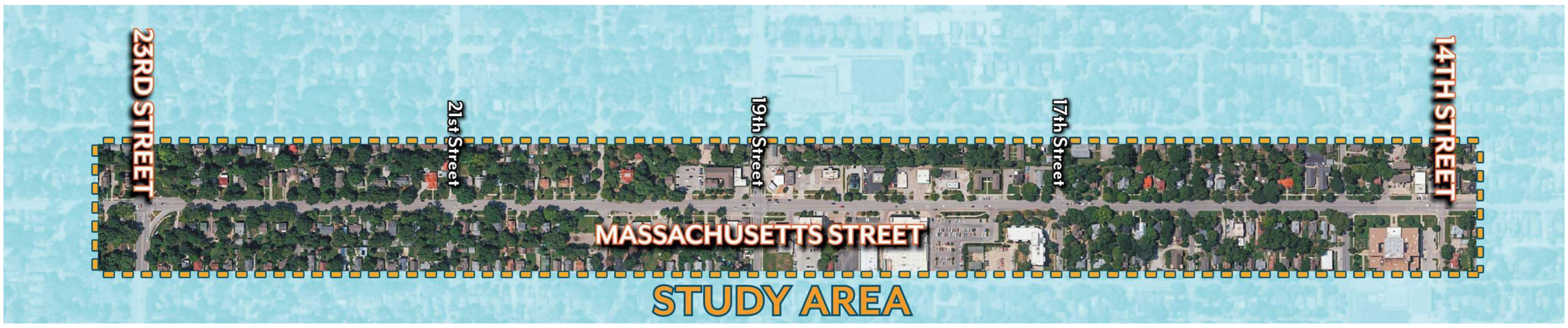
MASS. STREET MULTIMODAL IMPROVEMENTS STUDY

14th to 23rd Street

ABOUT THE PROJECT



PROJECT PURPOSE:

The City of Lawrence is performing a Multimodal Improvements Study to provide recommendations for construction of multimodal facilities on Massachusetts Street from 14th Street to 23rd Street.

PROJECT BACKGROUND:

- Massachusetts Street from 14th Street to 21st Street is a link in the future primary network in the Lawrence Bikes Plan.
- Massachusetts from 14th to 19th is on the Safe Routes to School network.
- Massachusetts Street is a minor arterial street and the Pedestrian Plan calls for connected sidewalks on both sides of the street.
- This project will provide recommended improvements to connect to the recently constructed bicycle boulevard on 21st Street between Iowa and Mass.
- This project will complete the gap in the bike network and improve safe multimodal access to downtown Lawrence.

PROJECT SCHEDULE:

Open House #1 - October 2023

Concept Development
- Oct 2023 to Jan 2024

Open House #2 - Jan 2024

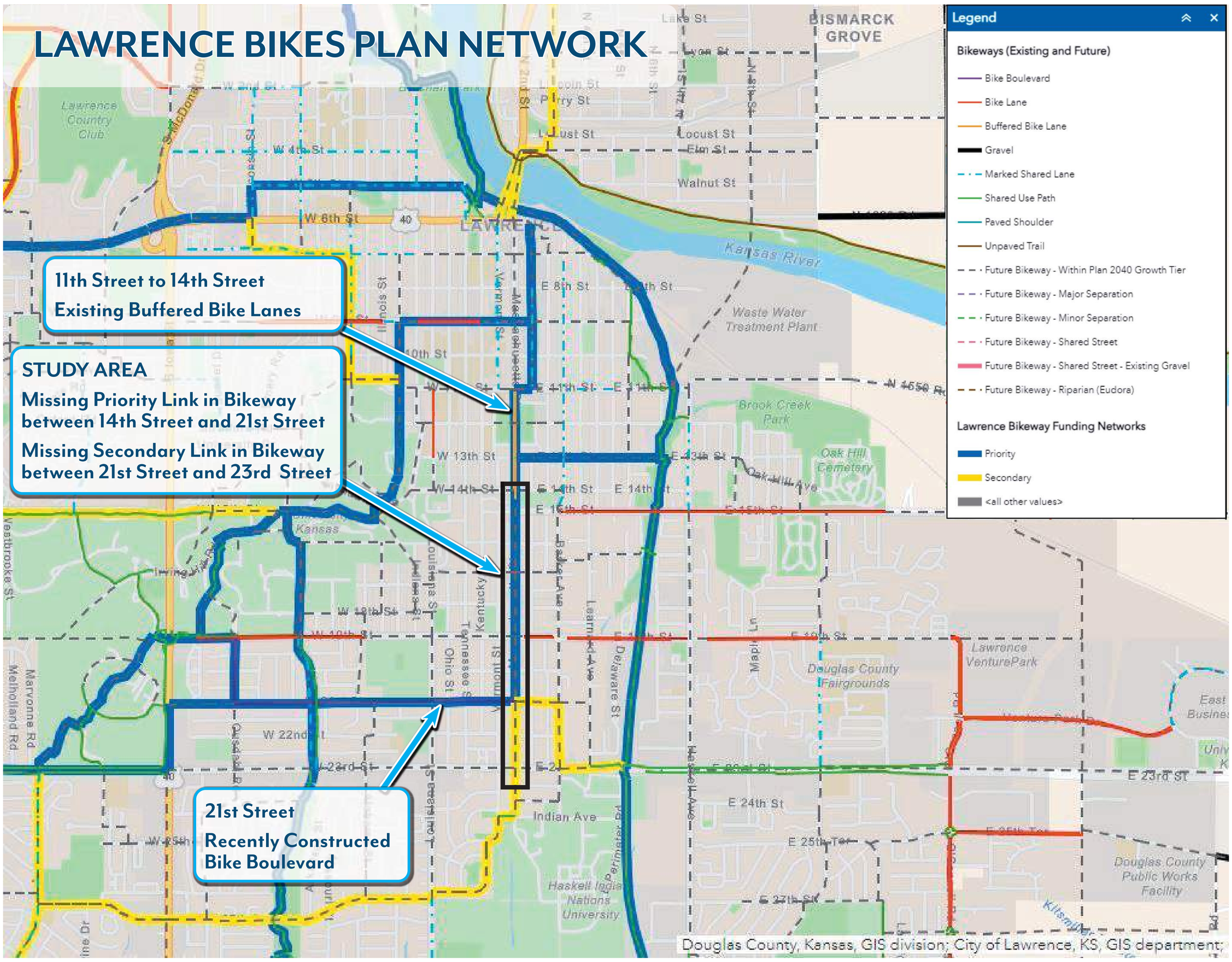
Concept Refinement
- Jan 2024 to Mar 2024

