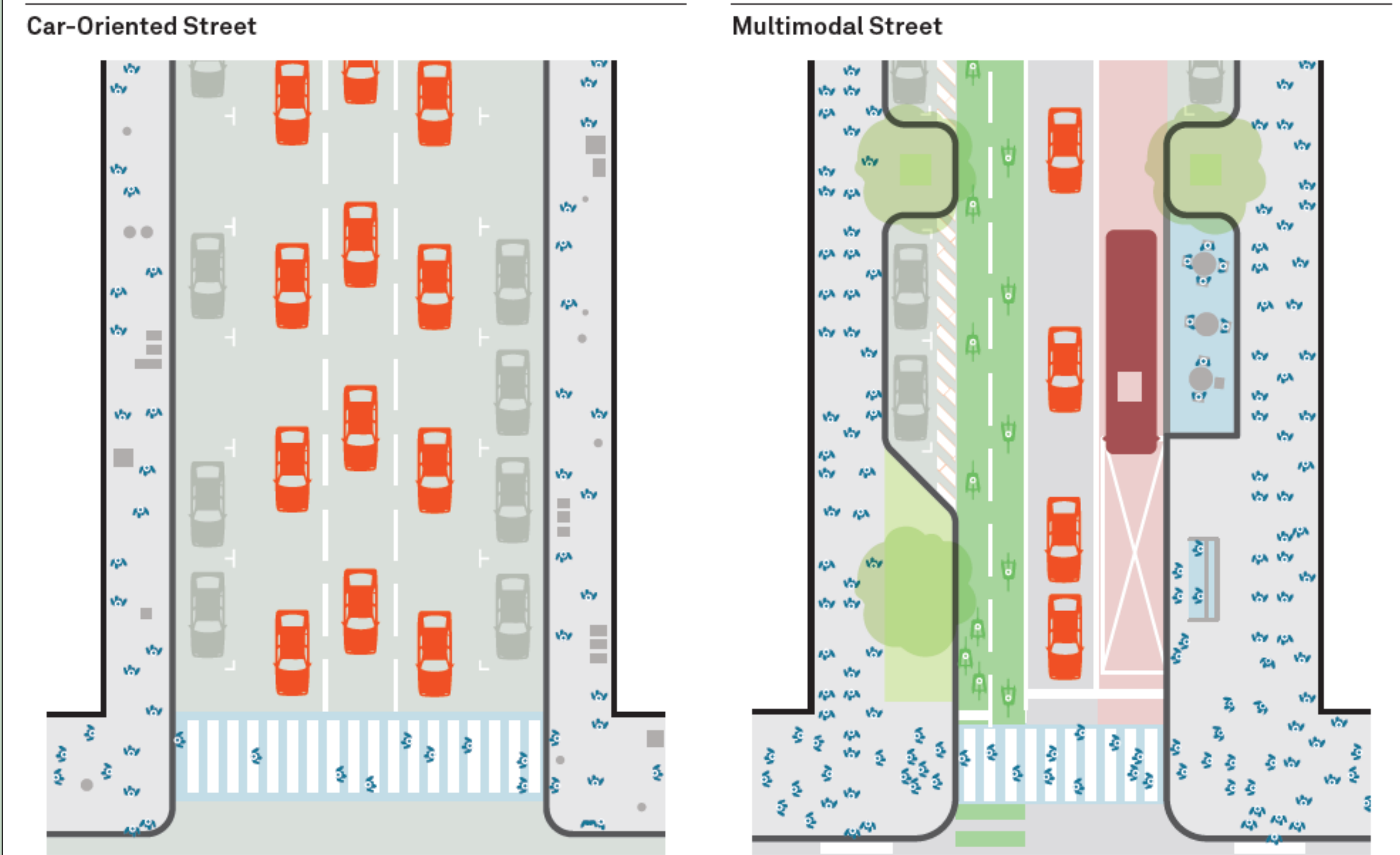


Road Diet

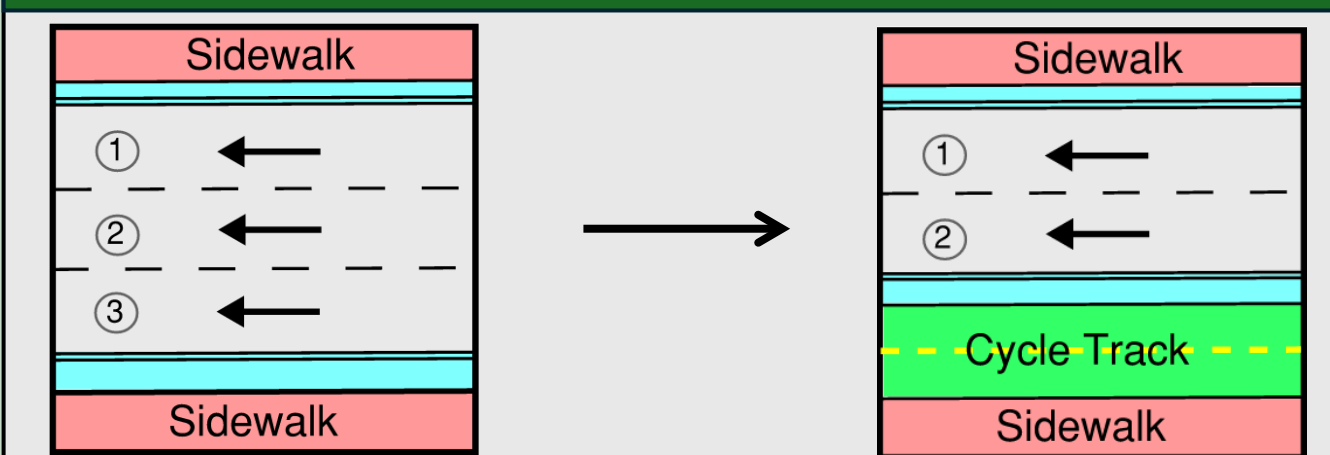
A road diet reduces the number of lanes to allow additional space for other uses such as off-street bike lanes, parking, or bus stops. One of the ways a road diet can reduce crashes is through traffic calming. The tighter cross-section of the roadway reduces overall speeds. The narrowing of lanes also provides space for shared use pathways or bike amenities. This reduces the chance of pedestrian, cyclist, and vehicle crashes by providing an additional buffer for pedestrians, removing cyclists from vehicular traffic. A road diet also makes for easier side-street traffic crossing for drivers and pedestrians crossing the main street due to fewer lanes needed to cross.



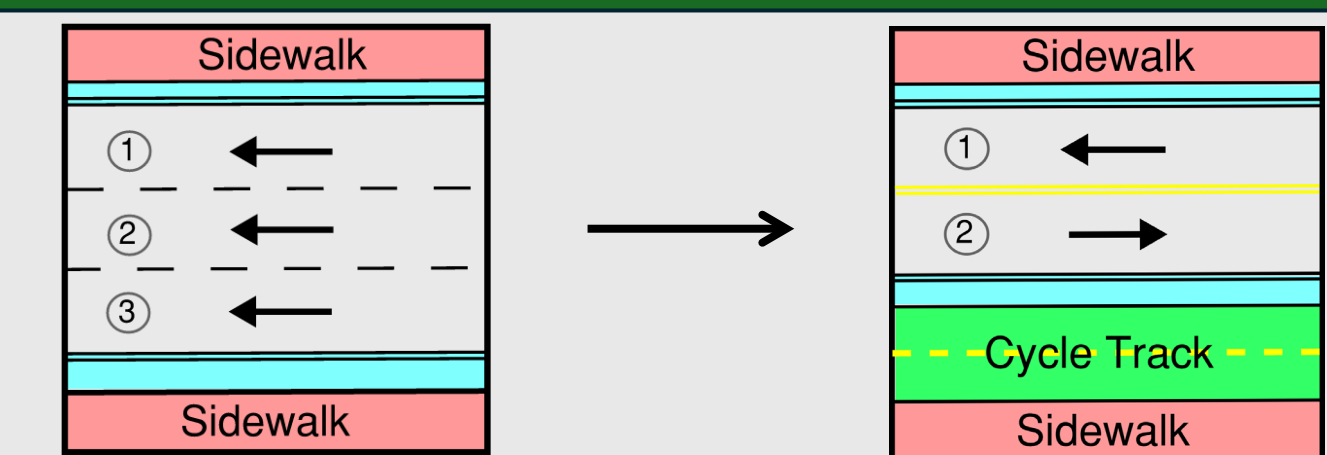
Aerial View of a Road Diet



Road Diet Example



Two-Way Conversion Example

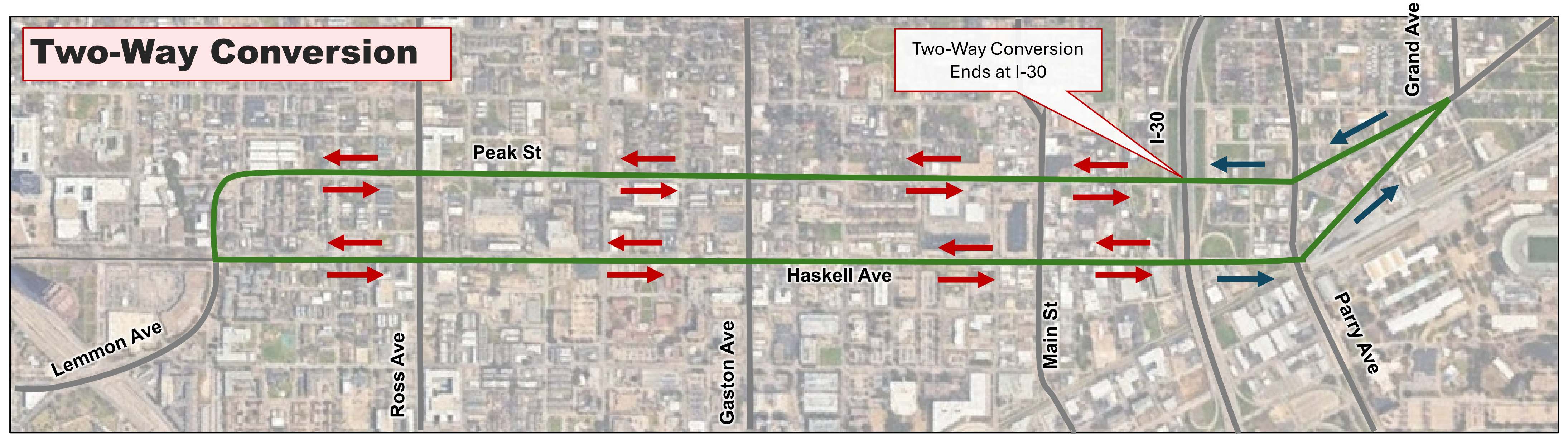
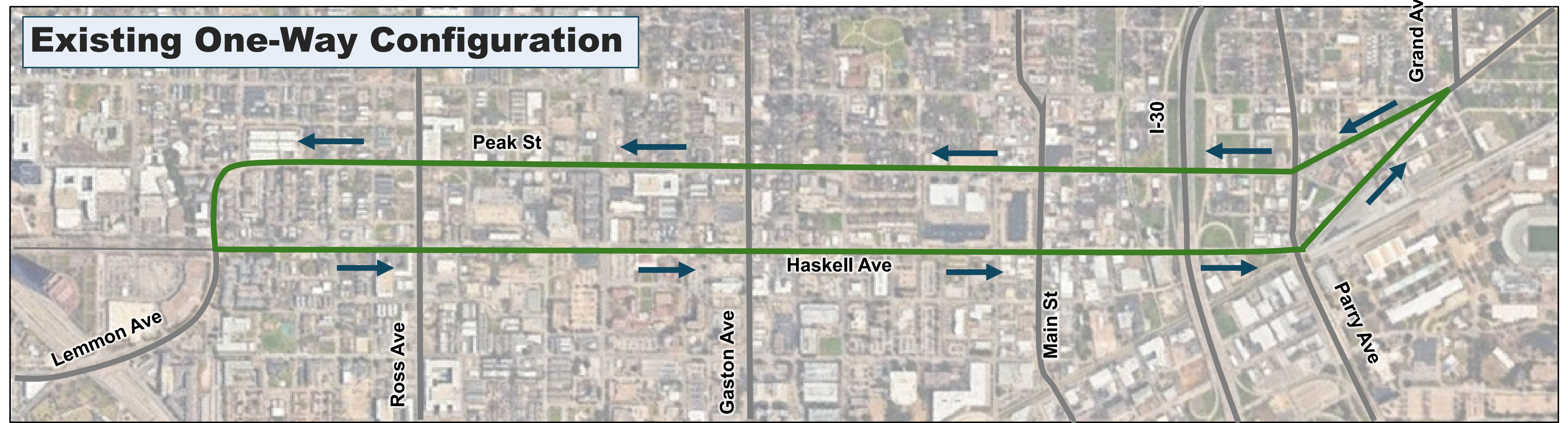


Traffic Calming

One solution to reduce crashes along the corridor is through traffic calming. Traffic calming refers to a set of strategies and design techniques to help reduce vehicle speeds and improve safety in residential/ urban areas. Traffic calming is implemented through methods such as narrowing travel lanes, installing speed tables, or installing speed reduction pavement markings. Because a motorist speed is often influenced by the context of the street, drivers tend to feel less comfortable driving fast on busier streets with trees/heavy pedestrian activity and will drive slower as a result. The use of narrower roads and an increase in pedestrian/cyclist presence will help encourage more attentive and cautious driving.