Open House #3 - Mar 2024

Concept Approval - Spring 2024

Potential Funding & Design
- Spring 2024 to Winter 2024

Construction - TBD

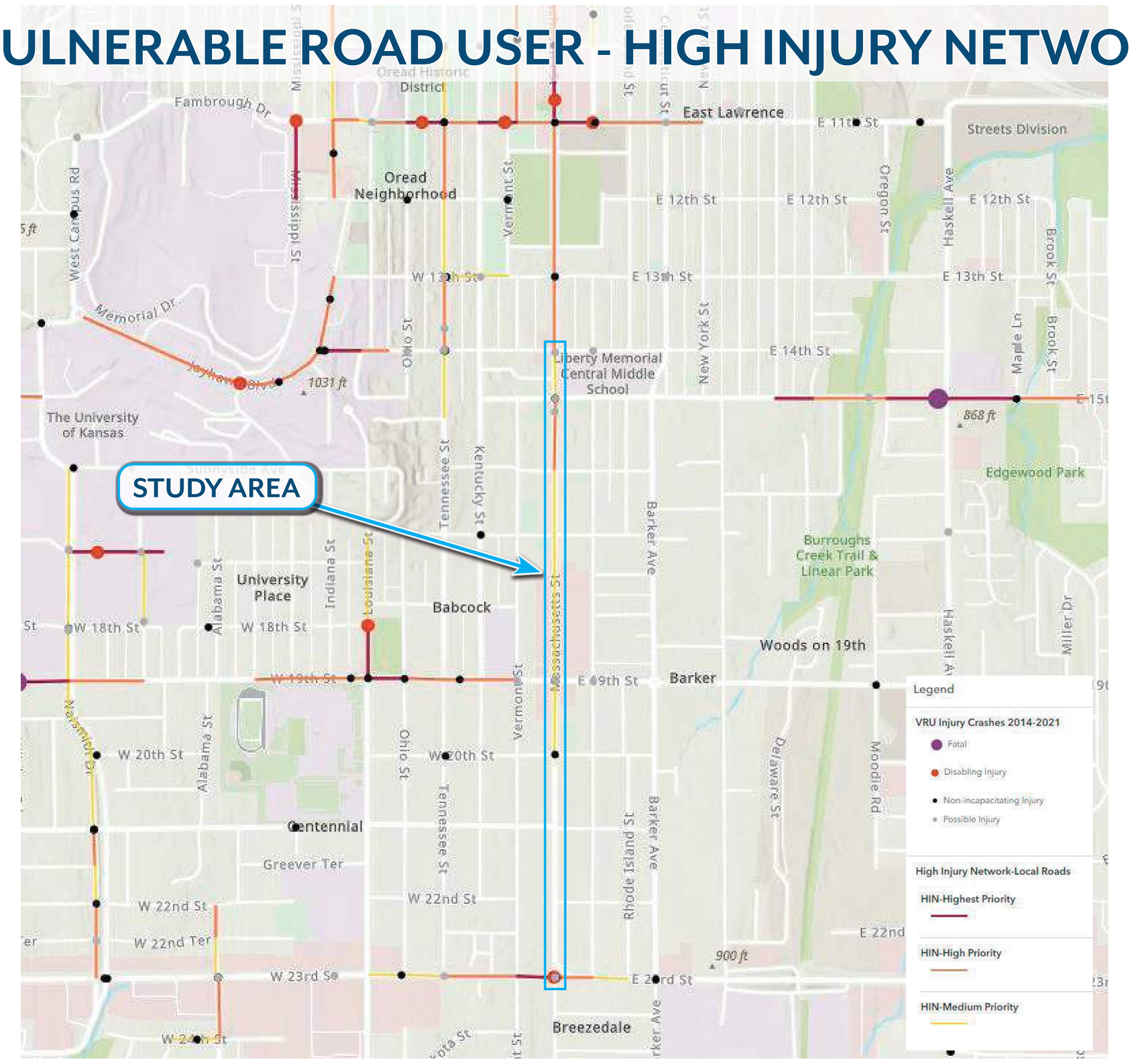


Lawrence KANSAS TREKK Shockey

MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

ABOUT THE PROJECT

KDOT VULNERABLE ROAD USER - HIGH INJURY NETWORK MAP



LAWRENCE BIKE LEVEL OF COMFORT MAP

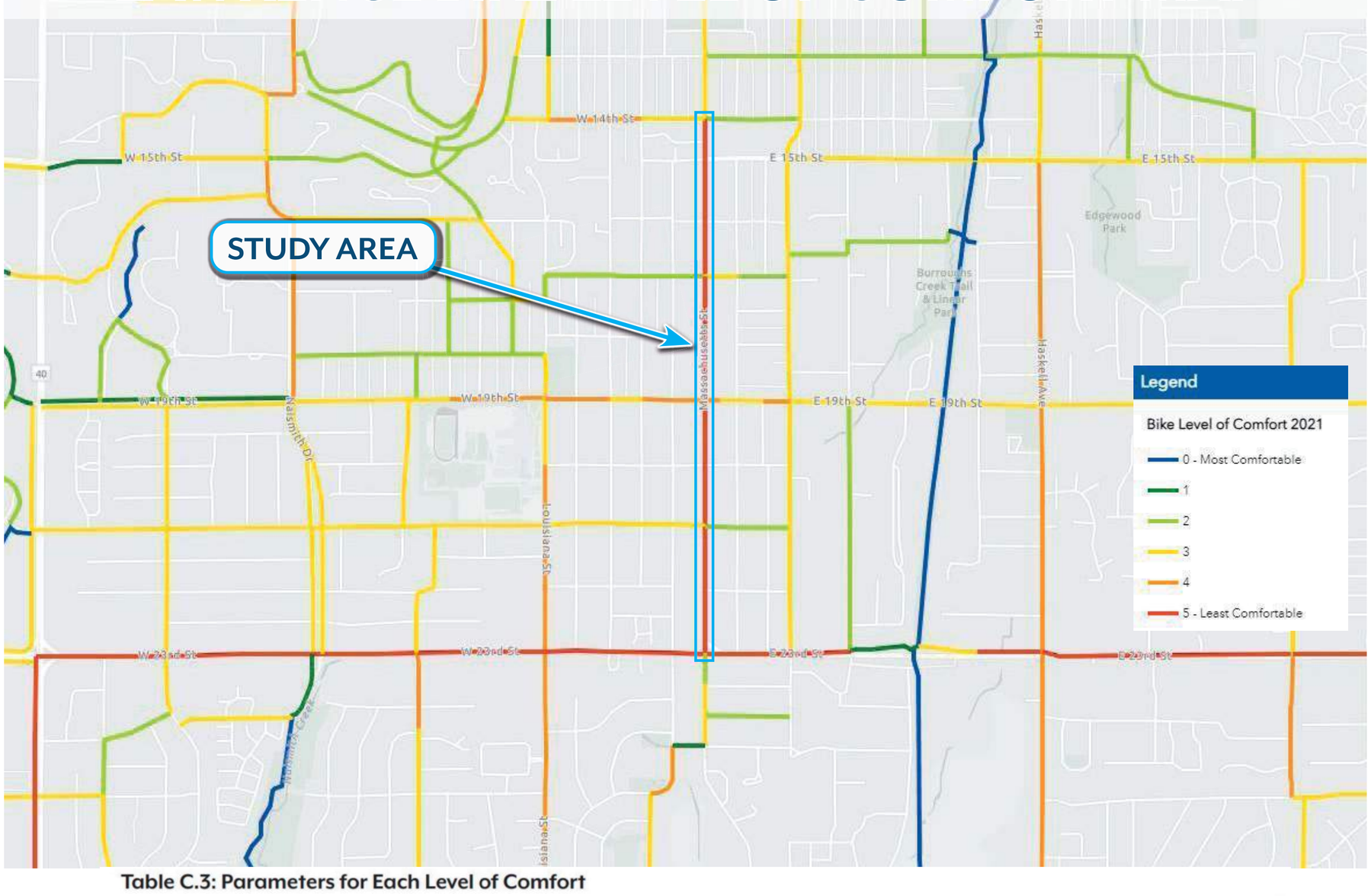


Table C.3: Parameters for Each Level of Comfort

	Existing Facility Type	0 (most comfortable)	1	2	3	4	5 (least comfortable)
major separation	shared use path	not side path	side path, <=13,000 vehicles, <=45 mph	side path, <=20,000 vehicles, <=45 mph	side path, > 20,000 vehicles OR > 45 mph		
major separation	protected bike lane/cycle track		<=13,000 vehicles, <=45 mph	<=20,000 vehicles, <=45 mph	>20,000 vehicles OR >45 mph		
minor separation	buffered bike lanes		<=4,000 vehicles, <=30 mph	<=6,000 vehicles, <=30 mph	<=13,000 vehicles, <=30 mph	<= 20,000 vehicles, <=45 mph	>20,000 vehicles OR >45 mph
minor separation	conventional bike lanes		<=4,000 vehicles, <=25 mph	<=8,000 vehicles, <=25 mph	<=13,000 vehicles, <=35 mph	<= 20,000 vehicles, <=40 mph	>20,000 vehicles OR > 40 mph
shared street	bicycle boulevards		<=1,500 vehicles, <=25 mph	<=3,000 vehicles, <=25 mph			
shared street	marked shared lanes		<=1,500 vehicles, <=25 mph	<=5,000 vehicles, <=25 mph	<=8,000 vehicles, <=30 mph	<= 13,000 vehicles, <=35 mph	
	no facility type			<=3,000 vehicles, <=25 mph	<=6,000 vehicles, <=30 mph	<=13,000 vehicles, <=40 mph	>13,000 vehicles OR > 45 mph

SOURCE: DETERMINED BY THE CITY OF LAWRENCE BASED ON NATIONAL GUIDELINES

MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

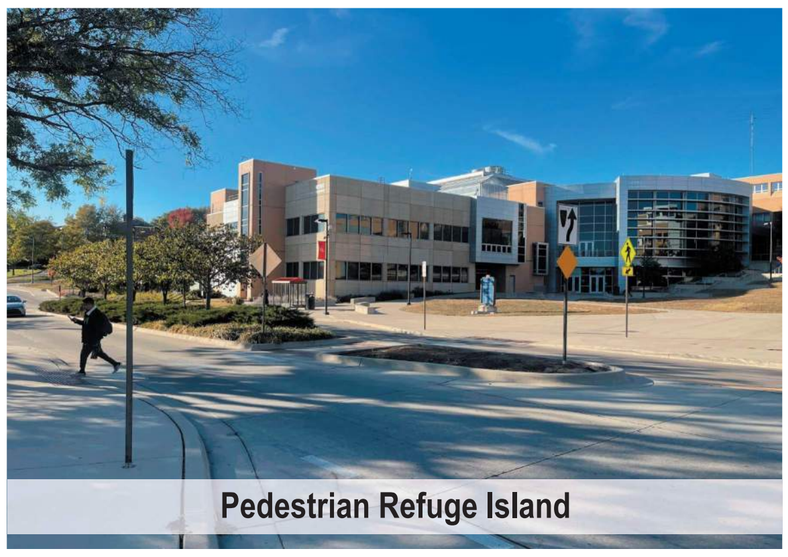
POTENTIAL MULTIMODAL IMPROVEMENTS

Potential Multimodal Improvement Ideas:

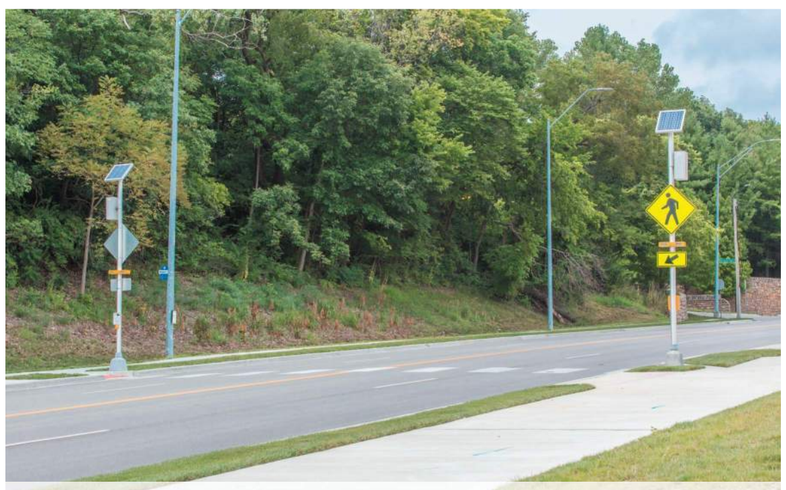
Reducing impacts to street trees or adding street trees, shared use paths, sidewalk connectivity, improving pedestrian ramps, installing medians, installing mid-block crossing with adequate signage and visibility such as a rectangular rapid flashing beacon, road sharing, bike lanes, buffered bike lanes, separated bike lanes, benches, bus shelters, floating bus stops, access management control with the use of medians, roadway reconfiguration, on-street parking, or intersection bump-outs.

Place a green dot below items that are a priority for you.

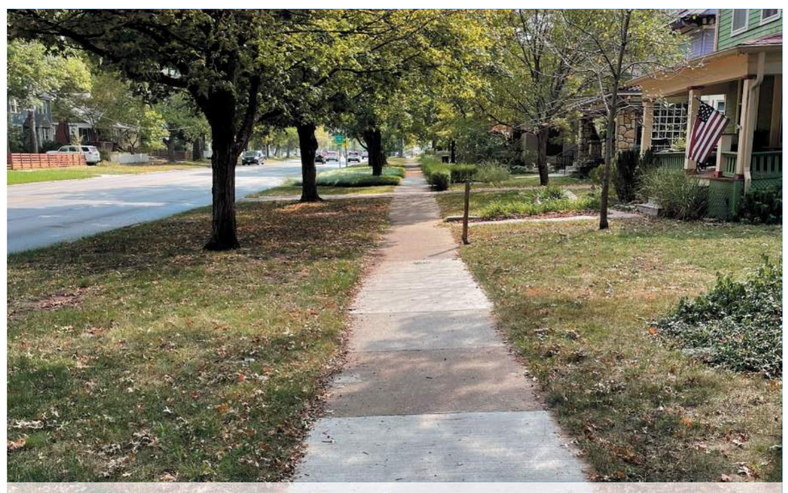
Preserve Street Trees


Pedestrian Refuge Island

ADA Compliant Pedestrian Ramps


Mid-Block Crossing - Rectangular Rapid Flashing Beacon

HAWK Signal


Sidewalk Connectivity

Improve Sidewalk Condition

On-Street Bike Lane

On-Street Buffered Bike Lane

On-Street Separated Bike Lane

Intersection Improvements - Bike Boxes

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MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

POTENTIAL MULTIMODAL IMPROVEMENTS

Potential Multimodal Improvement Ideas:

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Place a green dot below items that are a priority for you.

Intersection Improvements - Conflict Area Markings

Off-Street Shared Use Path

Cycle Track

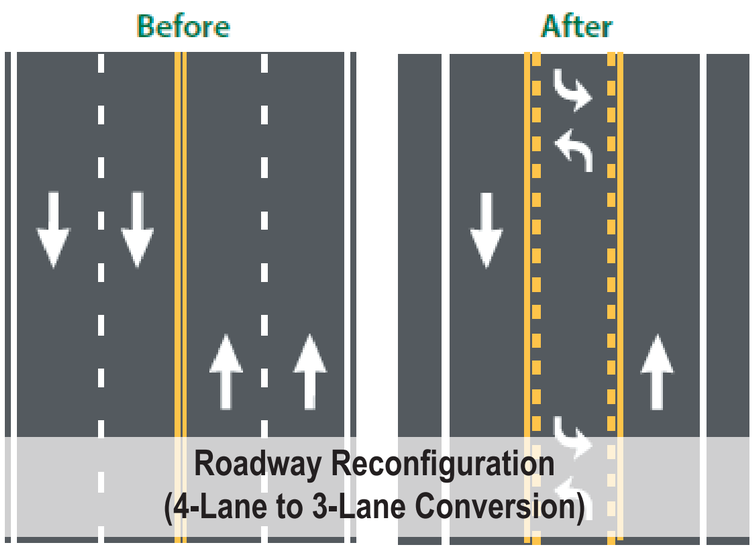
Separated Bike Lane with Floating Bus Stop

Central Median - Access Management

Bus Stop Pad & Bench

Bus Stop Pad with Shelter & Bench

On-Street Parking



Roadway Reconfiguration
(4-Lane to 3-Lane Conversion)

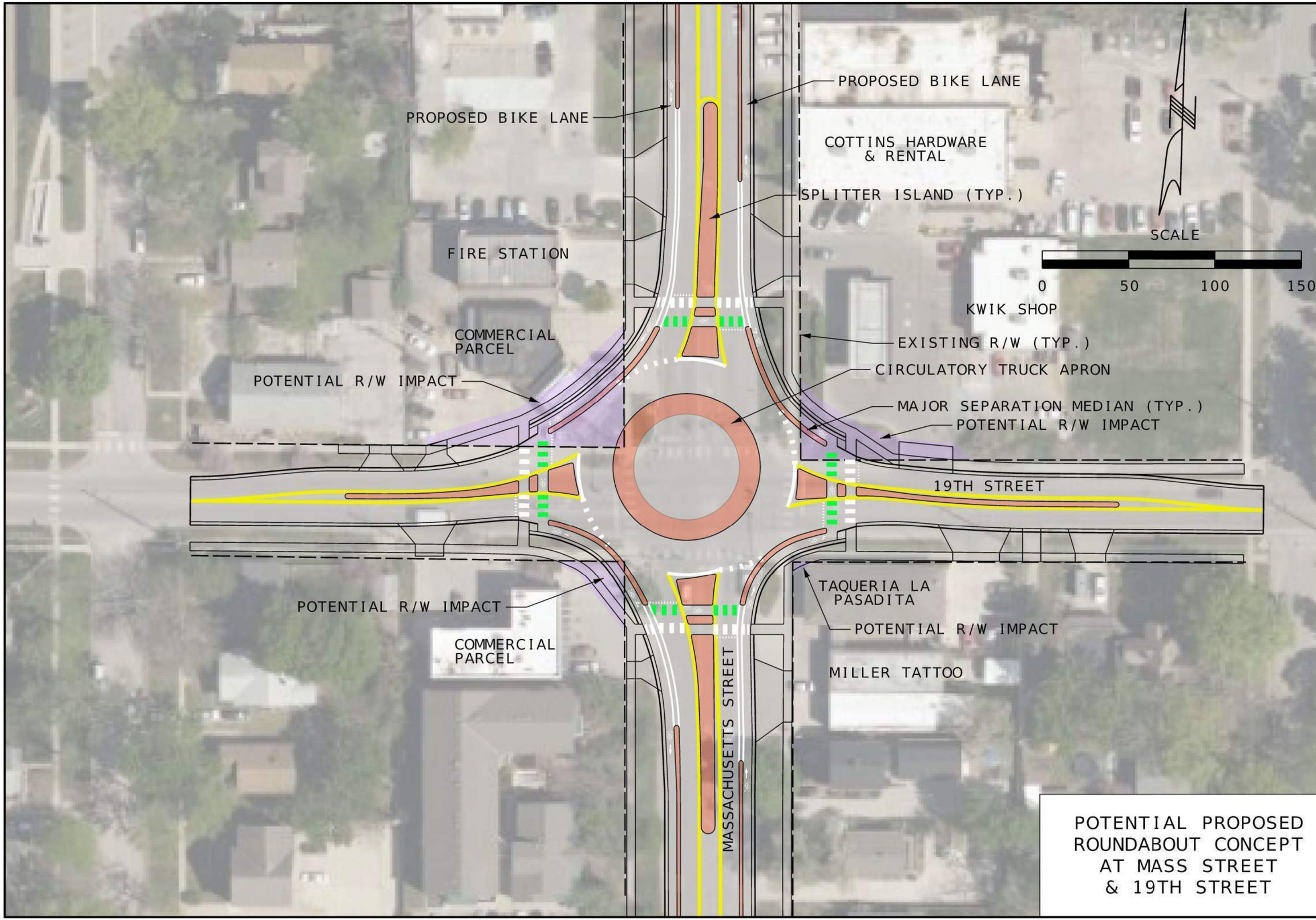
Intersection Bump-Outs

WEST
SOUTH
NORTH
EAST
23RD STREET
21st Street
20th Street
19th Street
17th Street
16th Street
15th Street
14TH STREET
MASSACHUSETTS STREET
MASSACHUSETTS STREET
MASSACHUSETTS STREET
MASSACHUSETTS STREET
Rainbow Works
Regnals Salon
City Solutions NS
Baby Boomer
Vintage Apts
Old Castle of Lawrence
Stanford Hotel Motorcycle Rental
American Legion Academy
Lawrence Piano Parlor
Lawrence Arts Center
Lawrence Visitors Bureau
Lucky Street Music
Mickey Bible Cancer
Trinity Episcopal Church of Lawrence
Mitter Tattoo
Lil' Twisted Tattoo
South Shore Sushi
Southie Hardware & Rentals
Scribe Books
Billings
Babcock Place
Liberty Tax Service Central Middle School
Free City Tattoos

Table 6 – 2023 & 2043 Operational Capacity Analysis Summary

Intersection & Movement/Approach	Control Type	No-Build 2023 (Current Timing Plan)				Build 2023 (Optimized Timing Plan)				Build 2023 (Current Timing Plan)				No-Build 2043 (Optimized Timing Plan)				Build 2043 (Current Timing Plan)				Build 2043 (Optimized Timing Plan)			
		AM		PM		AM		PM		AM		PM		AM		PM		AM		PM		AM		PM	
		Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS	Control Delay (s)	LOS
Mass & 14th		**8.9**	**A**	**8.9**	**A**	**8.4**	**A**	**9.8**	**A**	**9.7**	**A**	**9.9**	**A**	**8.5**	**A**	**8.8**	**A**	**10.4**	**B**	**10.3**	**B**	**9.0**	**A**	**9.0**	**A**
EB Approach		11.3	B	14.2	B	13.1	B	20.3	C	12.8	B	14.1	B	12.2	B	14.7	B	13.6	B	15.0	B	13.7	B	15.1	B
WB Approach	Signal	11.2	B	13.0	B	13.0	B	18.6	B	12.7	B	12.9	B	12.1	B	13.0	B	13.5	B	13.6	B	13.6	B	13.4	B
NB Approach		8.1	A	6.4	A	7.7	A	8.0	A	9.4	A	8.8	A	7.8	A	6.8	A	10.2	B	8.5	A	8.4	A	7.2	A
SB Approach		8.8	A	10.3	B	6.8	A	8.9	A	8.3	A	10.1	B	7.5	A	9.5	A	8.6	A	11.3	B	7.0	A	9.3	A
Mass & 15th		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EB Approach		16.2	C	24.1	C	19.6	C	30.8	D	19.6	C	30.8	D	18.3	C	26.1	D	23.8	C	35.4	E	23.8	C	35.4	E
WB Approach	TWSC	20.4	C	34.8	D	23.1	C	37.1	E	23.1	C	37.1	E	26.4	D	70.3	F	31.6	D	76.2	F	31.6	D	76.2	F
NBL		7.8	A	8.5	A	7.8	A	8.5	A	7.8	A	8.5	A	7.9	A	8.7	A	7.9	A	8.7	A	7.9	A	8.7	A
SBL		8.6	A	9.1	A	8.6	A	9.1	A	8.6	A	9.1	A	8.9	A	9.5	A	8.9	A	9.5	A	8.9	A	9.5	A
Mass & 16th		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EB Approach		14.0	B	20.1	C	15.6	C	24.0	C	15.6	C	24.0	C	15.3	C	21.3	C	17.3	C	26.4	D	17.3	C	26.4	D
WB Approach	TWSC	14.9	B	20.8	C	16.1	C	24.4	C	16.1	C	24.4	C	14.9	B	25.8	D	16.6	C	31.1	D	16.6	C	31.1	D
NBL		7.9	A	8.6	A	7.9	A	8.6	A	7.9	A	8.6	A	8.0	A	8.8	A	8.0	A	8.8	A	8.0	A	8.8	A
SBL		8.5	A	8.9	A	8.4	A	8.9	A	8.4	A	8.9	A	8.7	A	9.3	A	8.6	A	9.2	A	8.6	A	9.2	A
Mass & 17th	No-Build:	**4.8**	**A**	**3.9**	**A**	-	-	-	-	-	-	-	-	**4.5**	**A**	**3.9**	**A**	-	-	-	-	-	-	-	-
EB Approach	Signal	17.9	B	18.3	B	14.9	B	27.8	D	14.9	B	27.8	D	14.3	B	14.7	B	17.0	C	39.7	E	17.0	C	39.7	E
WB Approach		17.5	B	17.1	B	19.4	C	35.8	E	19.4	C	35.8	E	13.8	B	13.5	B	22.6	C	46.3	E	22.6	C	46.3	E
NB Approach (NBL)	Build:	2.5	A	2.8	A	7.9	A	8.6	A	7.9	A	8.6	A	2.8	A	3.2	A	8.0	A	8.9	A	8.0	A	8.9	A
SB Approach (SBL)	TWSC	2.3	A	2.5	A	8.3	A	9.0	A	8.3	A	9.0	A	2.5	A	2.8	A	8.4	A	9.3	A	8.4	A	9.3	A
Mass & 19th*		**25.1**	**C**	**28.2**	**C**	**28.2**	**C**	**31.0**	**C**	**33.6**	**C**	**36.8**	**D**	**21.3**	**C**	**22.3**	**C**	**31.7**	**C**	**36.6**	**D**	**25.3**	**C**	**29.9**	**C**
EB Approach		13.1	B	22.6	C	20.5	C	30.4	C	18.4	B	22.6	C	15.0	B	20.1	C	20.1	C	26.8	C	18.1	B	24.2	C
WB Approach	Signal	16.7	B	24.4	C	37.0	D	38.8	D	23.2	C	24.4	C	22.4	C	23.9	C	26.1	C	28.8	C	25.8	C	29.7	C
NB Approach		41.1	D	35.1	D	28.1	C	28.1	C	59.1	E	54.2	D	25.2	C	24.2	C	51.2	D	58.4	E	34.0	C	41.9	D
SB Approach		38.8	D	33.1	C	23.4	C	26.0	C	43.0	D	52.0	D	23.8	C	21.8	C	35.4	D	38.1	D	24.5	C	27.0	C
Mass & 20th		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EB Approach		13.5	B	14.9	B	14.7	B	16.8	C	14.7	B	16.8	C	13.7	B	16.4	C	15.2	C	18.9	C	15.2	C	18.9	C
WB Approach	TWSC	12.5	B	14.3	B	13.4	B	16.0	C	13.4	B	16.0	C	13.4	B	15.6	C	14.4	B	17.8	C	14.4	B	17.8	C
NBL		7.8	A	8.2	A	7.8	A	8.2	A	7.8	A	8.2	A	7.9	A	8.3	A	7.8	A	8.3	A	7.8	A	8.3	A
SBL		8.2	A	8.4	A	8.2	A	8.4	A	8.2	A	8.4	A	8.3	A	8.5	A	8.3	A	8.5	A	8.3	A	8.5	A
Mass & 21st		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EB Approach		9.0	A	9.6	A	9.6	A	10.7	B	9.6	A	10.7	B	9.1	A	9.7	A	9.8	A	11.1	B	9.8	A	11.1	B
WB Approach	TWSC	9.6	A	9.8	A	10.6	B	11.2	B	10.6	B	11.2	B	9.7	A	10.0	B	11.0	B	11.7	B	11.0	B	11.7	B
NBL		7.8	A	8.2	A	7.8	A	8.2	A	7.8	A	8.2	A	7.8	A	8.3	A	7.8	A	8.3	A	7.8	A	8.3	A
SBL		8.1	A	8.3	A	8.1	A	8.3	A	8.1	A	8.3	A	8.3	A	8.5	A	8.3	A	8.5	A	8.3	A	8.5	A
Mass & 23rd		**14.5**	**B**	**22.2**	**C**	**16.0**	**B**	**15.3**	**B**	**15.4**	**B**	**22.2**	**C**	**12.6**	**B**	**21.2**	**C**	**22.3**	**C**	**29.6**	**C**	**14.1**	**B**	**17.2**	**B**
EB Approach		8.4	A	13.3	B	15.2	B	12.7	B	11.8	B	13.4	B	12.1	B	18.9	B	17.5	B	18.3	B	11.9	B	13.3	B
WB Approach	Signal	12.7	B	20.1	C	18.8	B	19.0	B	14.6	B	20.0	C	12.3	B	21.6	C	25.5	C	27.8	C	18.1	B	22.0	C
NB Approach		28.7	C	30.2	C	11.5	B	12.7	B	31.2	C	30.2	C	17.0	B	16.3	B	26.0	C	33.7	C	11.1	B	14.7	B
SB Approach		34.0	C	41.8	D	12.9	B	16.1	B	24.8	C	41.8	D	14.0	B	27.5	C	30.9	C	55.4	E	12.5	B	19.2	B

*Build scenario assumes a signal at 19th Street. Roundabout build scenario is summarized in following sections.



POTENTIAL PROPOSED ROUNDABOUT CONCEPT AT MASS STREET & 19TH STREET

CONCEPTUAL PLANS NOT APPROVED FOR CONSTUCTION

DATE PREPARED 12/21/2023

ROUTE	STATE
MASS ST	KS
DISTRICT	SHEET NO.