One-Way to Two-Way Conversion



In some environments, two-way conversion can create better circulation and creates more options for alleviation routes during traffic congestion. The tighter cross-sections and two-way traffic controls speeds and leads to traffic calming. There is also better driver expectancy with typical street patterns and network.

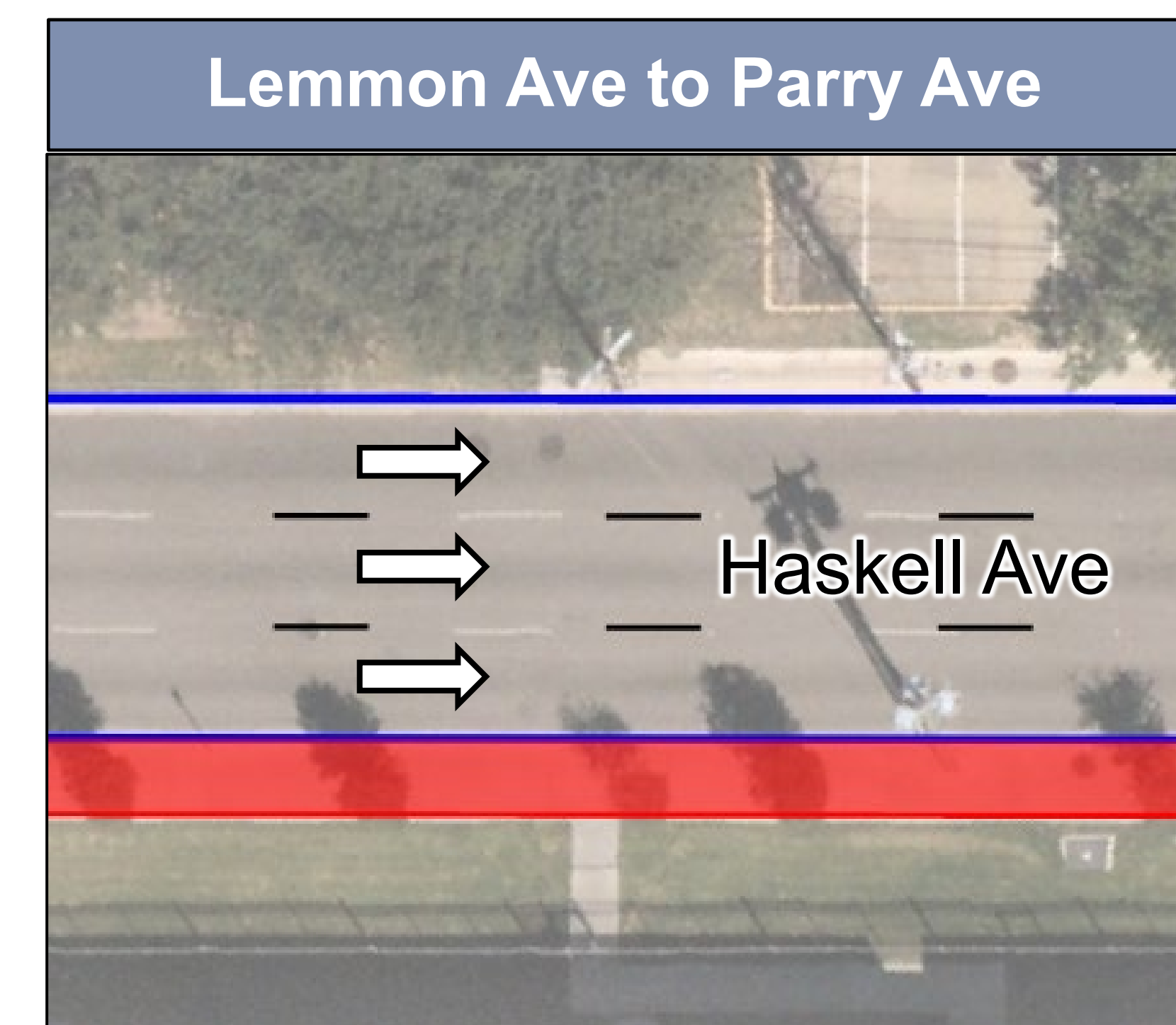
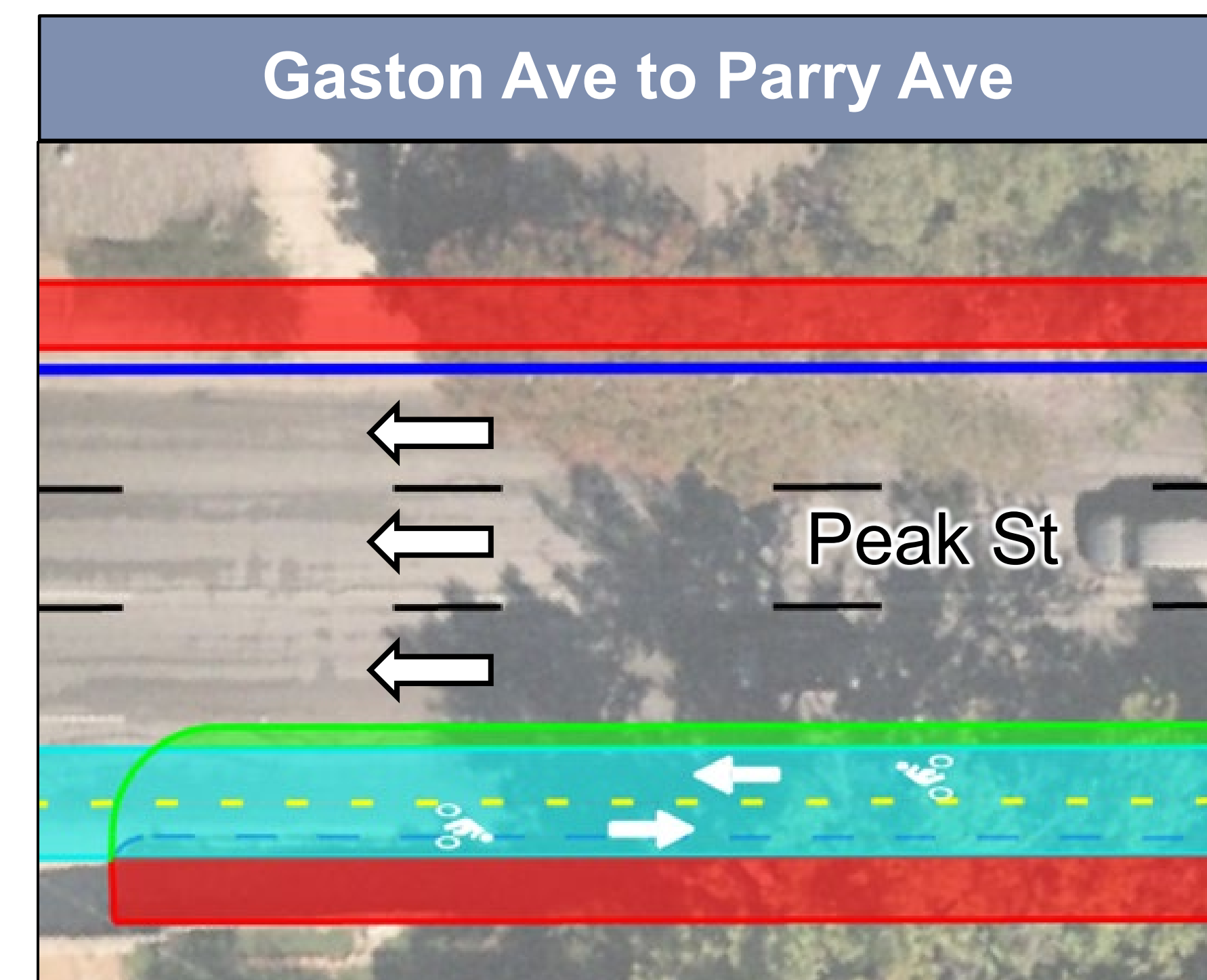
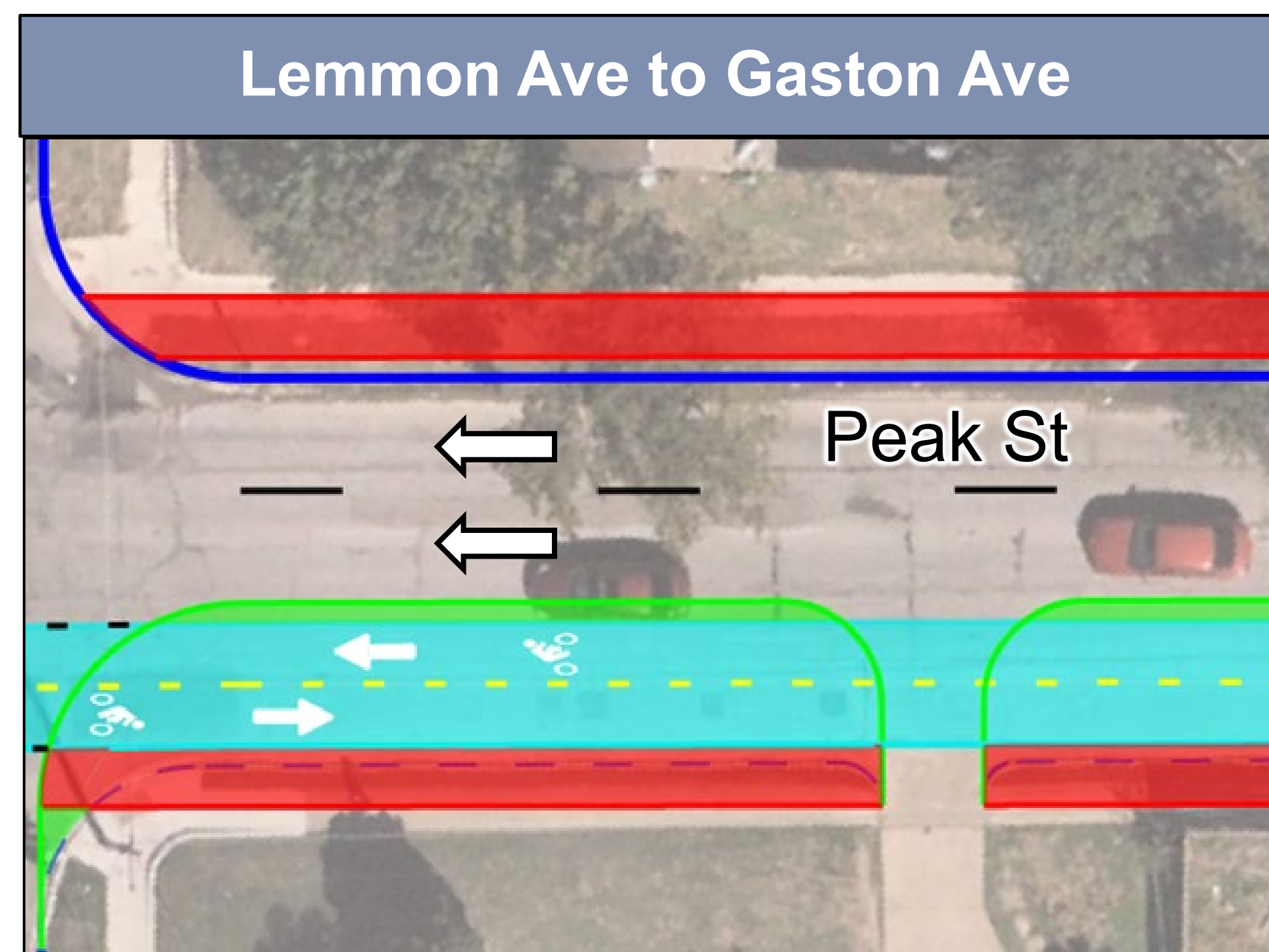


Summary:

Two alternatives have been established for the Haskell/Peak corridor. The one-way alternative maintains the existing one-way configuration and implements a road diet along Peak Street to accommodate for a two-way cycle track. Haskell Avenue is proposed to remain the same in this alternative, serving only southbound traffic. The two-way alternative proposes a road diet to accommodate the two-way cycle track and a two-way conversion along Peak Street. Haskell Avenue is proposed to serve two-way traffic with a four-lane configuration and a three-lane configuration with a shared center left turn lane. In both alternatives, sidewalk and signal infrastructure improvements are proposed.