COUNTY: DOUGLAS

JOB NO.

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

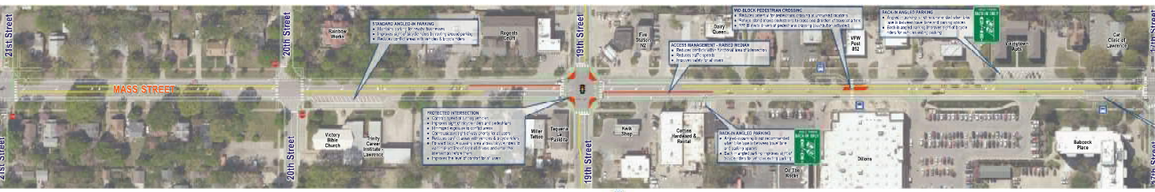
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

Lawrence KANSAS

TREKK DESIGN GROUP, LLC
1411 East 104th St.
Kansas City, MO 64131
Tel (816) 874-4655
Fax (816) 874-4675
www.trekkdesigngroup.com
Missouri Cert. of Authority 2002010360

MASS STREET MULTIMODAL
23rd to 22nd Street

MASS STREET MULTIMODAL
22nd to 21st Street



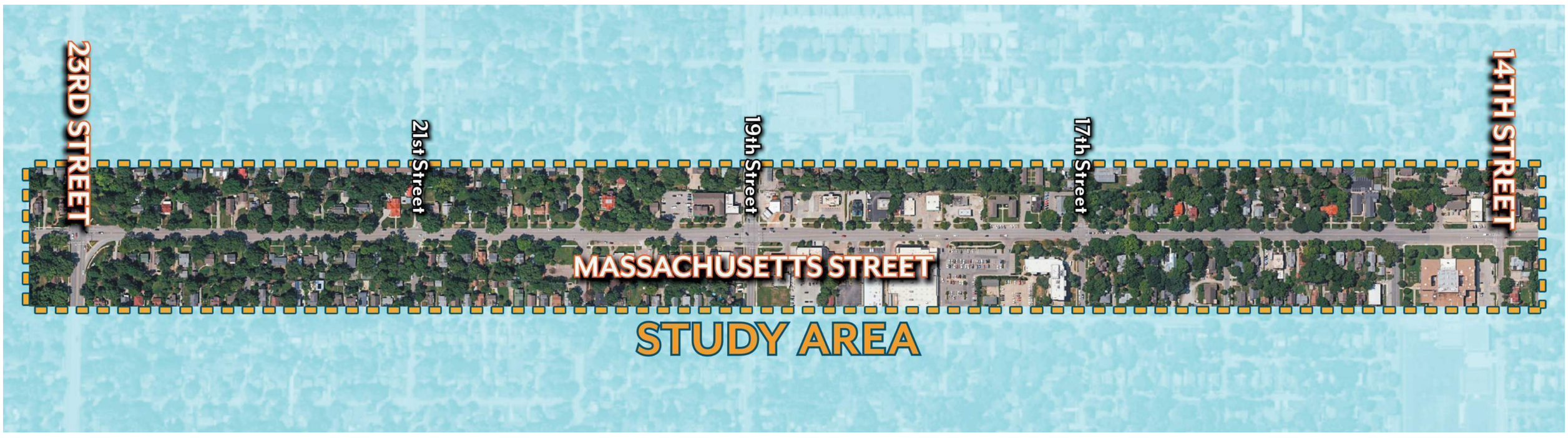
MASS STREET MULTIMODAL
21st to 20th Street

MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

OPEN HOUSE No. 2
Feb. 7, 2024 4:30-6:30 p.m.

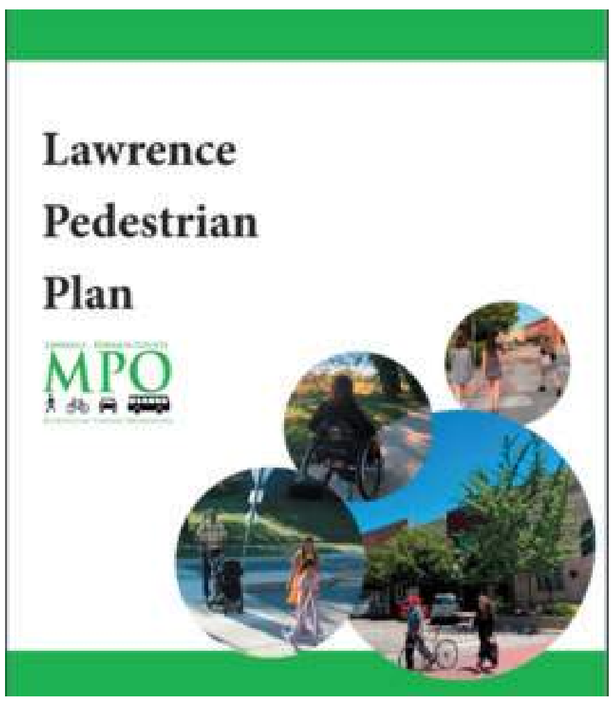
The Massachusetts Street Multimodal Improvements Study seeks to develop new multimodal infrastructure along Massachusetts from 14th Street to 23rd Street.

Multimodal **refers to all types of modes or transportation – including walking, biking, driving, or riding transit.**



Relevant Plans

The Lawrence Bikes Plan identifies Massachusetts Street from 14th Street to 21st Streets as a priority funding segment in the City's bikeway network. Massachusetts Street from 21st Street to 23rd Street is on the secondary funding network. The Massachusetts Street roadway from 14th Street to 23rd Street is currently mostly unmarked for bicycling (sharrows) and contains no bike lanes. **The entire corridor is rated 5 out of 5 for least comfortable to cyclists.**



The Lawrence Pedestrian Plan requires arterial roads to have connected sidewalk on both sides of the roadway. This project will assure sidewalk is in good condition and connected from 14th St to 23rd St. This project will address sidewalk gaps, panel ADA deficiencies, and ADA ramps at intersections and driveways.

Lawrence KANSAS TREKK Shockey

MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

PROJECT BACKGROUND

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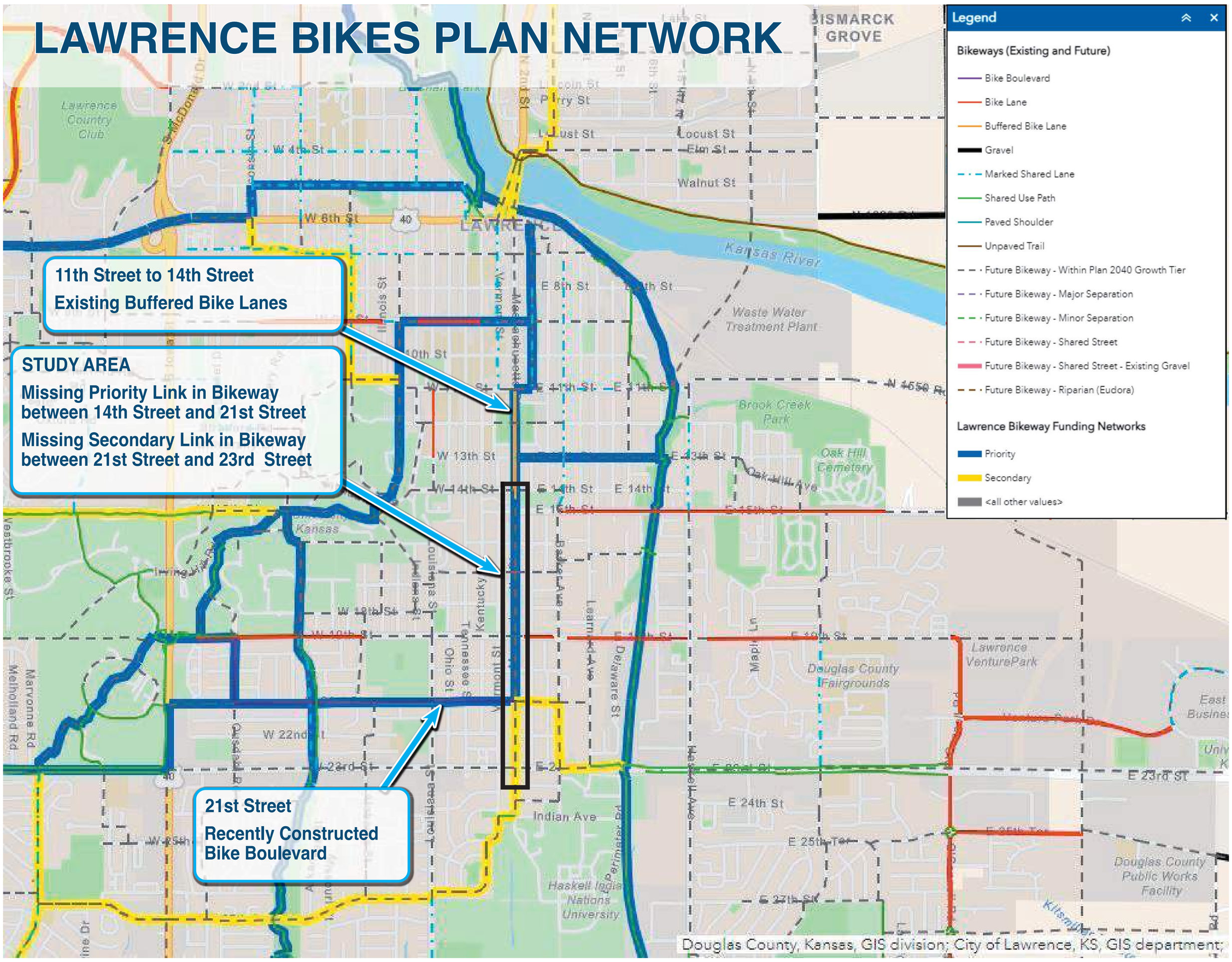
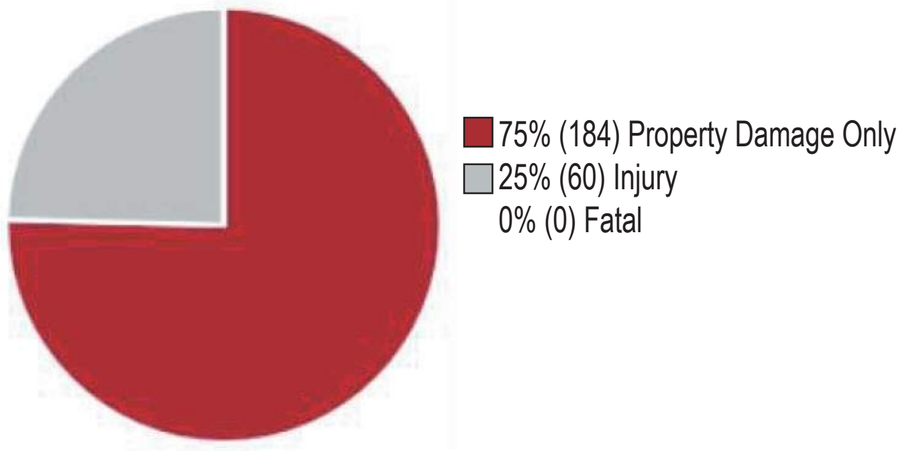
- Massachusetts from 14th to 19th is on the Safe Routes to School network.
- Massachusetts Street is a minor arterial street and the Pedestrian Plan calls for connected sidewalks on both sides of the street.
- This project will provide recommended improvements to connect to the recently constructed bicycle boulevard on 21st Street between Iowa and Mass.
- This project will complete the gap in the bike network and improve safe multimodal access to downtown Lawrence.

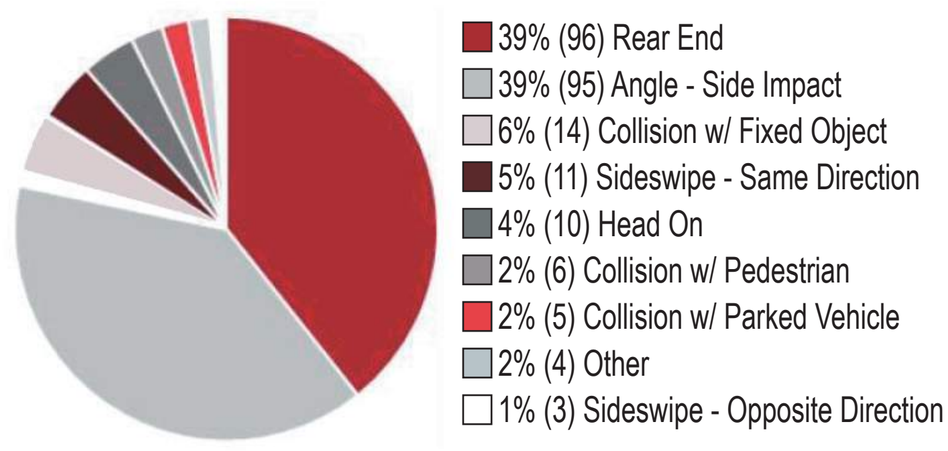


Crash history of 14th Street - 23rd Street on Mass Street corridor

Crashes by Severity - 1/1/2018 to 12/31/2022



Crashes by Crash Type - 1/1/2018 to 12/31/2022



Lawrence KANSAS TREKK Shockey

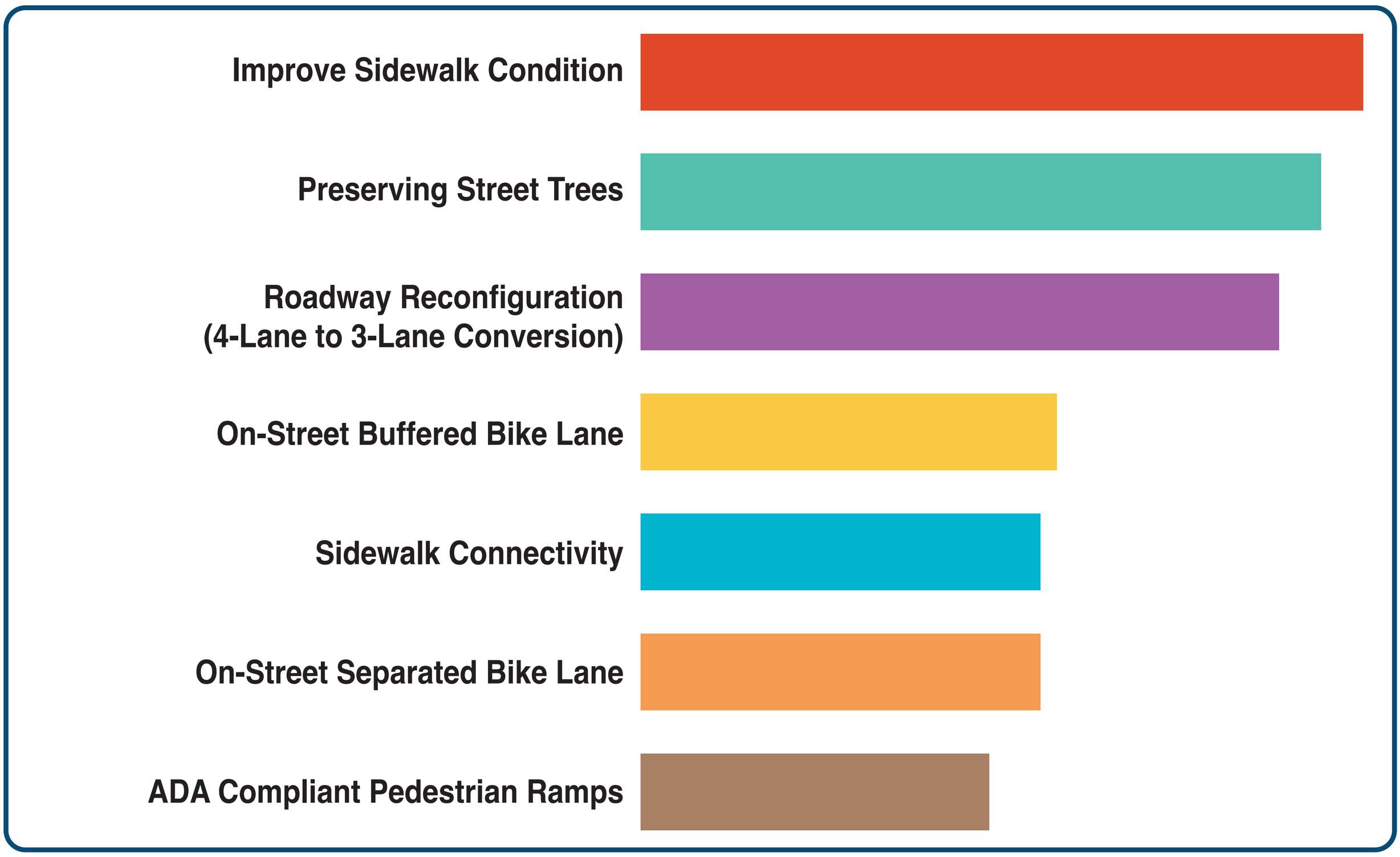
MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

WHAT WE HEARD

Open House No. 1 was well attended with approximately 72 people in attendance.

86 survey responses were collected.

Below are the prioritized rankings of multimodal improvements from the community feedback during Open House #1 in October 2023.



OTHER GENERAL COMMUNITY COMMENTS TRENDS:

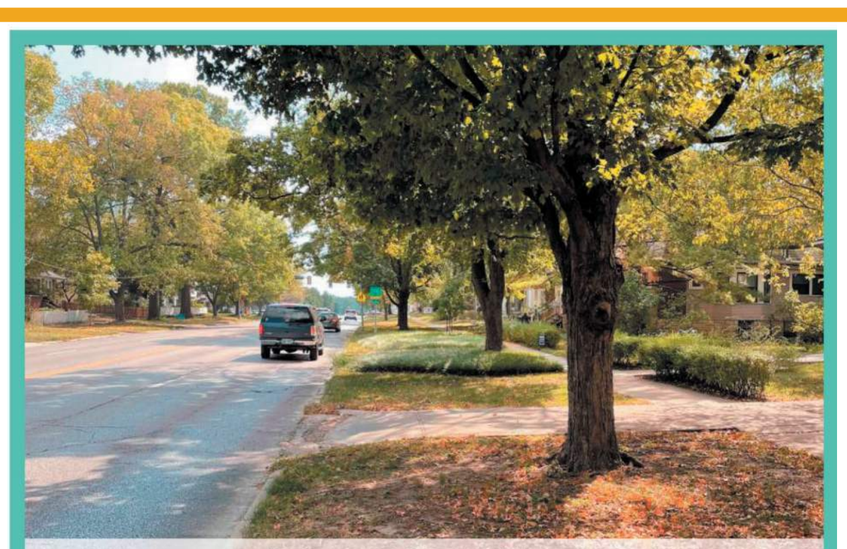
- Slow Down Traffic
- Provide Bike Lanes
- Provide Mid-Block Crossings
- Roadway Reconfiguration (4-Lane to 3-Lane)
- Preserve On-Street Parking for Businesses
- Consider Roundabouts

Lawrence KANSAS TREKK Shockey

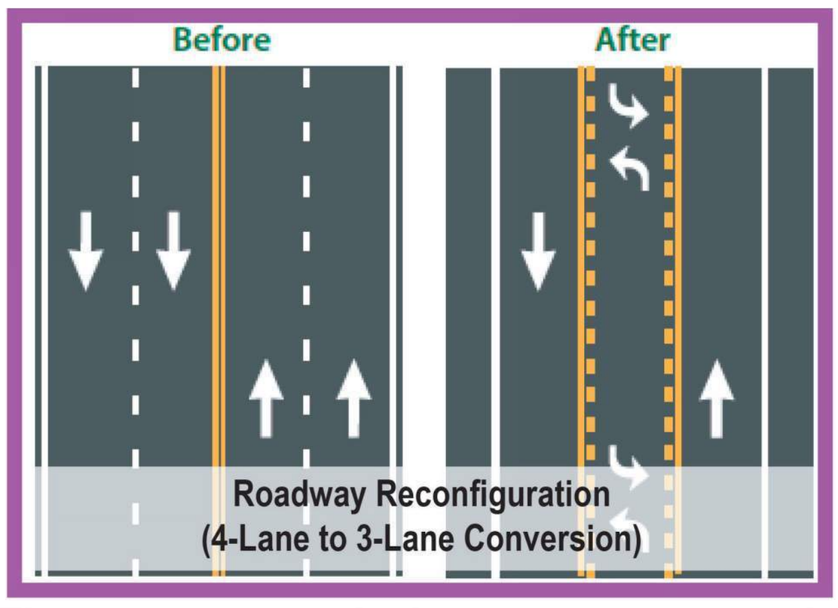
MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

WHAT WE ARE DOING

The City of Lawrence plans to analyze existing sidewalk condition during the design phase and improve sidewalk conditions as recommended.



The recommended concepts consider preserving street trees along Mass street by maintaining the existing location of the curb.

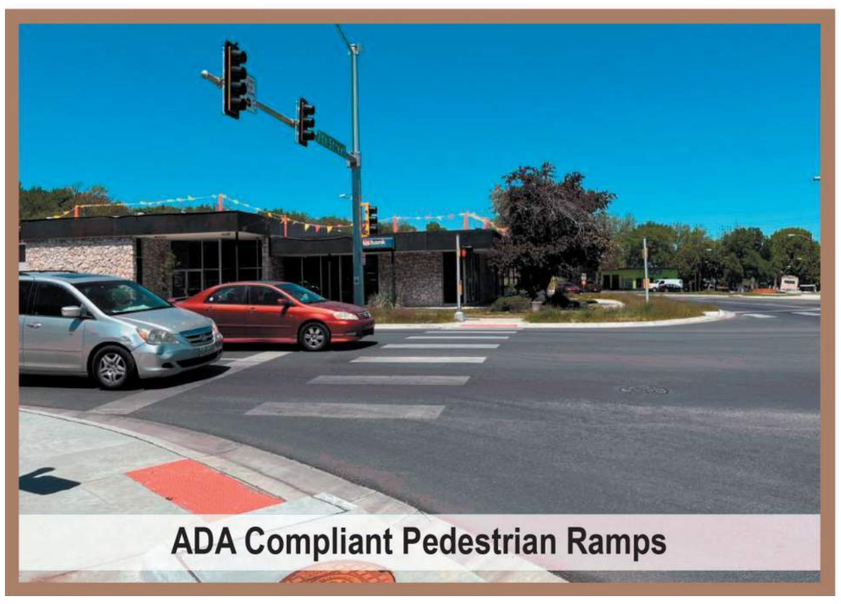


The recommended concepts consider reconfiguring Mass Street from 4-lanes to 3-lanes to promote safety for all users.

The recommended concepts consider on-street buffered bike lanes on Mass Street.

The recommended concepts include constructing sidewalk on the west side of Mass Street from 21st Street to 23rd Street to improve connectivity.

The recommended concepts consider on-street separated bike lanes on Mass Street.



The recommended concepts consider improving pedestrian ramps per ADA compliance.

OTHER CONSIDERATIONS:

- Mid-Block Crossings have been recommended in key locations as shown in the current recommended solution strip map.
- On-Street Parking has been accommodated in key locations as shown in the current recommended solution strip map.
- A single-lane roundabout has been considered at 19th Street. However, is not recommended due to right-of-way impacts and traffic volumes.