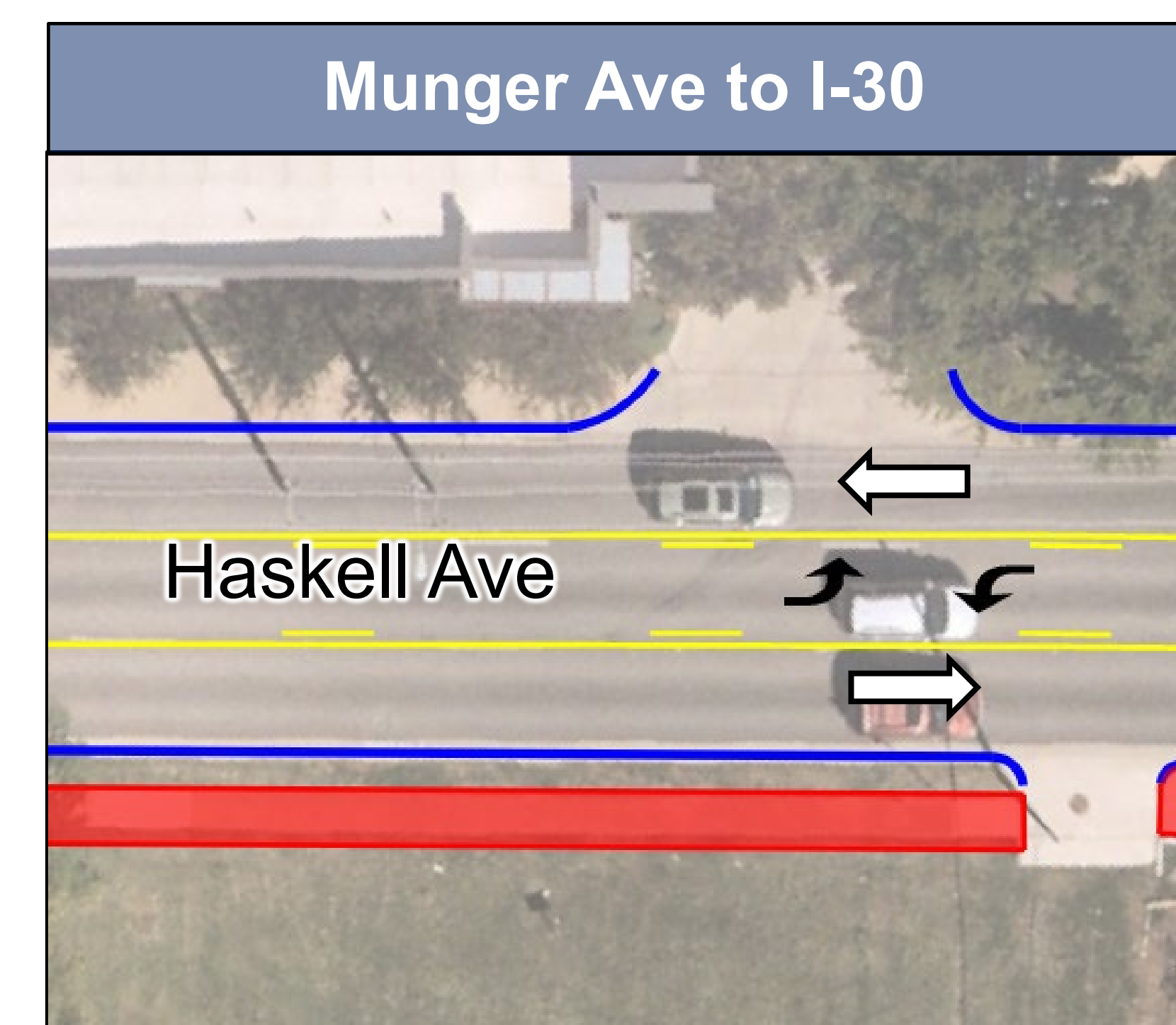
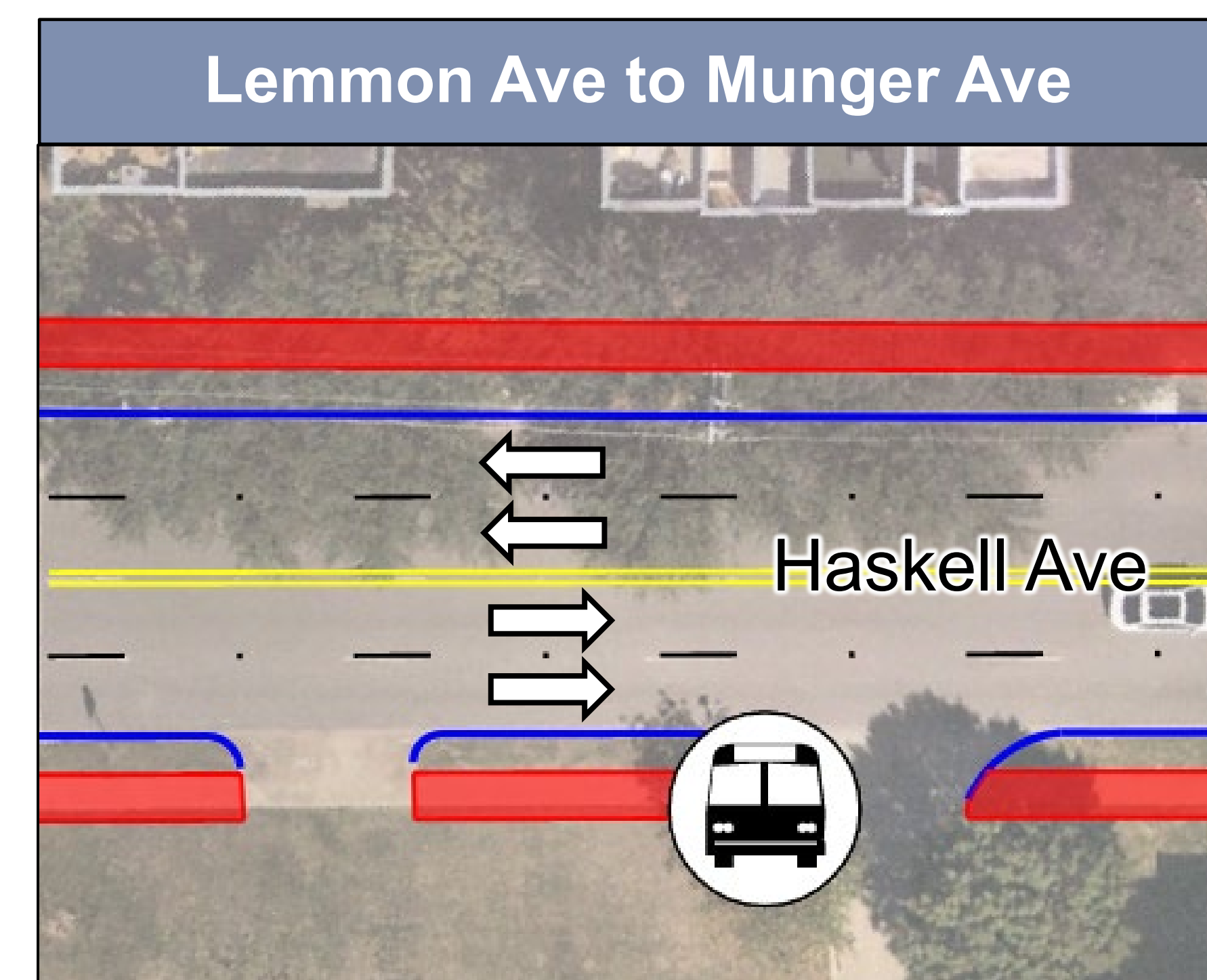
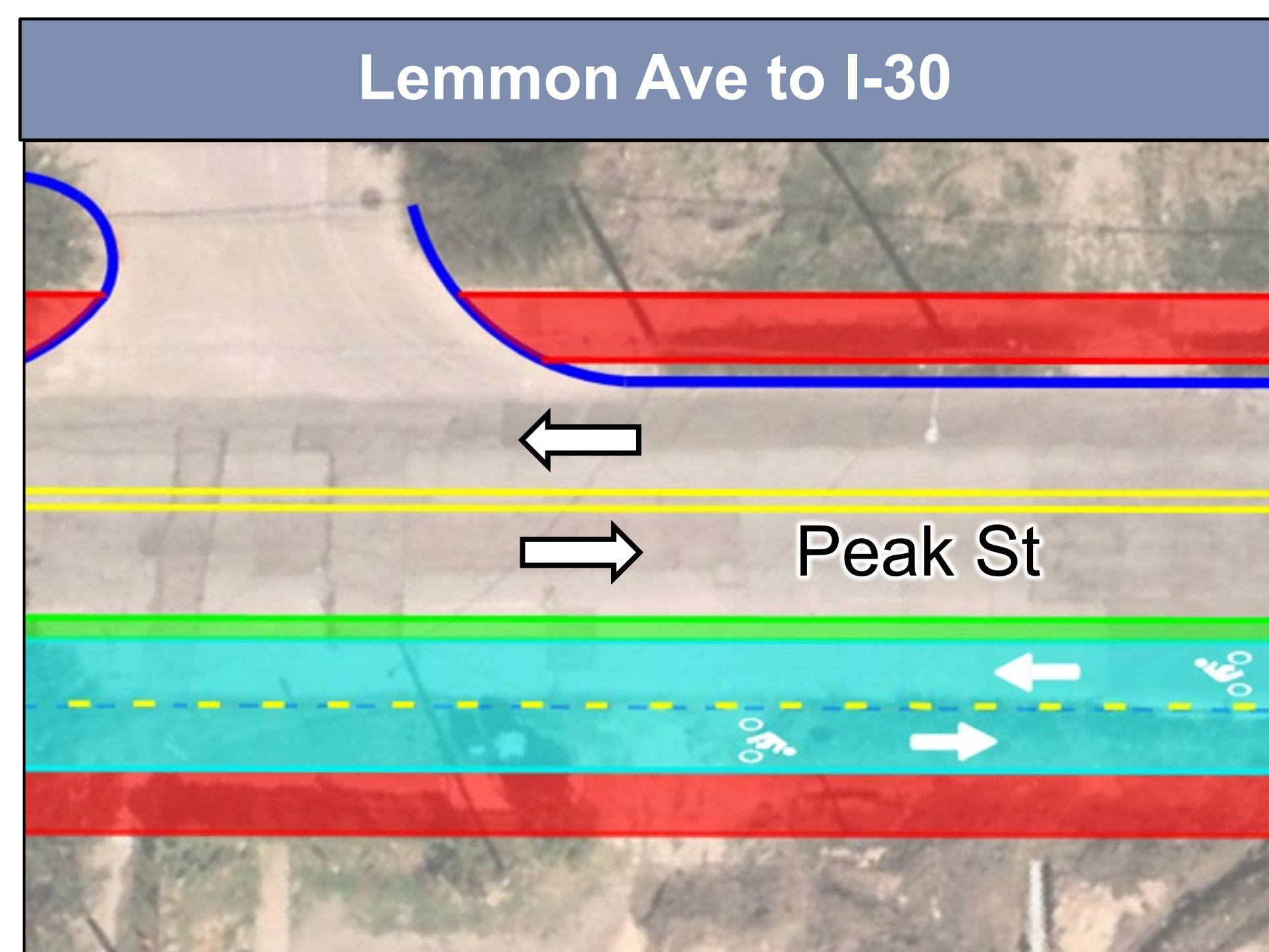
One-Way Alternative

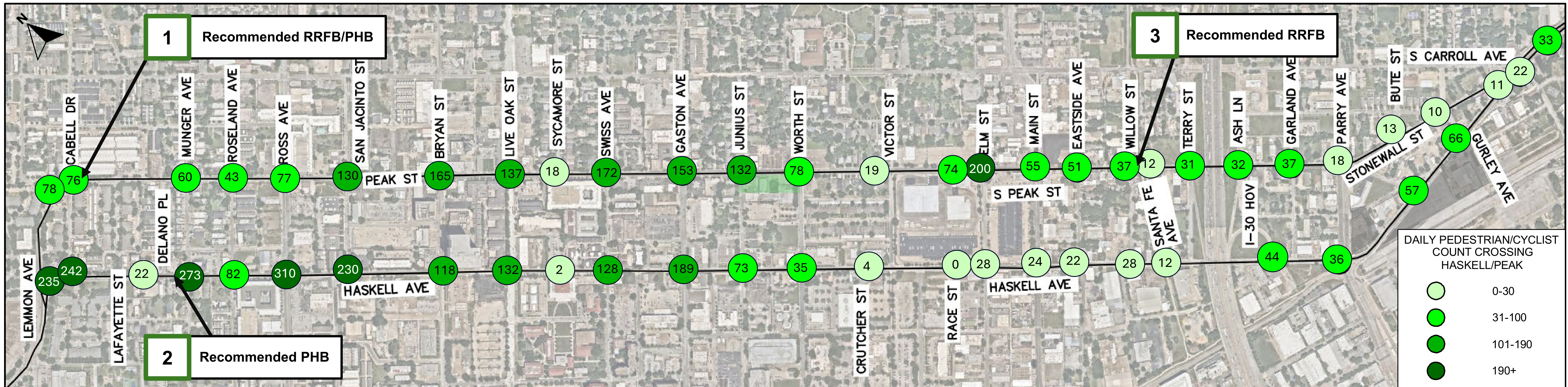
- Keep existing **one-way** street configuration on Haskell Ave and Peak St
- Adjust inside curb to remove one travel lane and install a **two-way cycle track** on Peak St west of Lemmon Ave
- Continue installation of **two-way cycle track** on Peak St from Gaston Ave to Parry Ave with existing three-lane cross-section
- Improve sidewalks and signal infrastructure along project corridors



Two-Way Alternative

- Convert both Haskell Ave and Peak St from one-way to **two-way** streets
- Propose a two-lane cross-section on Peak St and a four-lane/three-lane cross-section on Haskell Ave
- Adjust inside curb to install a **two-way cycle track** on Peak St from Lemmon Ave to Parry Ave
- Improve sidewalks and signal infrastructure along project corridors



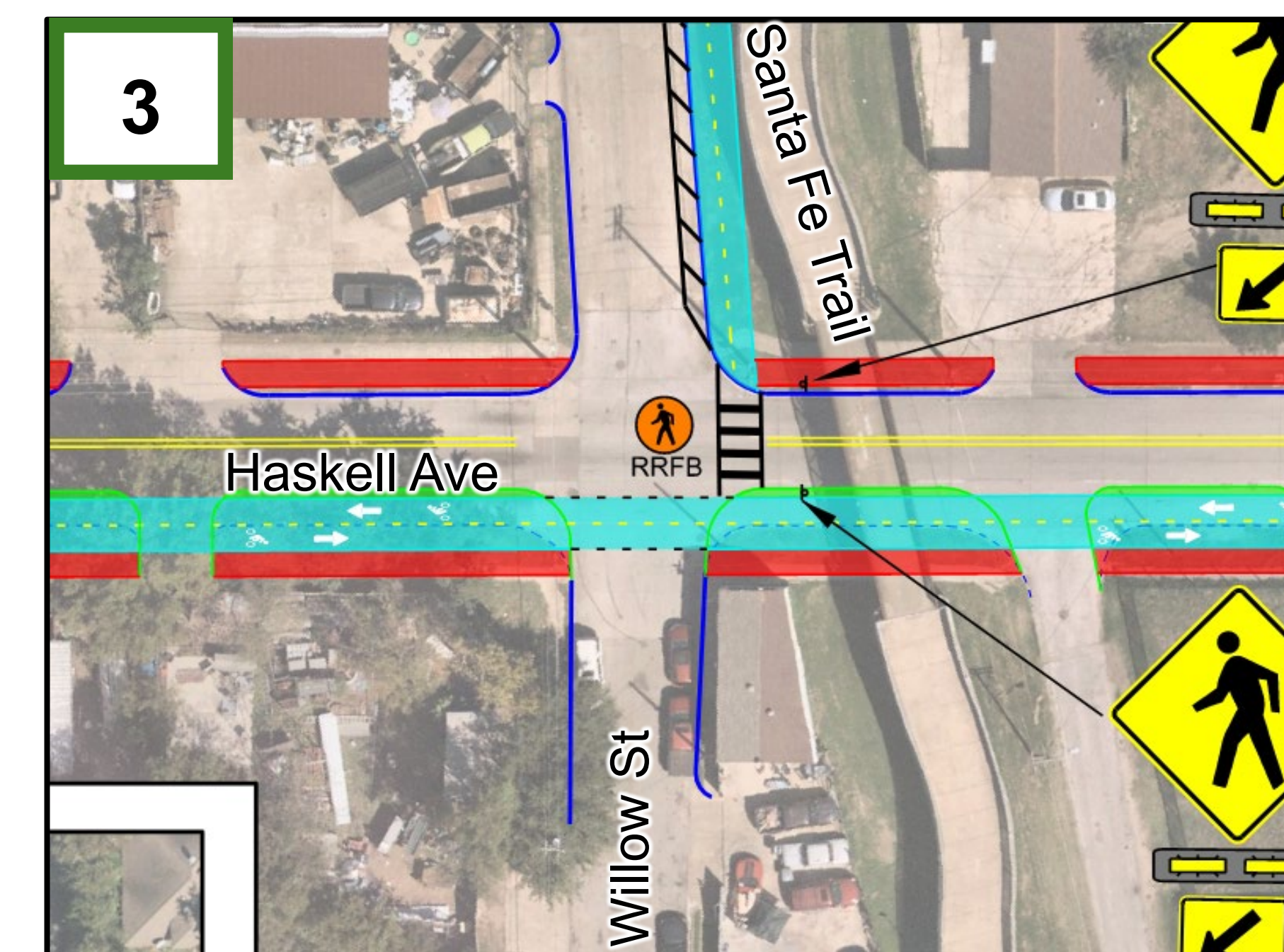
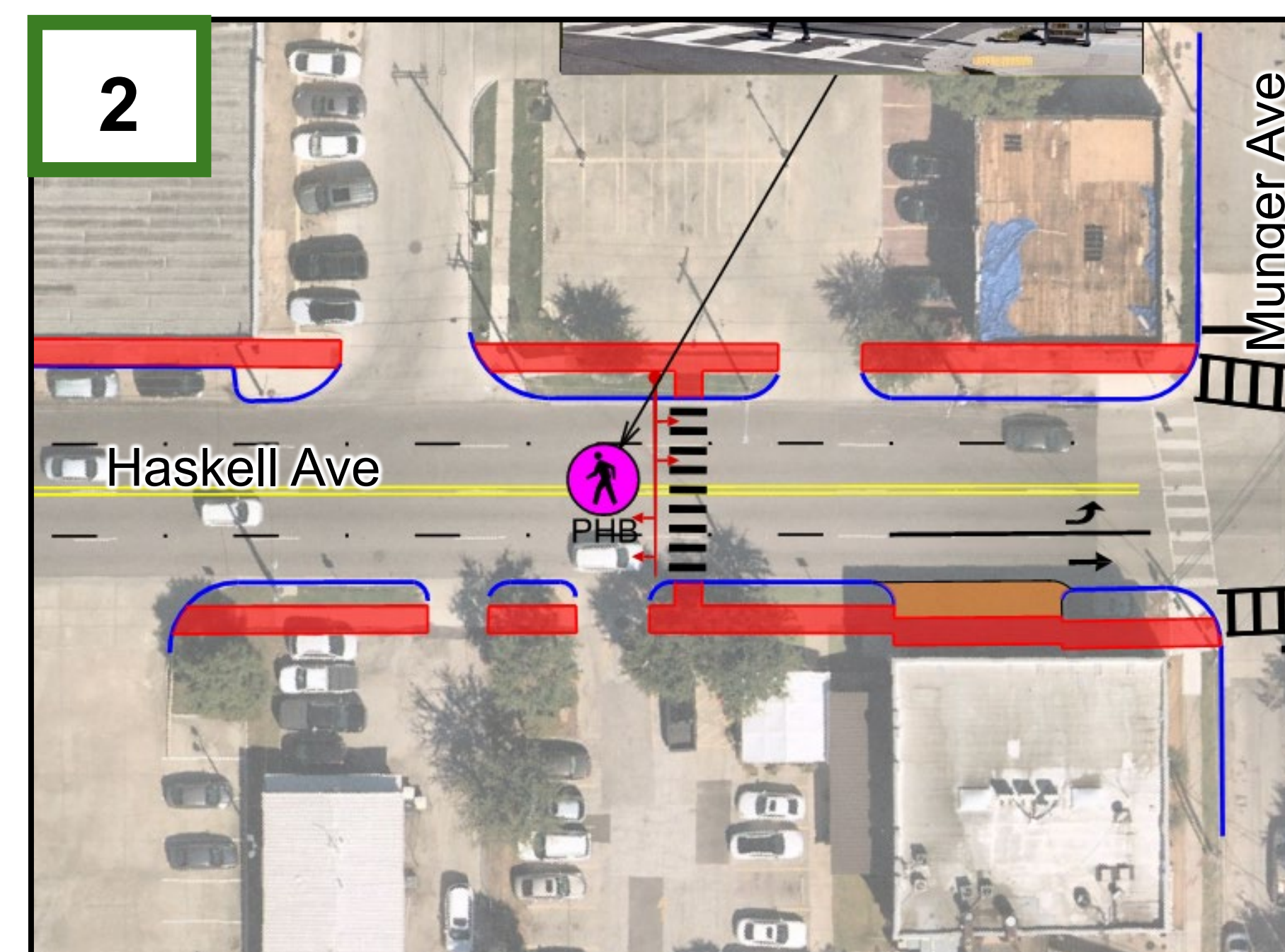
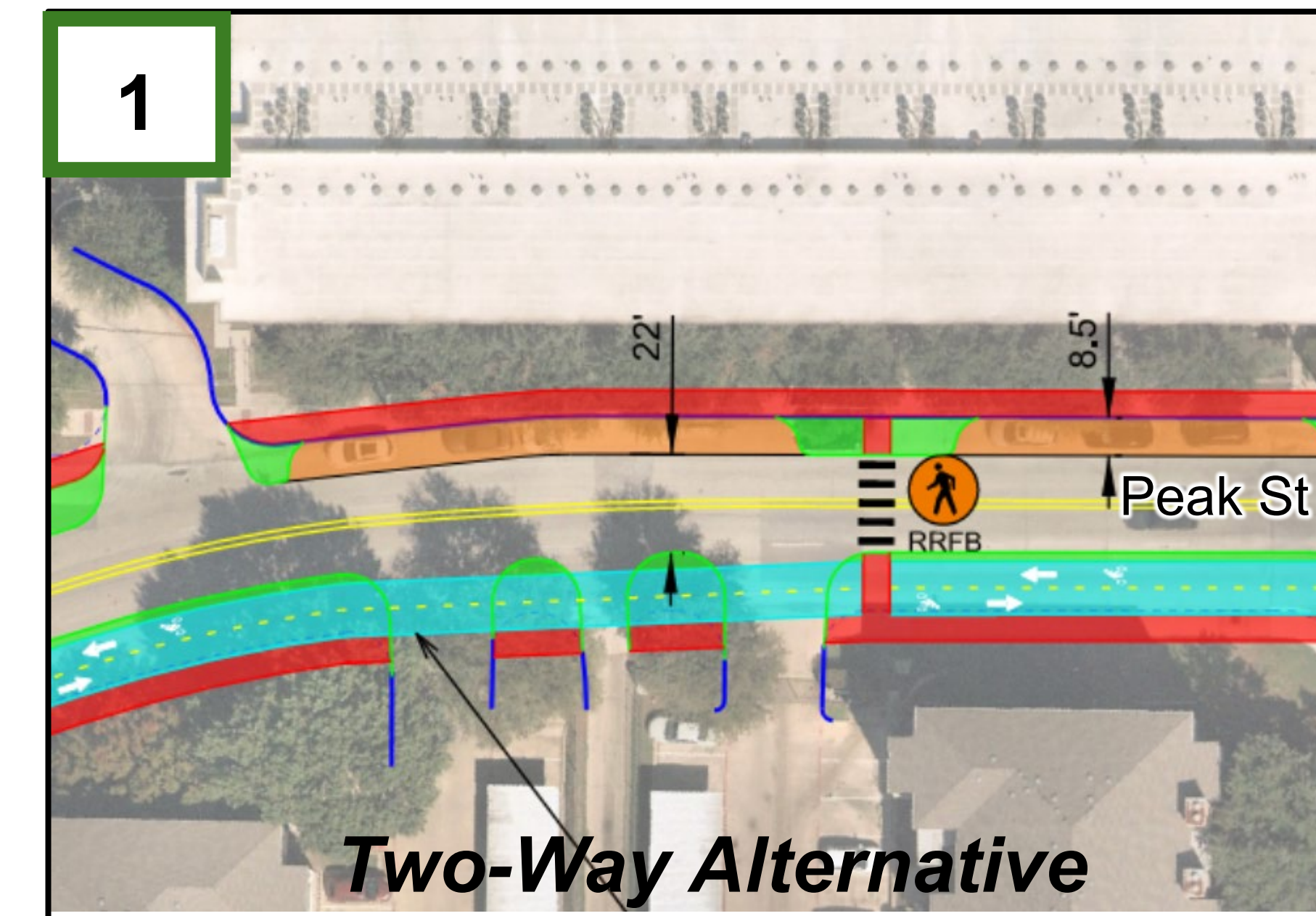
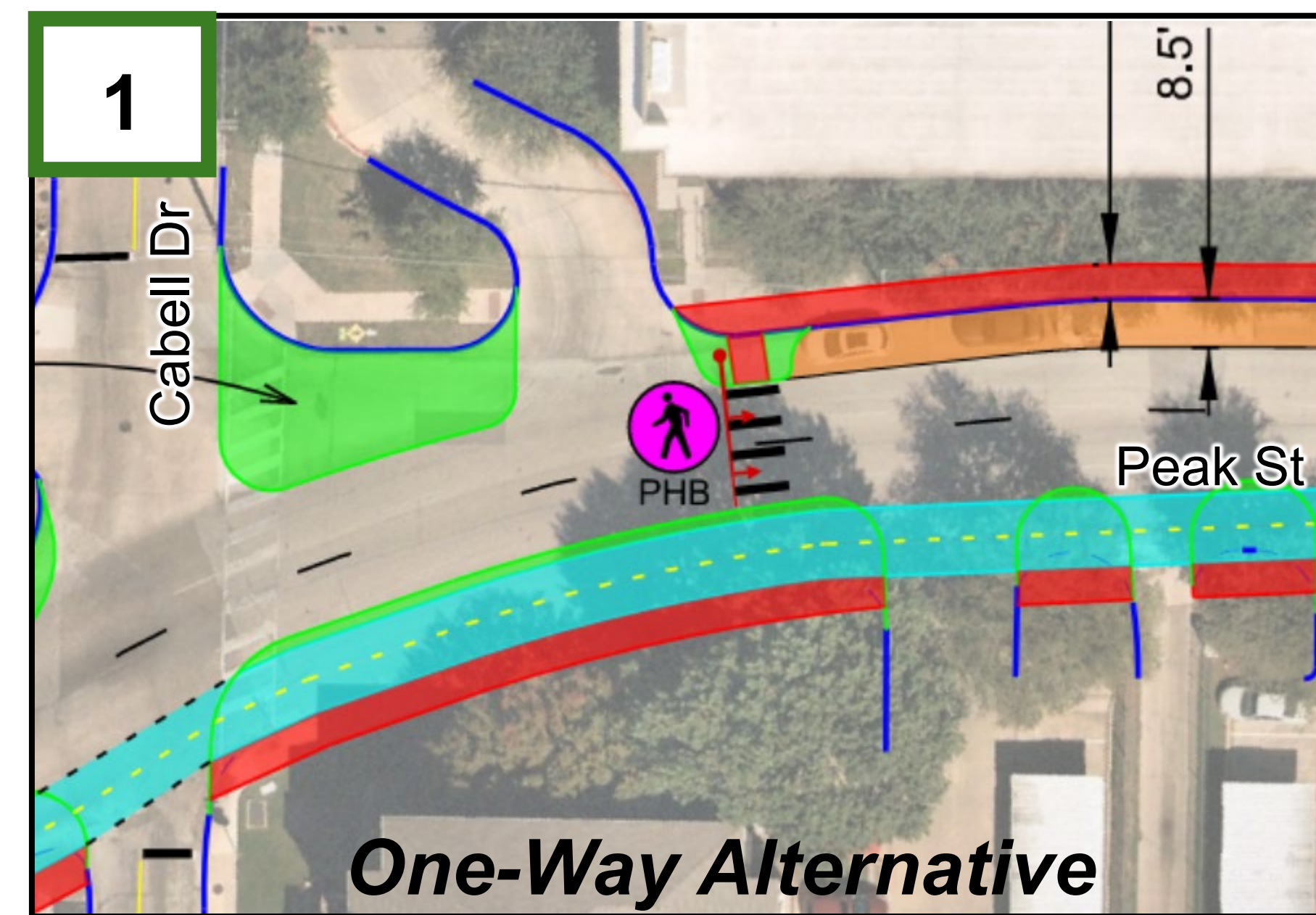