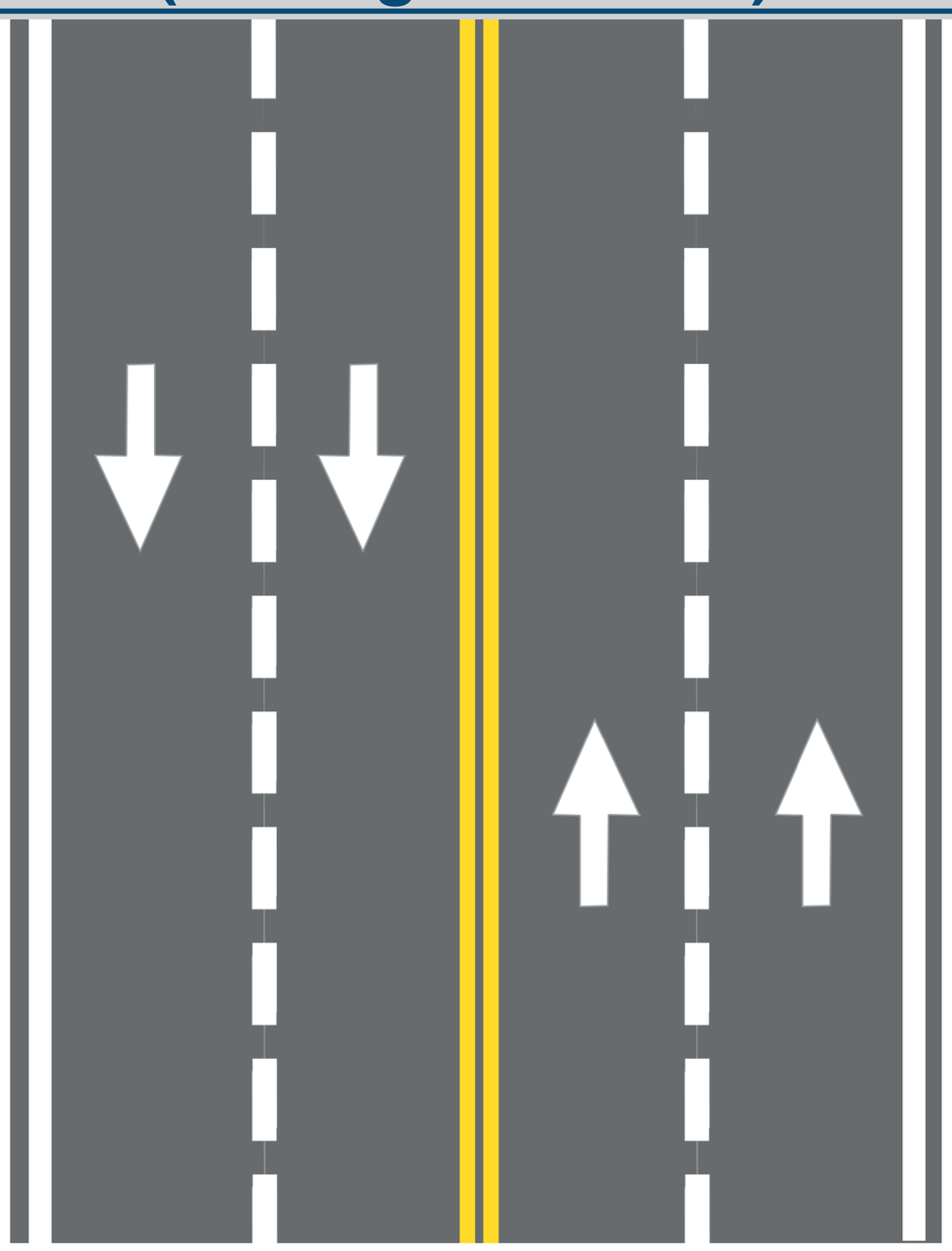
Lawrence KANSAS TREKK Shockey

MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

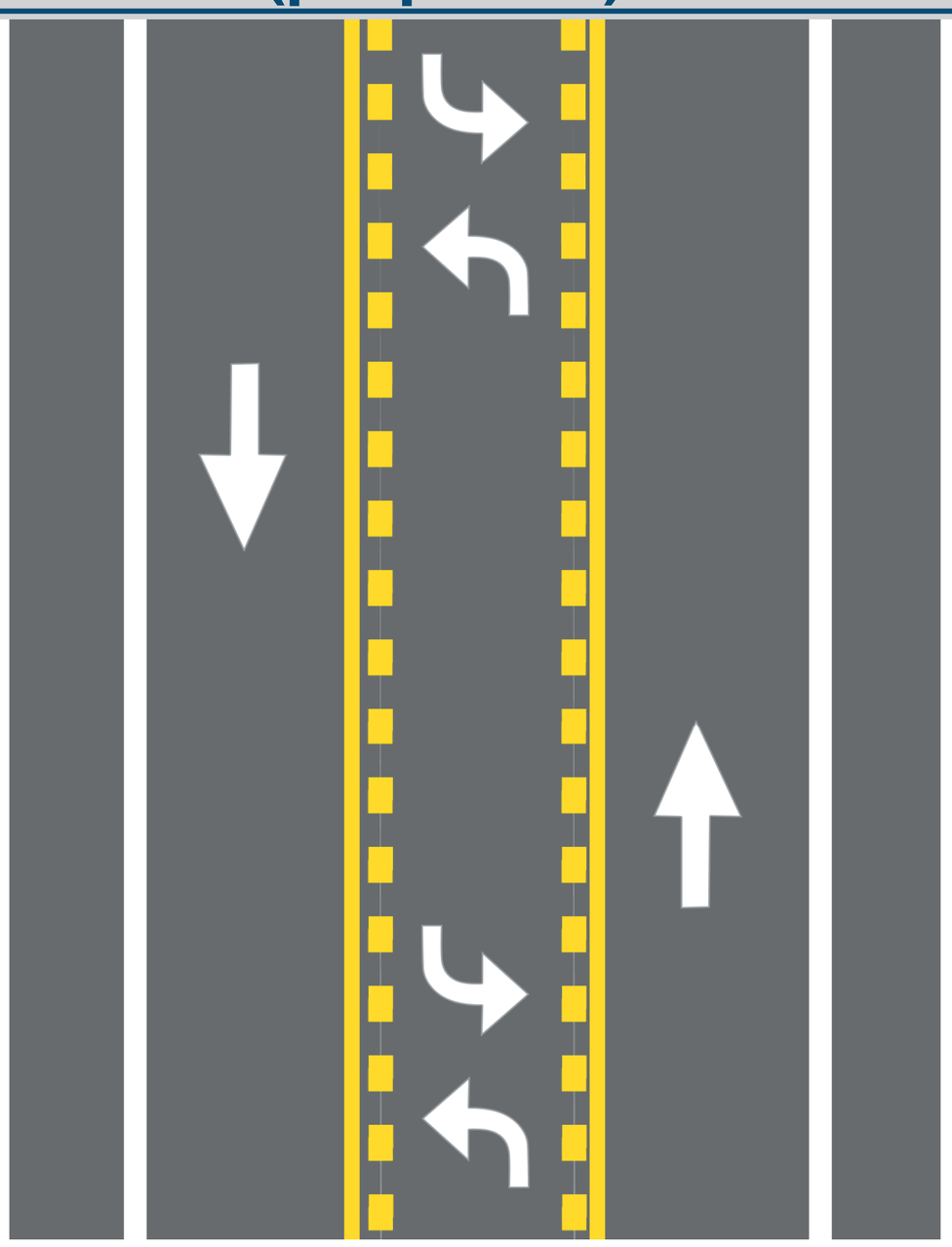
MASS STREET TRAFFIC ANALYSIS FINDINGS

Roadway Reconfiguration
Mass Street 4-Lane to 3-Lane Conversion

4-Lane Street (exising condition)



3-Lane Street (proposed)



Mass Street - Existing 4-Lane Roadway

Common Cause of Crashes on 4-Lane Roadways

- Speed differential between lanes
- Frequent/sudden lane changes
- Left-turning vehicles stopped in inside lane
- Poor sight distance/gap judgment for through/left-turning vehicles
- Lack of comfortable space for cyclists
- Long pedestrian crossings across 4 lanes of traffic

Mass Street - Proposed 3-Lane Roadway

Benefits of Converting 4-Lane Roadway to 3-Lanes

- More consistent and slower speeds
- Dedicated space for left-turning vehicles
- Improved sight distance/gap judgment due to lane reduction
- Opportunity to install pedestrian refuge islands
- Opportunity to install more comfortable facilities for cyclists
- Reduced length of pedestrian crossings

Safety Benefit: 19-47% reduction in total crashes per FHWA

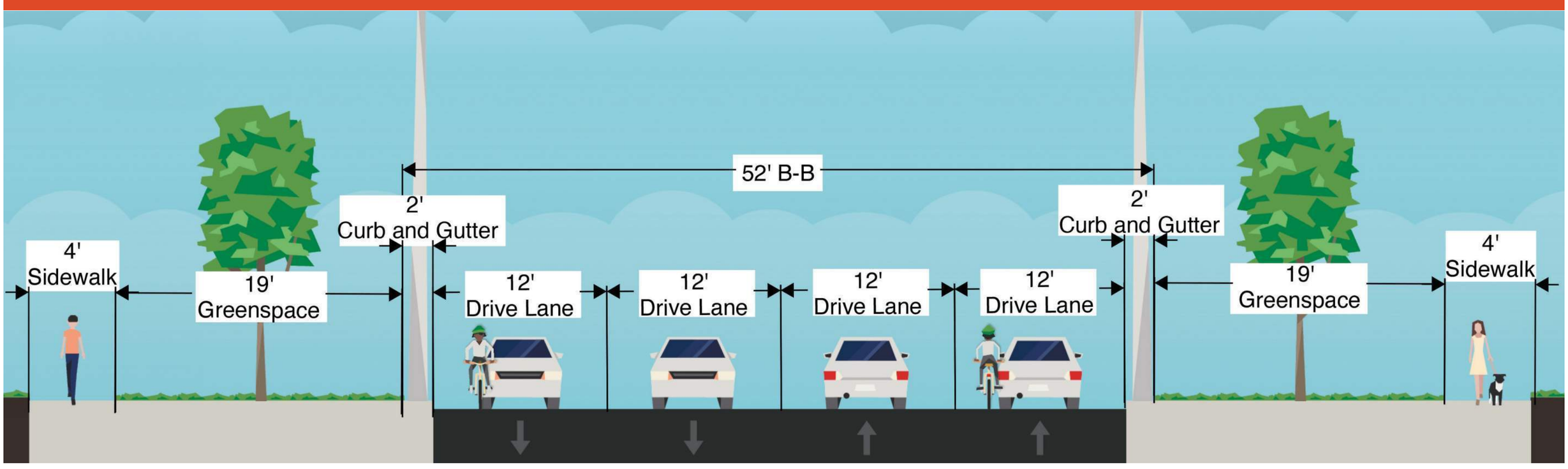
The volume of vehicles driven on Massachusetts Street in this corridor on any given day averages about 11,000.

A 3-lane roadway is capable of handling up to 25,000 vehicles per day, exceeding the typical traffic on Massachusetts Street between 14th to 23rd Street.