Summary of Proposed Crossing Improvements

Multiple locations along the corridor were assessed as potential locations for installing pedestrian enhancements. Haskell Ave at Munger Ave warranted a Pedestrian Hybrid Beacon (PHB) based on pedestrian volumes alone. Although the warrant for a PHB or an RRFB was not met at Peak St and Cabell Dr, it is still recommended to address the high pedestrian demand. In the alternative 2 (Two-Way configuration), an RRFB is shown further away from Peak/Cabell intersection due to road geometry causing sight distance constraints for two-way traffic. An RRFB warrant was met for the Haskell/Avenue and Cabell Dr intersection; however, a PHB was recommended to serve the high pedestrian demand between Haskell at Cabell and Munger. Although not warranted, an RRRB was recommended at Peak St and Willow St enhance safety of the existing sidewalk and enhance bike connectivity to the Santa Fe trail. Additionally, several existing crosswalks throughout the corridor are recommended to be restriped, and several ramps and sidewalks are recommended to be reconstructed.

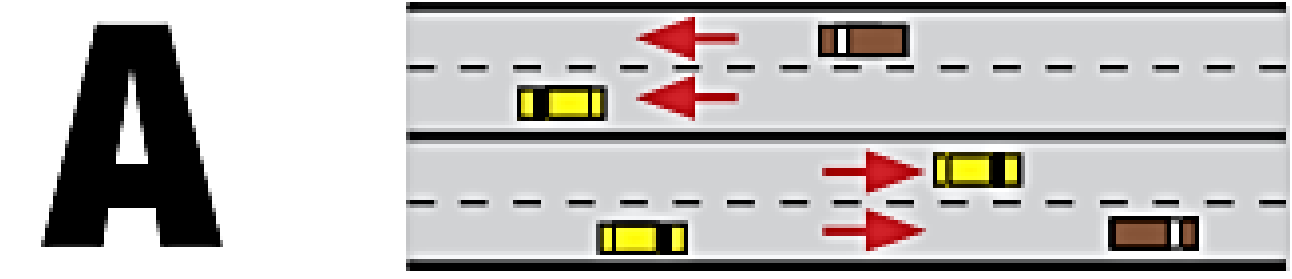
Intersection	Warrant Met Based on Vehicular and Pedestrian Volumes		Recommendation
	RRFB	PHB	
Haskell Ave & Munger Ave	-	✓	Install PHB*
Haskell Ave & Roseland Ave	-	-	None
Haskell Ave & Cabell Dr	✓	-	None*
Haskell Ave & San Jacinto St	-	-	None
Peak St & Swiss Ave	-	-	None
Peak St & Junius St	-	-	None
Peak St & Lemmon Ave	-	-	None
Peak St & Cabell Dr	-	-	Install PHB (Alt. 1)** Install RRFB (Alt. 2)**
Peak St & Willow St	-	-	Install RRFB**

*PHB to be installed between Lafayette and Munger to serve pedestrian demand observed at Cabell and at Munger
 ** RRFB/PHB recommended to enhance safety of existing crosswalk and to enhance bike connectivity

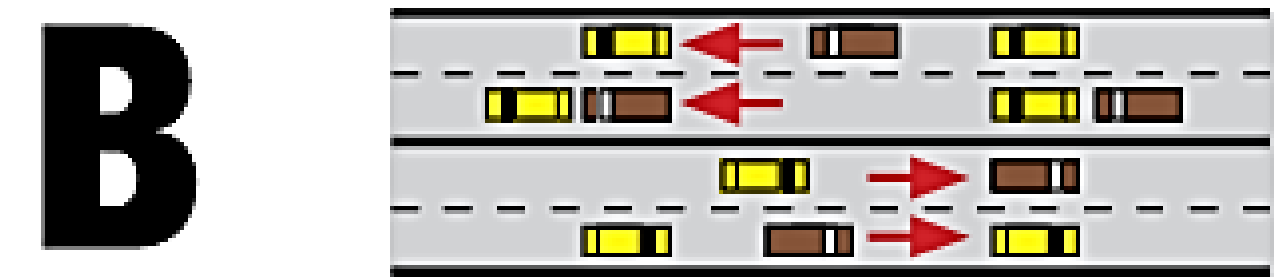




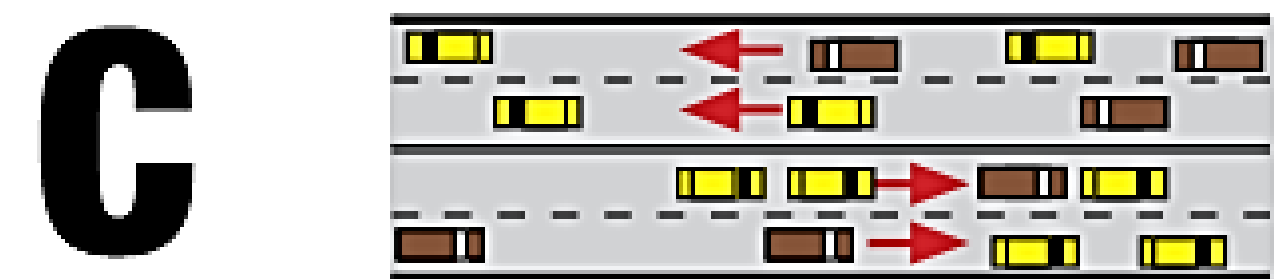
Level of Service - Highway



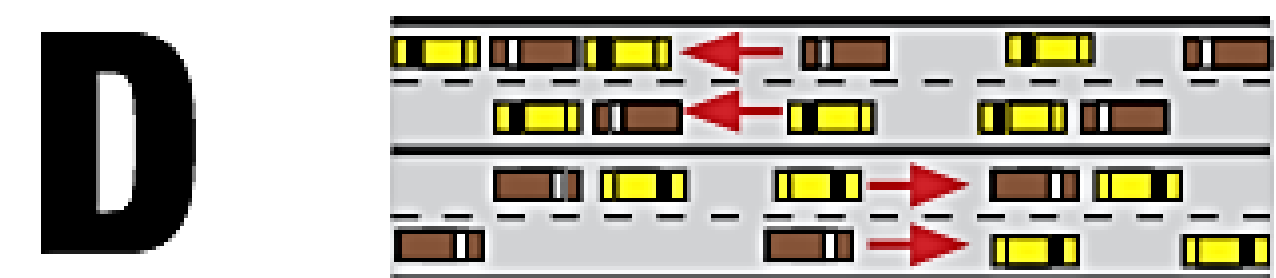
Free flow, low traffic density.



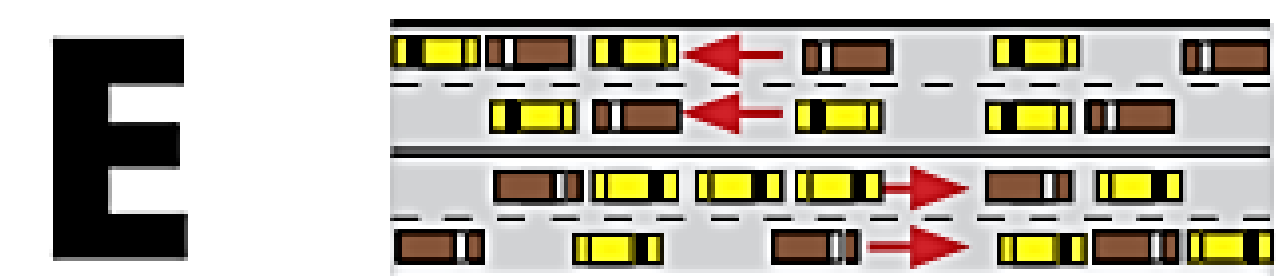
Minimum delay, stable traffic flow.



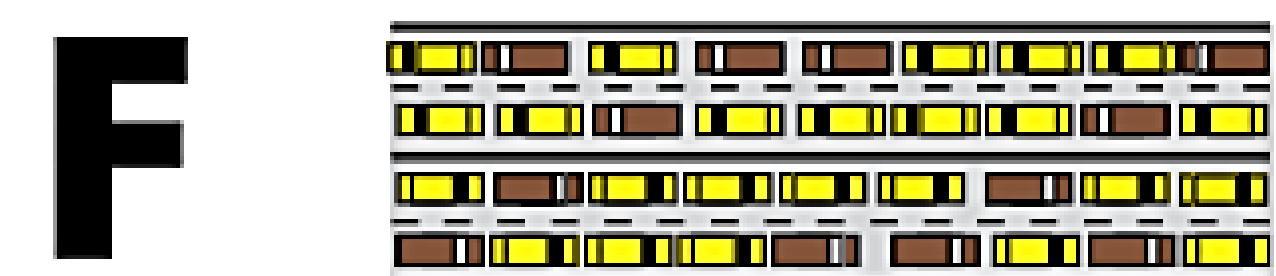
Stable condition, movements somewhat restricted due to higher volumes, but not objectionable for motorists.



Movements more restricted, queues and delays may occur during short peaks, but lower demands occur often enough to permit clearing, preventing backups.



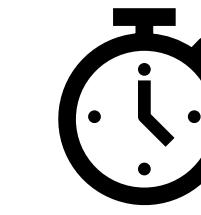
Actual capacity of the roadway involves delay to all motorists due to congestion.



Forced flow with demand volumes greater than capacity resulting in congestion.

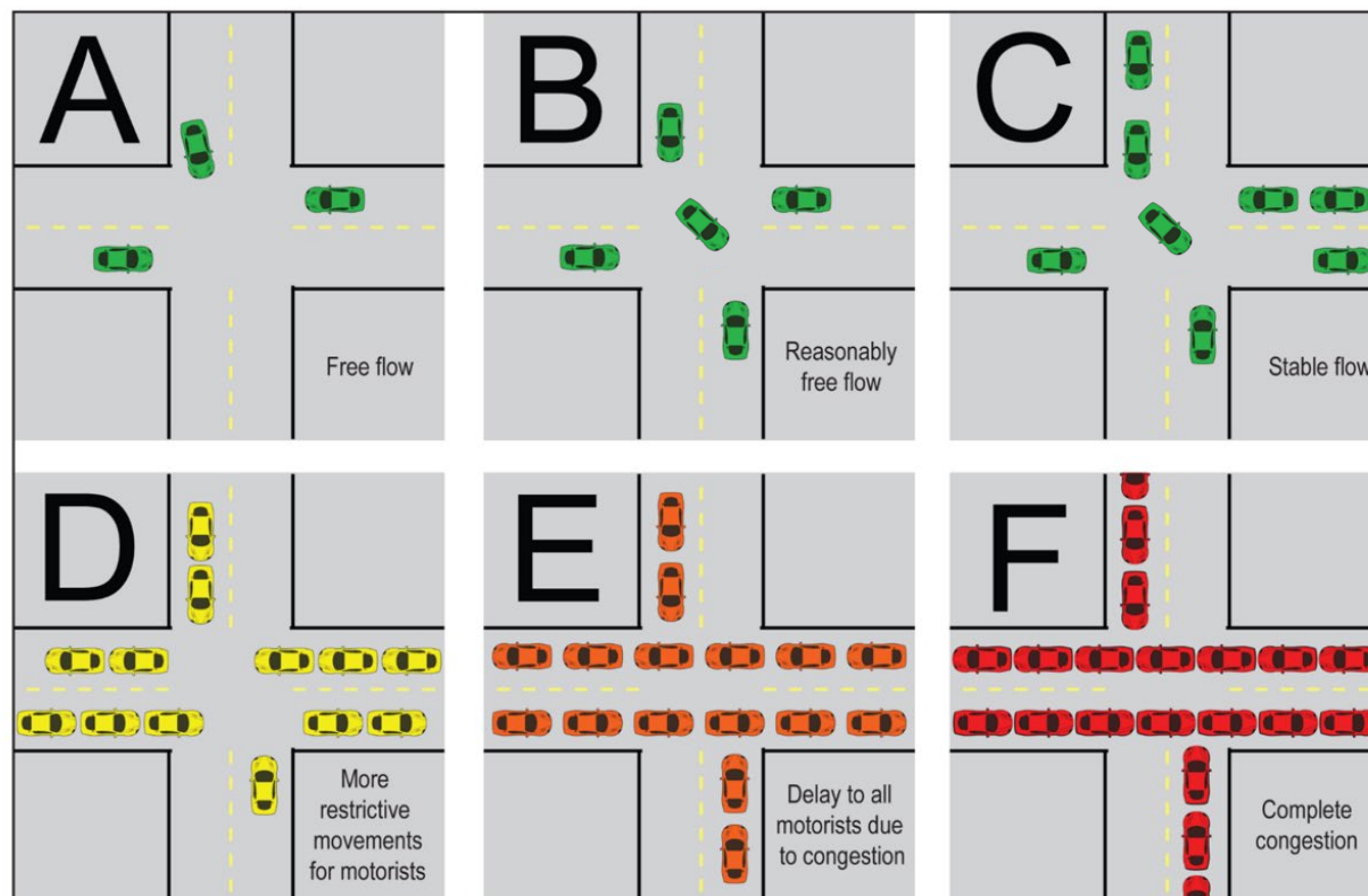
What is Level of Service (LOS)?

Level of Service (LOS) is a letter grade that assesses the congestion at an intersection or along a roadway. For intersections, it is typically assigned based on the **Average Total Delay in seconds per vehicle**. For roadways, it is usually assigned based on the **volume over capacity ratio (VIC)**. An A or B grade indicates very little delay or congestion, while a E or F grade indicates heavy congestion.



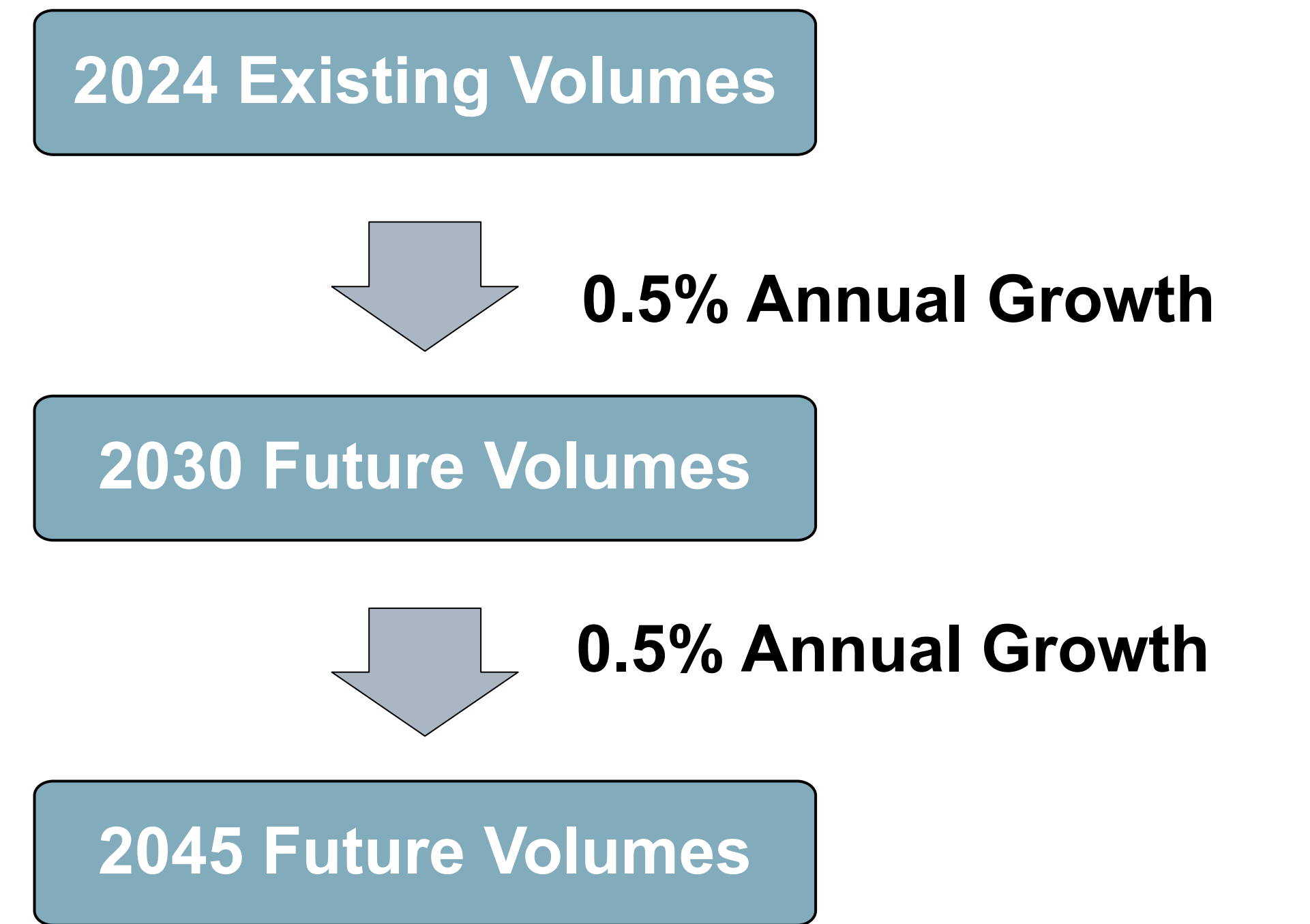
Level of Service - Intersection

LOS	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50



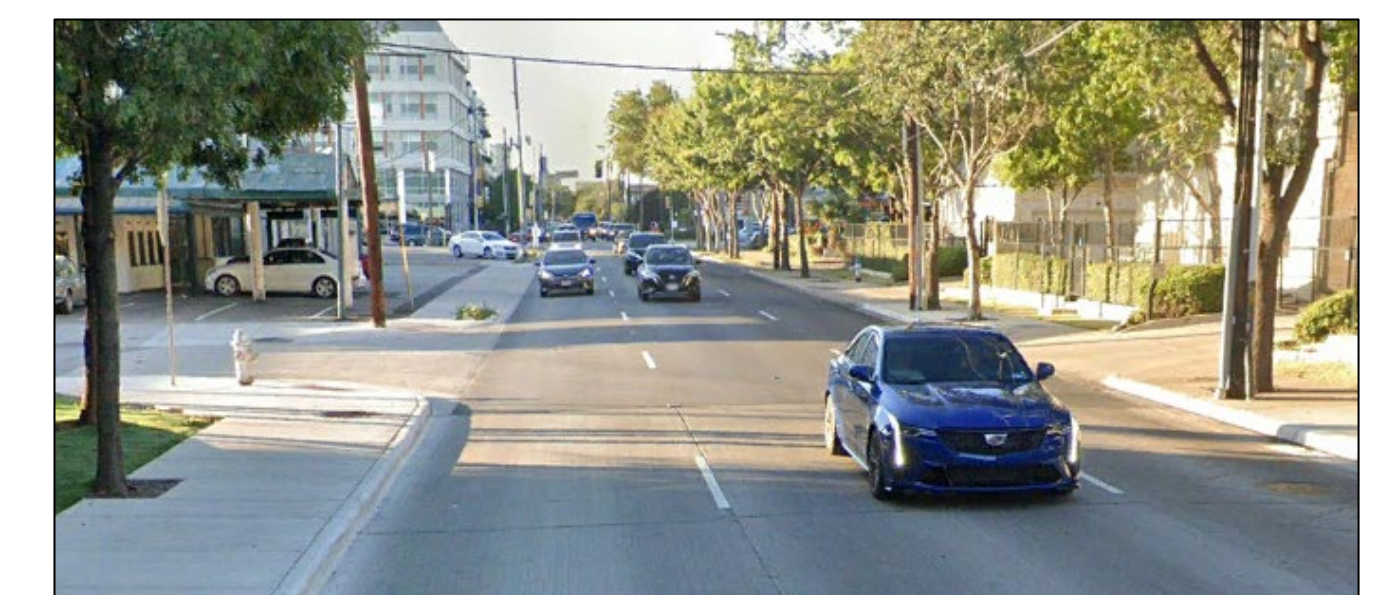
Projected Traffic Volumes

Existing traffic counts were collected at several intersections along the corridor. Using these counts and historical volumes from TxDOT, an **annual growth rate of 0.5%** was determined from **2024 to 2030**, and an annual growth rate of **0.5%** from **2030 to 2045**. This growth rate was used to **increase the existing traffic volumes to both 2030 and 2045 traffic volumes**, which were then used in the analysis.



Future Roadway Capacity

Through 2045, **excess capacity** is expected to be available on Peak Street between Lemmon Ave and Gaston Ave with the **existing 3-lane one-way configuration**. This leaves **over 55% of available traveled space** underutilized. As part of this study, we looked at potential improvements that could **better-utilize the available space, control speeds, and provide connectivity** from the Santa Fe Trail and future trails to neighborhoods and nearby amenities.





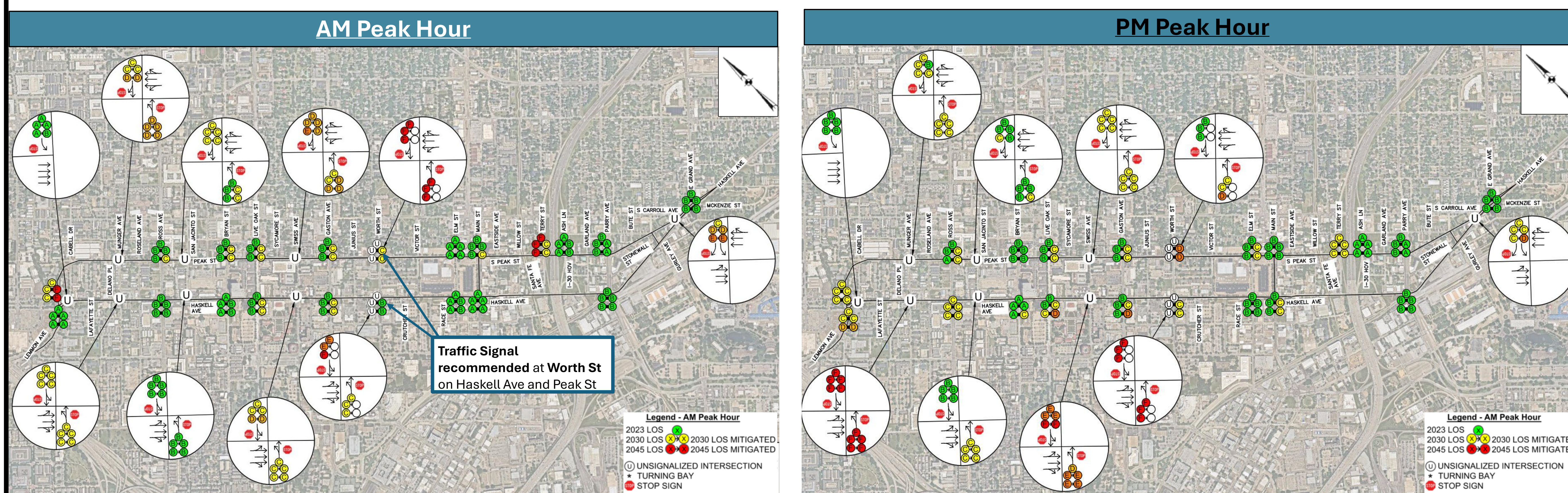
LOS Evaluation

The LOS at each signalized intersection and select stop-controlled intersections were evaluated using the **average total delay with and without signal timing adjustments**. The **Two-Way configuration had more delay than the One-Way configuration**. However, after signal timing adjustments, **the majority of the intersections performed adequately in both the AM and PM peak hour**. **Stop-controlled intersections** that are projected to perform at LOS E and F in 2045 were evaluated for signalization, but most intersections **did not meet signal warrants**. It is not uncommon for stop-controlled approaches to fail during the peak traffic hours due to the higher volumes. Therefore, no additional mitigations were recommended.