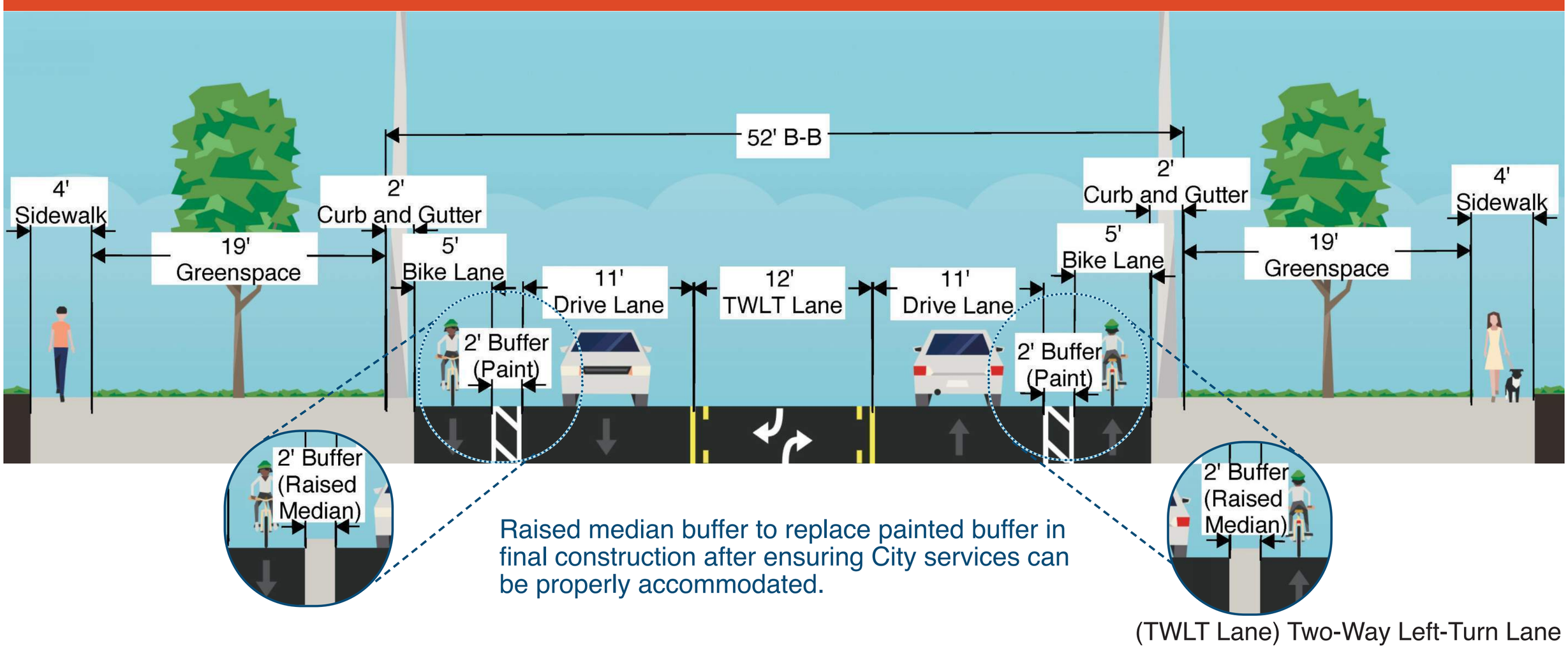
MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

MASS STREET CONCEPTUAL OPTIONS

OPTION A
Mass Street - Existing Condition (4-Lane)

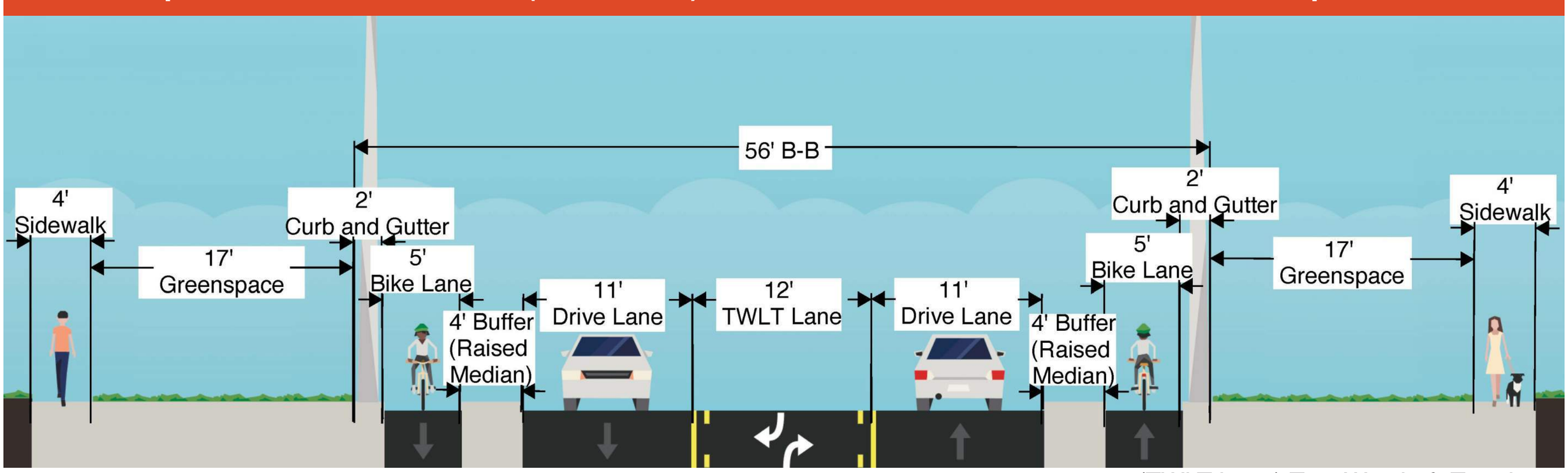


OPTION B
Proposed Conditon (3-Lane) I 2 foot buffer



(TWLT Lane) Two-Way Left-Turn Lane

OPTION C
Proposed Conditon (3-Lane) I 4 foot buffer with street expansion



(TWLT Lane) Two-Way Left-Turn Lane

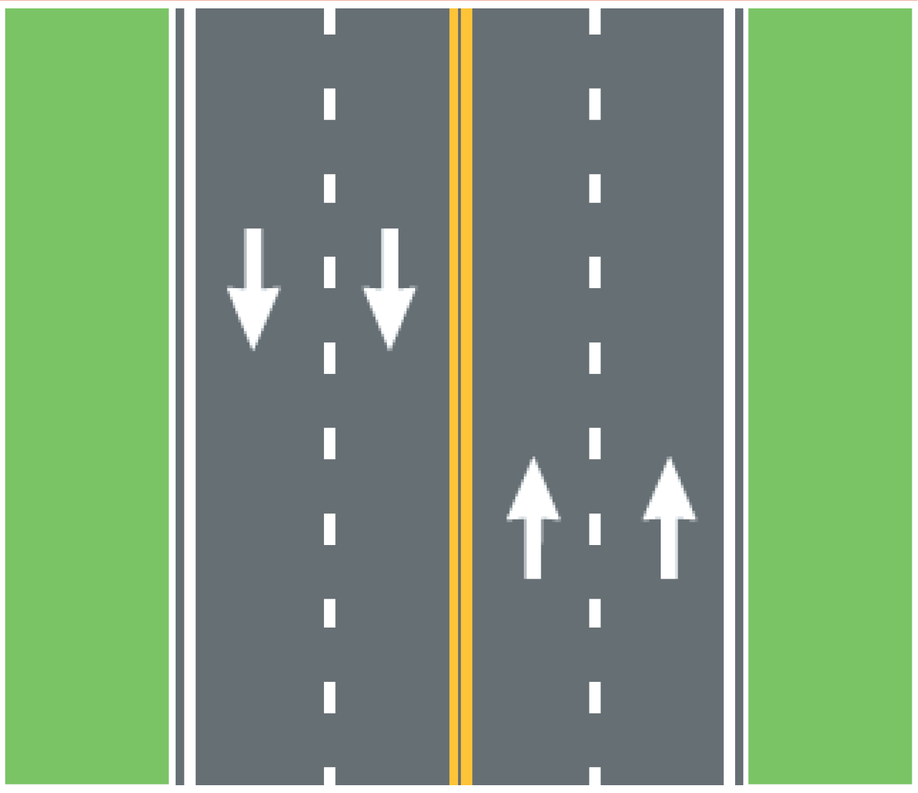
Lawrence KANSAS TREKK Shockey

MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

MASS STREET CONCEPTUAL OPTIONS

OPTION A

Mass Street - Existing Condition (4-Lane)



Benefits

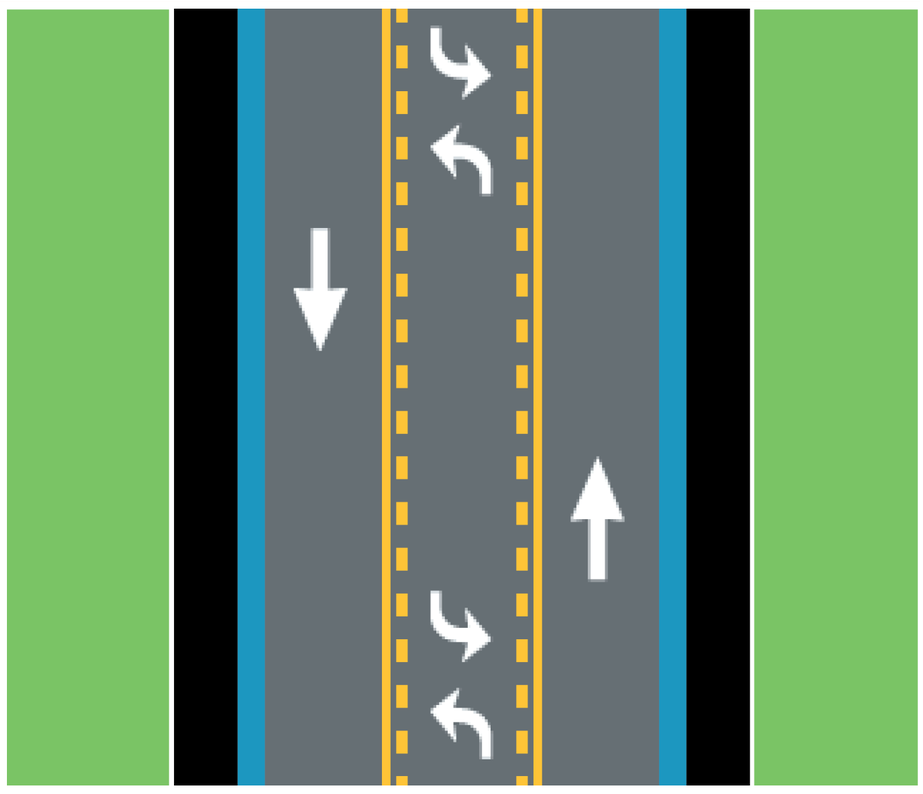
- No increase in vehicle traffic times
- No impact to trees

Challenges

- Safety concerns for walking, biking, driving, or riding transit.
- Missed opportunity to increase bicyclist and pedestrian comfort.
- Increased opportunities for speeding vehicles.
- Prone to more vehicle crashes.

OPTION B

Proposed Conditon (3-Lane) I 2 foot buffer



Benefits

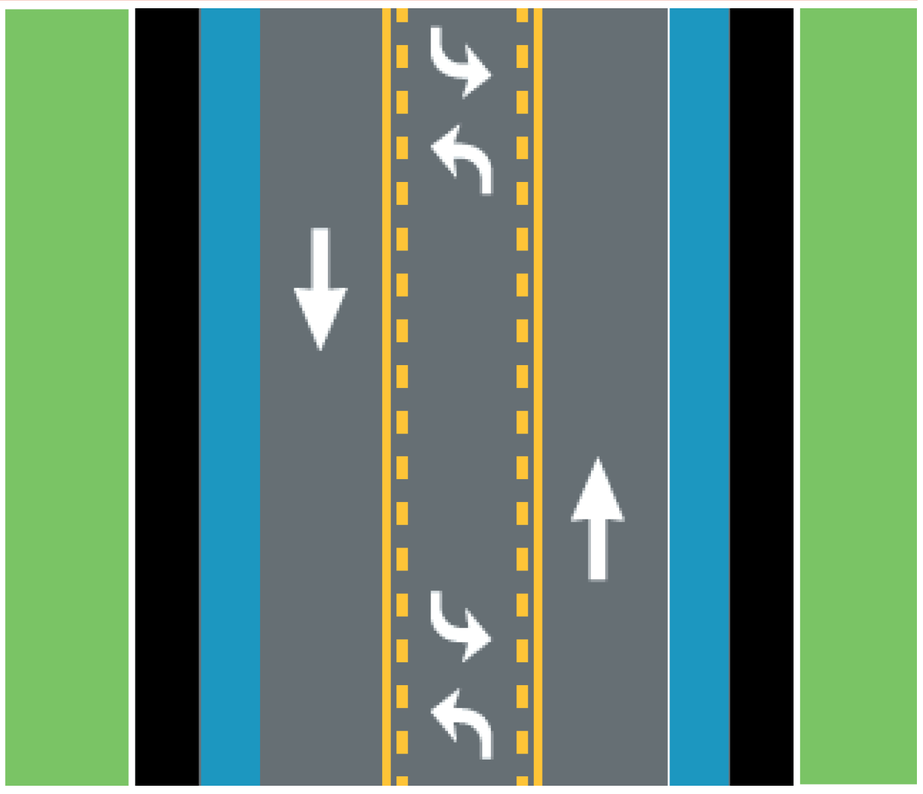
- Improve pedestrian facilities
- Improve bike facilities
- Anticipated reduction in rear-end crashes
- Anticipated reduction in left-turn crashes
- Anticipated reduction in right-angle crashes
- Fewer lanes for pedestrians to cross
- Opportunity to install pedestrian refuge islands
- Reduce traffic speeds
- Accommodate all users
- Minimize impacts to trees