Signal Warrant Information

A signal warrant was conducted on all unsignalized intersections that were operating at a **LOS of E or F**. For both the AM and/or PM scenarios, a traffic signal was warranted for Peak at Worth and Haskell at Worth.

Intersection LOS Map with Signal Timing Adjustments **One-Way**

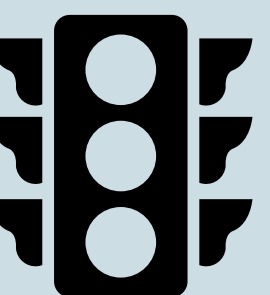


Traffic Signal Warrants

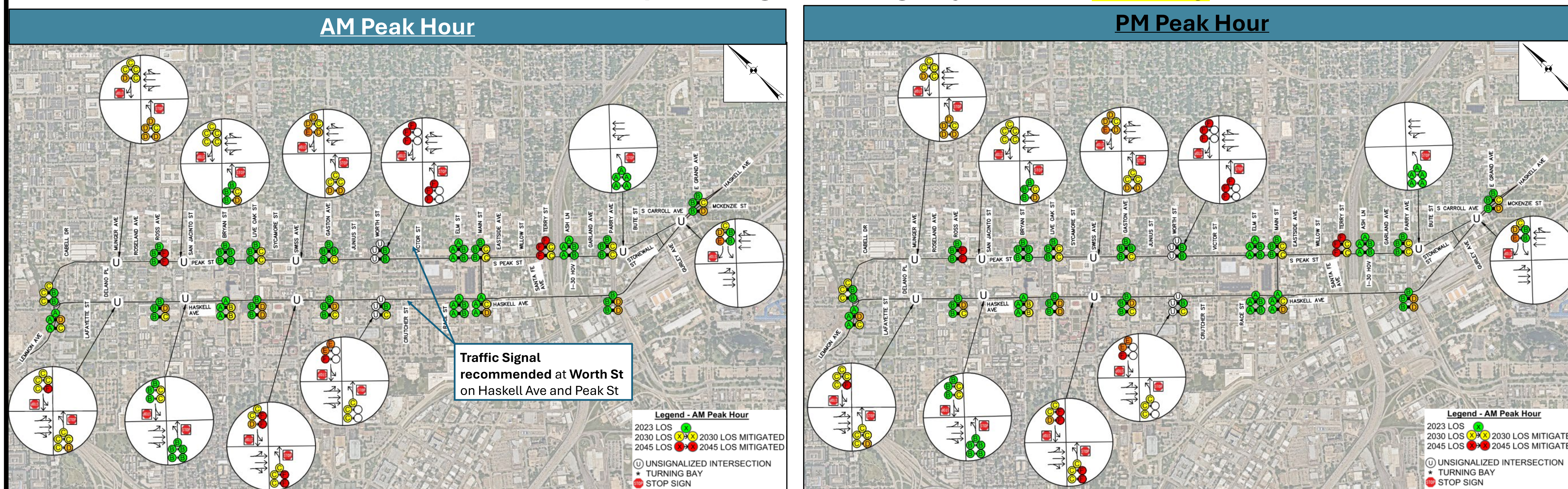
Intersection	Scenario Year	Warrant Met?
Peak at Worth	2030	No
	2045	Yes
Haskell at Worth	2030	Yes
	2045	Yes

One-Way LOS

18 out of 19 signalized intersections in the AM and **19 out of 19** signalized intersections in the PM peak hour are projected to operate at **LOS D or better** in 2045 with the signal timing adjustments.

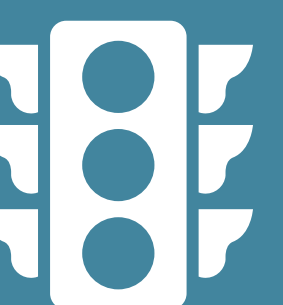


Intersection LOS Map with Signal Timing Adjustments **Two-Way**



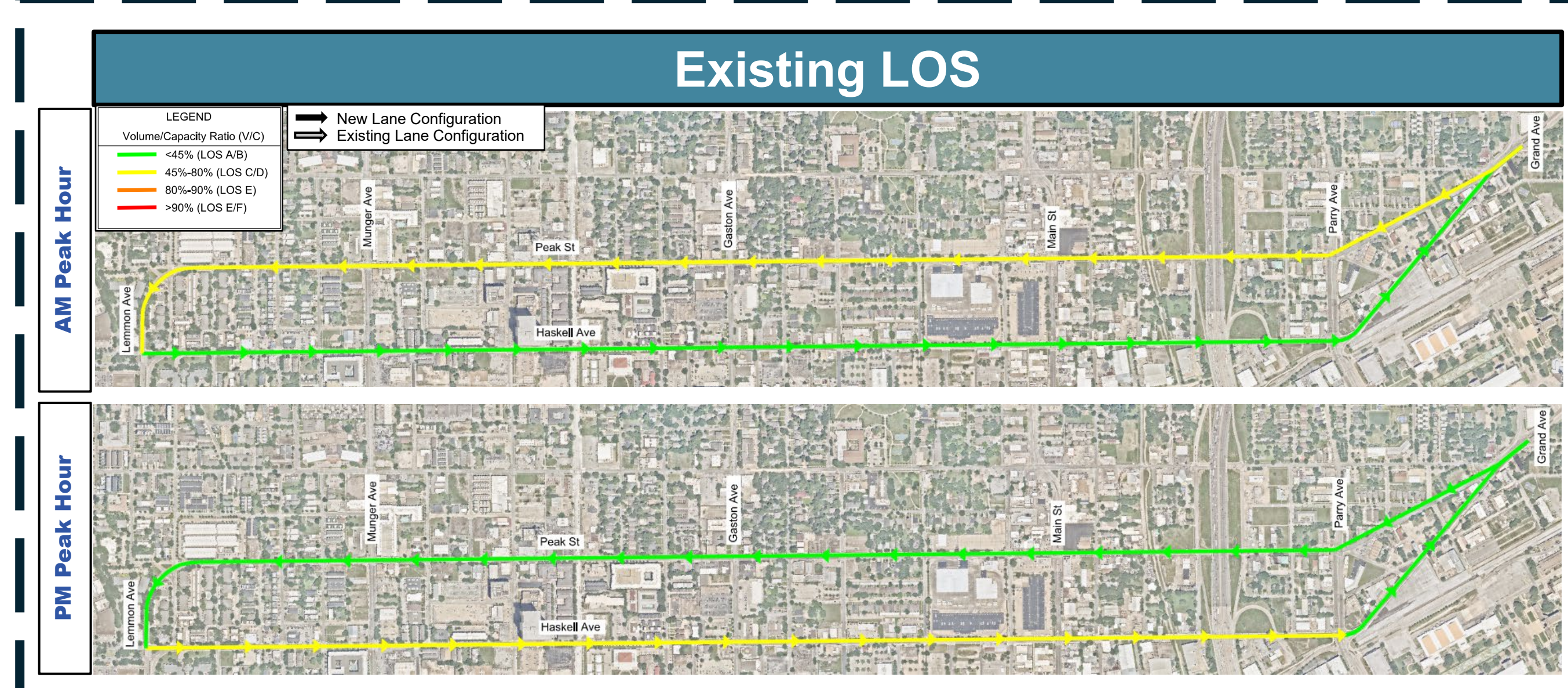
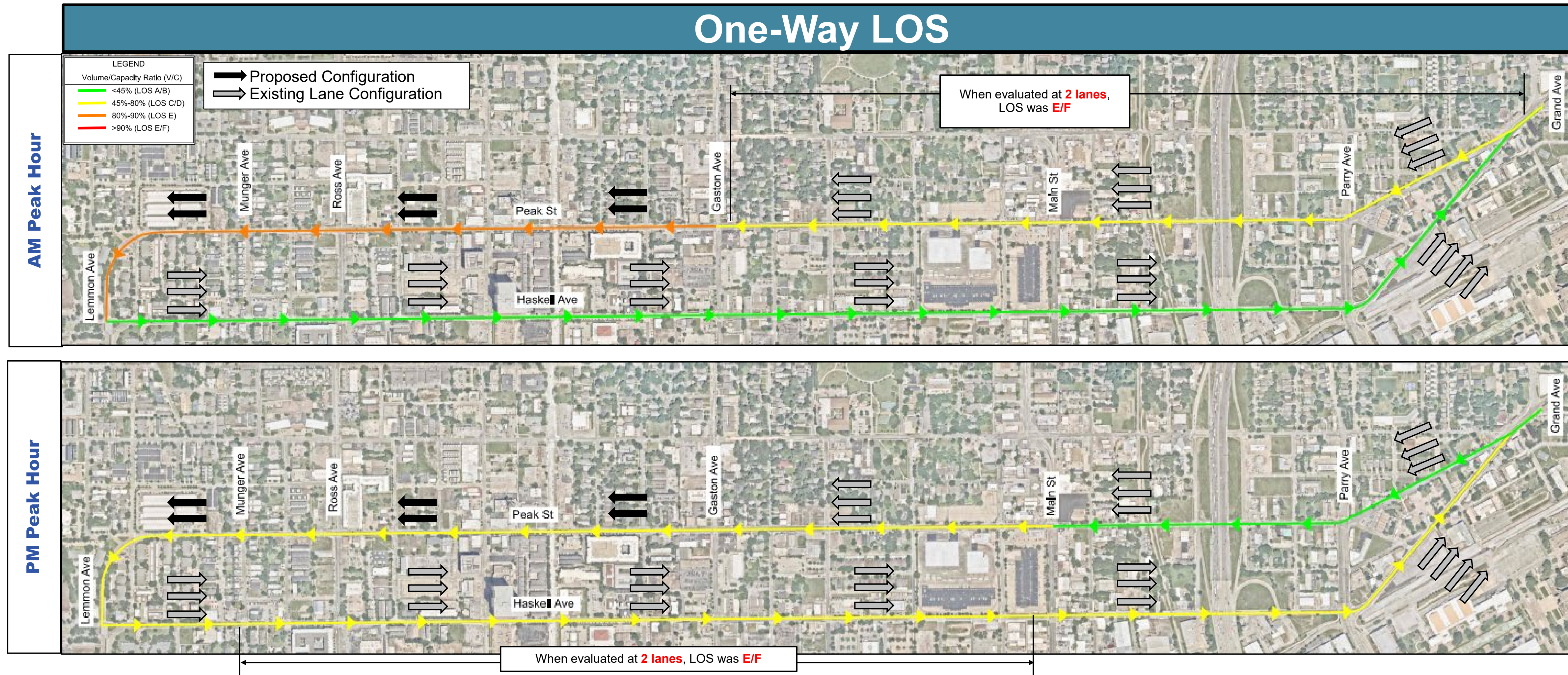
Two-Way LOS

18 out of 19 signalized intersections in the AM and **16 out of 19** signalized intersections in the PM peak hour are projected to operate at **LOS D or better** in 2045 with the signal timing adjustments.



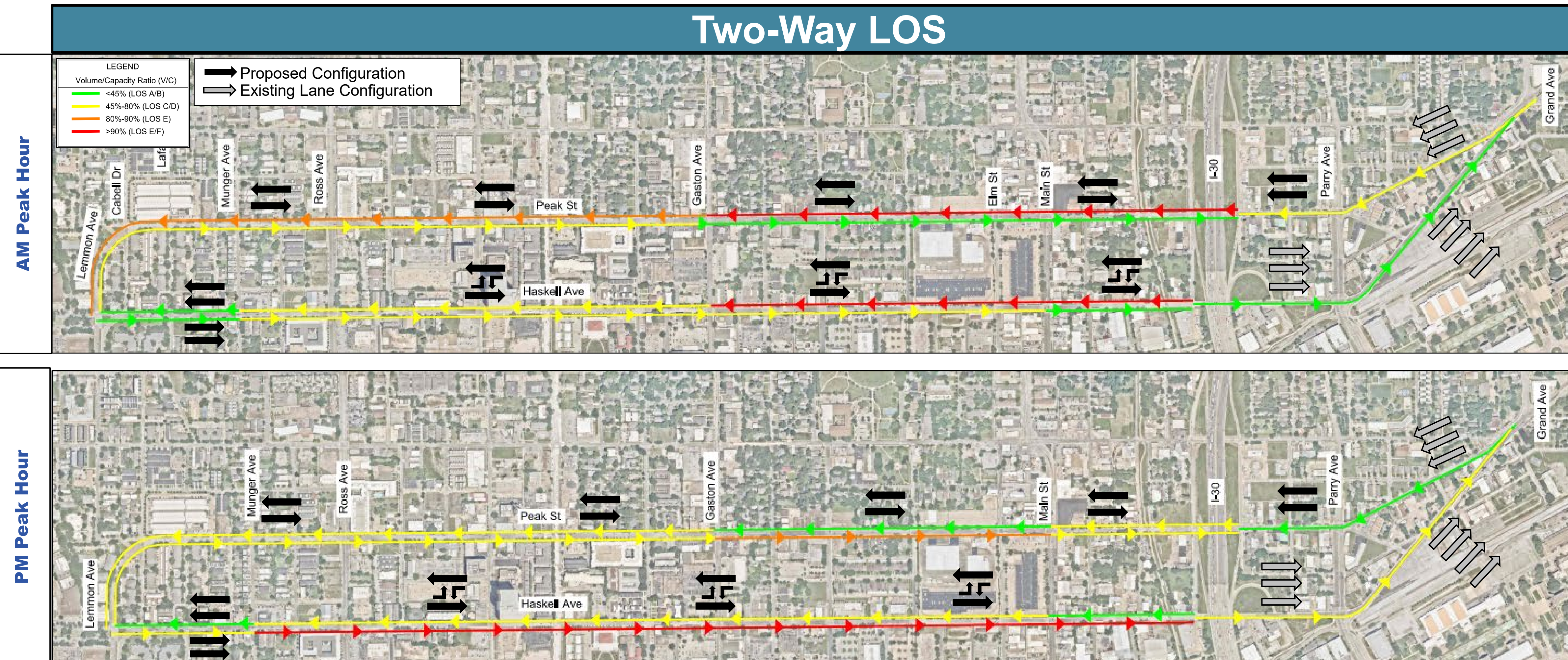
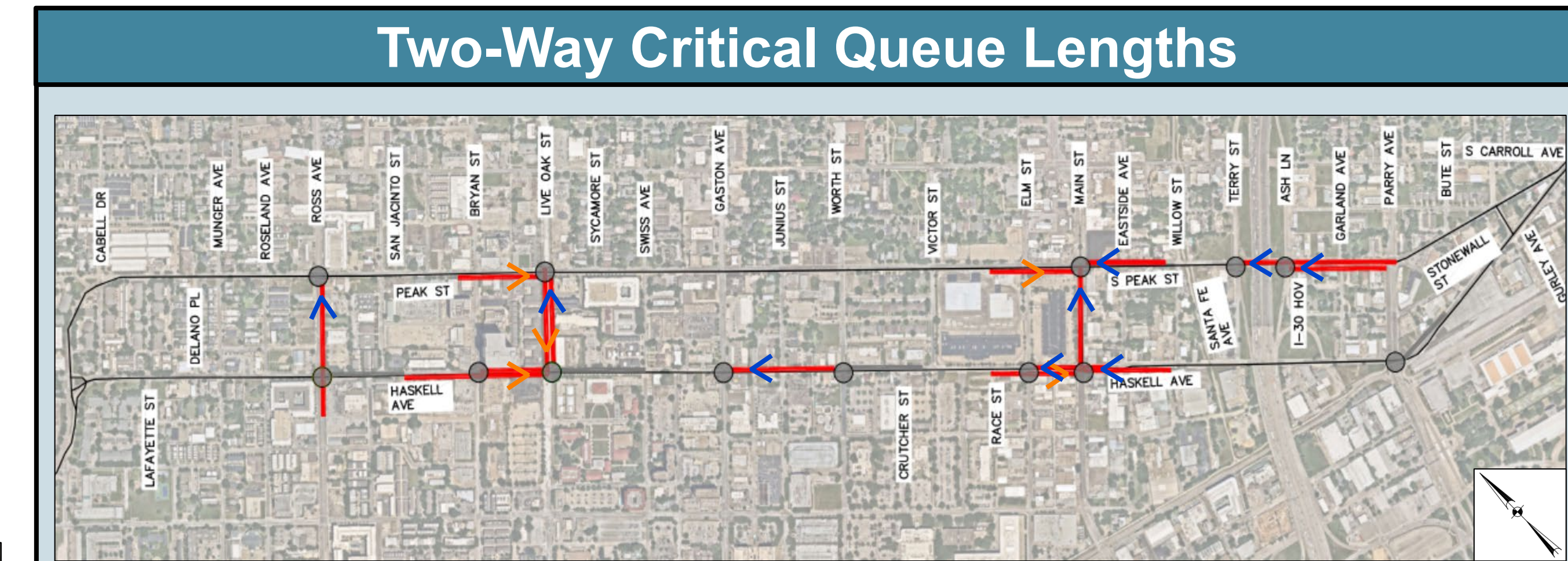


Link Analysis – 2045



In 2045, the existing configuration on Haskell Ave and Peak St is expected to perform at LOS C/D.

A road diet was evaluated along both corridors and is only recommended along Peak Street from Lemmon Ave to Gaston Ave having capacity constraints.





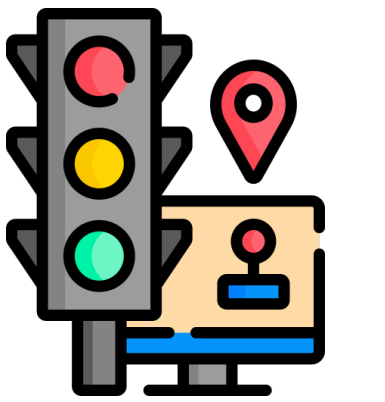


Intersection	Approach	2045 AM Queue (FT)	2045 PM Queue (FT)
Haskell @ Ross	NB	596	328
Haskell @ Bryan	NB	521	155
Haskell @ Live Oak	NB	691	204
	SB	616	1061
Haskell @ Gaston	NB	755	405
	WB	754	74
Haskell @ Worth	NB	566	31
	WB	668	190
Haskell @ Elm	NB	571	262
	NB	664	132
Haskell @ Main	SB	201	634
	WB	668	190
Haskell @ Parry	NB	558	234
	EB	413	1011
Peak @ Ross	SB	383	742
	EB	137	564
Peak @ Live Oak	EB	137	564
	NB	581	134
Peak @ Main	SB	232	664
	NB	1175	343
Peak @ Terry	NB	1175	343
	NB	723	150

The queue lengths shown in the table above refer to the length of vehicles waiting at a signalized intersection. The red columns denote the intersections with queue lengths that spill into other intersections. With the two-way conversion, long queue lengths are expected with three intersections over 1000' of queuing.

Two-way conversion was evaluated along both corridors and would be expected to have **more significant peak hour congestion** compared to the existing one-way alternative. With the two-way conversion, **40%** of southbound traffic rerouted from Haskell Ave to Peak St and **55%** of northbound traffic rerouted from Peak St to Haskell Ave. For this analysis, trip rerouting assumed more **regional trips** would utilize **Haskell Avenue** due to better connectivity.



Haskell Ave / Peak St - Alternative Comparison Table

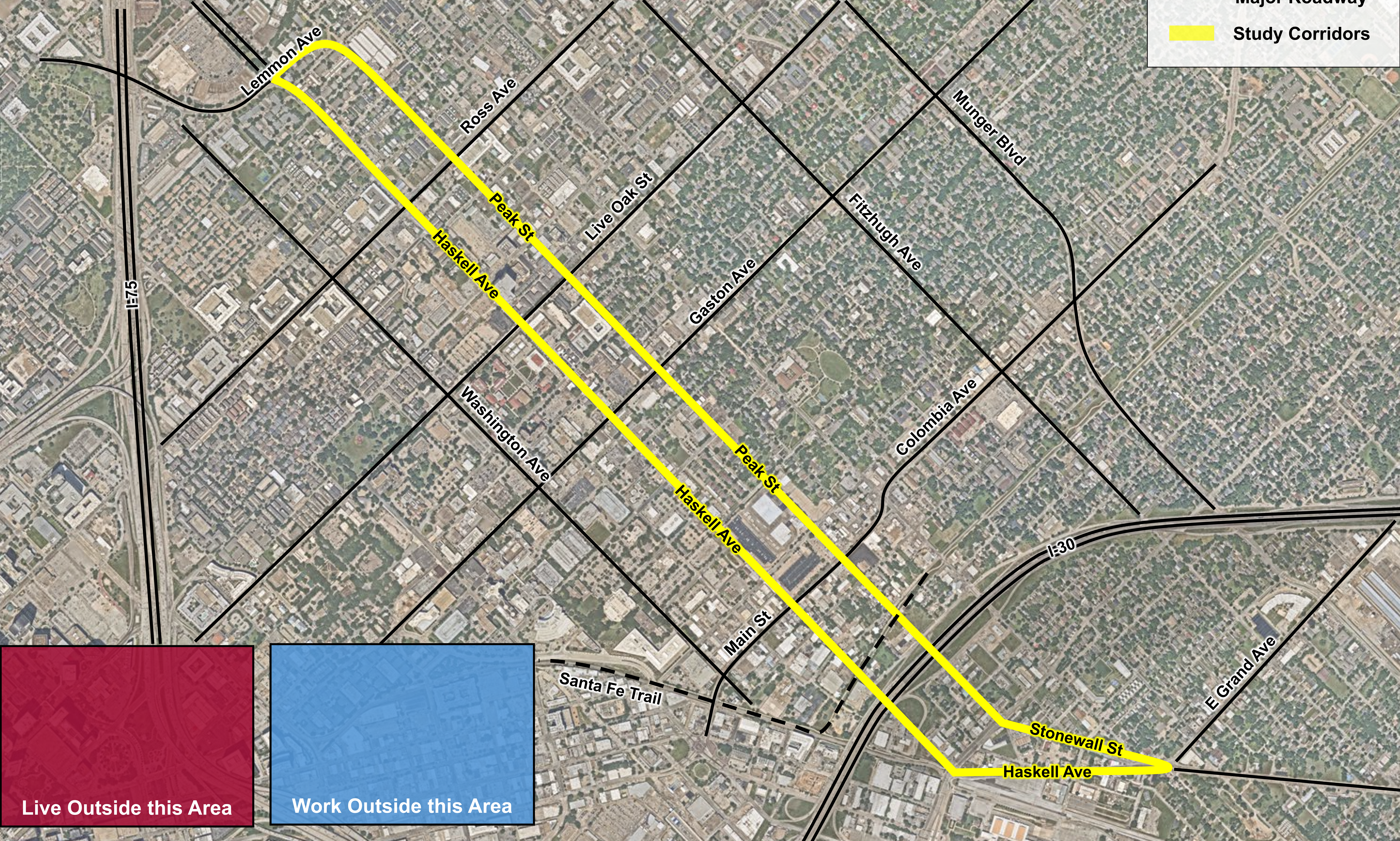
Metric	Two-Way Conversion Alternative		One-Way Alternative		No Build	
 <p>Cost</p>	<p>Major cost improvements include:</p> <ul style="list-style-type: none"> - Traffic signal improvements on both streets - Two-way conversion (major intersection reconfigurations) - Two-way cycle track on Peak St - Sidewalk improvements on both streets <p>Cost: \$\$\$\$</p>	✓	<p>Major cost improvements include:</p> <ul style="list-style-type: none"> - Traffic signal improvements on Peak St - Two-way cycle track on Peak St - Sidewalk improvements on both streets <p>Cost: \$\$</p>	✓	<p>Major cost improvements include:</p> <ul style="list-style-type: none"> - Sidewalk improvements on both streets <p>Cost: \$</p>	✓
 <p>Safety</p>	<p>Proposed lane reduction on Peak St should lead to traffic calming and a shorter crossing distance for pedestrians. Two-way configuration should lead to greater traffic calming but also increases conflict points at intersections.</p>	✓	<p>Proposed lane reduction on Peak St should lead to traffic calming and a shorter crossing distance for pedestrians. The one-way configuration has fewer conflict points at intersections than the two-way configuration.</p>	✓	<p>Minimal improvements to safety.</p>	✓
 <p>Traffic Operations</p>	<p>4 signalized intersections expected to be over capacity and operate at LOS E/F through 2045. Volume/capacity ration exceeds 90% in several areas. Queue lengths exceed 500' or are expected to spill into the adjacent intersections. Potential for some traffic diverting to parallel streets due to poor LOS. Left-turn movements may need to be restricted on Peak St in the future unless left-turn lanes are provided.</p>	✓	<p>Apart from one intersection, all signalized intersections are expected to operate at LOS D or better through 2045. The link analysis performs at LOS D or better in 2045. Queue lengths are not expected to be significant.</p>	✓	<p>No changes in traffic operations that could negatively impact delay.</p>	✓
 <p>Level of Comfort for Bicyclists and Pedestrians</p>	<p>Proposed separated two-way cycle track with 6' sidewalk allows higher level of comfort for bicyclists and pedestrians.</p>	✓	<p>Proposed separated two-way cycle track with 6' sidewalk allows higher level of comfort for bicyclists and pedestrians. Proposed lane reduction on Peak St will shorten crossing distance for pedestrians.</p>	✓	<p>Sidewalks widened to 6' where there is adequate public right-of-way. No bicycle facility.</p>	✓
 <p>Ease of Access to Businesses</p>	<p>More routes to access businesses. More alleviation routes during traffic congestion. However, when paired with high intersection delays, a two-way conversion may not result in these circulation advantages. The proposed cycle track and improved sidewalks lead to better walkability and access for pedestrians and bicyclists to businesses along the corridor.</p>	✓	<p>Keeps the same access to businesses that exists today. However, there could be less access to certain businesses along the corridors compared to a two-way network. The cycle track and improved sidewalks lead to better walkability and access for pedestrians and bicyclists to businesses along the corridor.</p>	✓	<p>Keeps the same access to businesses that exists today.</p>	✓



Use a **red pin** to indicate where you live, use a **blue pin** to indicate where you work

LEGEND

- Major Roadway
- Study Corridors





Haskell Ave/Peak St Transportation Corridor Study



**Public Meeting
October 22nd**