Challenges

- Slight increase in vehicular travel times (10 to 15 seconds depending on direction and time of day or ~15%)
- Bike facilities less comfortable than Option C

OPTION C

Proposed Conditon (3-Lane)
4 foot buffer with street expansion

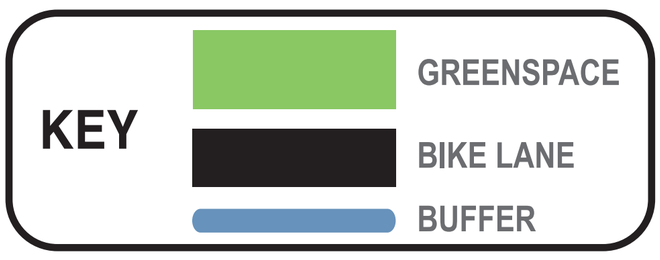


Benefits

- Improve pedestrian facilities
- Improve bike facilities
- Anticipated reduction in rear-end crashes
- Anticipated reduction in left-turn crashes
- Anticipated reduction in right-angle crashes
- Fewer lanes for pedestrians to cross
- Opportunity to install pedestrian refuge islands
- Reduce traffic speeds
- Accommodate all users
- Bike facilities more comfortable than Option B

Challenges

- Slight increase in vehicular travel times
  (10 to 15 seconds depending on direction and time of day or ~15%)
- Major impact to trees (74% of existing trees impacted)



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MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

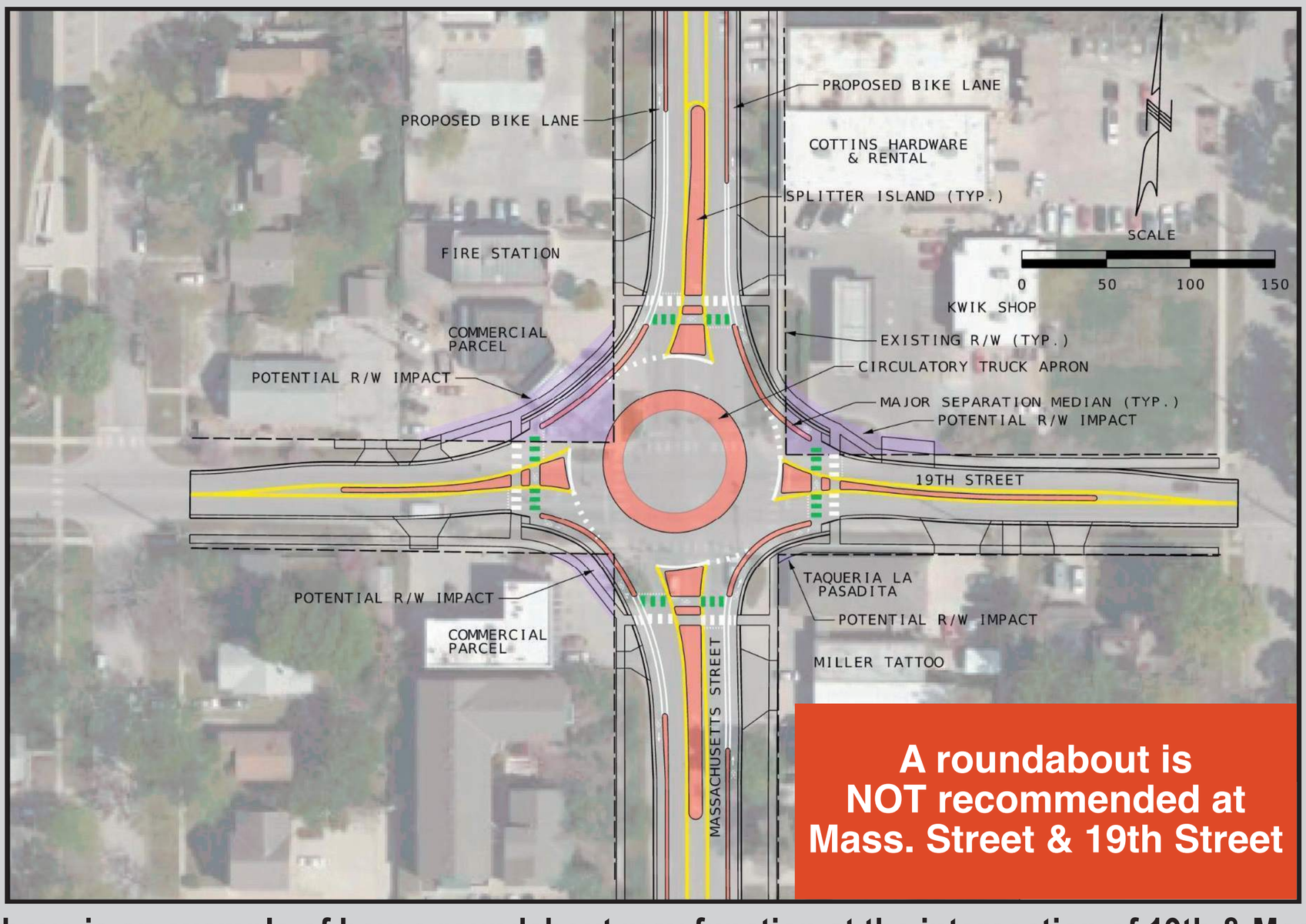
19th Street/Massachusetts St INTERSECTION

Existing traffic signal control at the intersection of 19th Street & Massachusetts

BACKGROUND

There have been ongoing conversations in the community about the intersection at 19th Street and Massachusetts Street for over a decade.

Specifically, a report from AARP titled, “Walkability and Complete Streets” from the summer of 2014 discussed the opportunity to change the intersection to a roundabout as a means of increasing “walkability and livability”. However, since this report there have been additional engineering studies which conclude that a roundabout would not be recommended at this intersection. These engineering studies reviewed the traffic volumes, crash history, speeds, and the available right-of-way and came to the conclusion that a traffic signal would be best.



Above is an example of how a roundabout may function at the intersection of 19th & Mass

Summary of Findings

- **A traffic signal is anticipated to operate better than a roundabout**
- **A roundabout would have right-of-way impacts**
- **A roundabout is not recommended at the intersection of Mass. Street & 19th Street**

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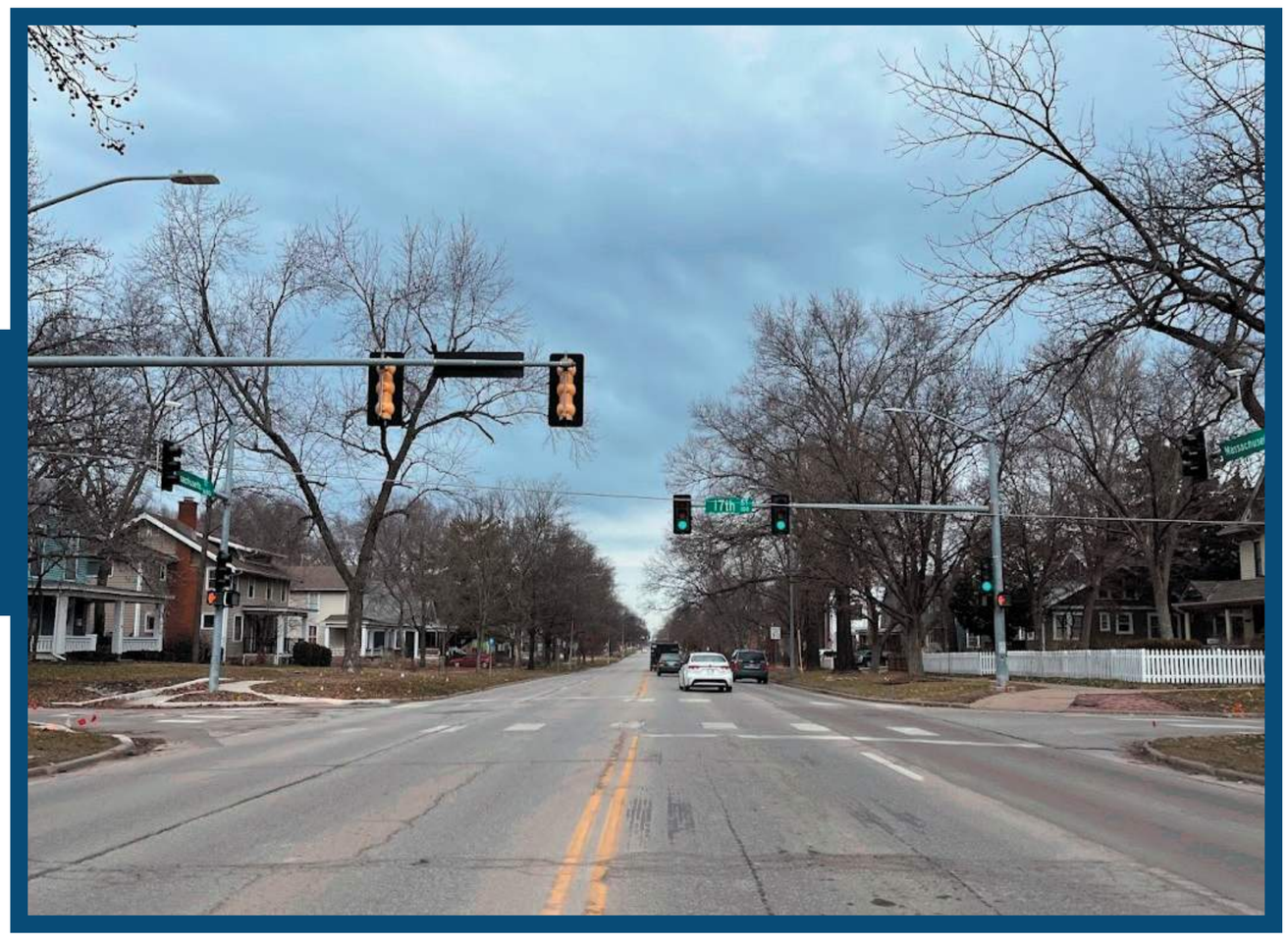
MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

17th Street/Massachusetts St INTERSECTION



Existing traffic signal control at the intersection of 17th Street & Massachusetts

BACKGROUND

The traffic signal at the intersection of 17th Street and Massachusetts street was installed in 2000 at request of the community due to increasing pedestrian concerns. The City noted at the time of the installation that this intersection did not meet the vehicle traffic standards for a traffic signal (MUTCD).

Since the installation of the traffic signal there have been traffic studies which found the warrants are still not being met for the traffic signal at this intersection.

Additionally, HAWK signals were not an approved pedestrian safety device in 2000. Engineering studies show that the the use of this “new” technology are appropriate for the vehicle traffic volume at this intersections.

Example of how a HAWK signal may function at the intersection of 17th & Mass
Example location: 21st & Mass Street | HAWK signal

Summary of Findings

- **A HAWK signal is anticipated to operate better than a traffic signal.**
- **17th & Mass does not meet MUTCD vehicle warrants for a traffic signal.**
- **Removing the traffic signal will likely reduce crashes.**

Youtube video of how to use the 21st and Mass Bike Ped Signal posted in 2021.

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MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

NEXT STEPS & UPCOMING ENGAGEMENT OPPORTUNITIES

PROJECT SCHEDULE:

- ✓ Open House #1 - October 2023
- ✓ Concept Development - Oct 2023 to Jan 2024
- Open House #2 - Feb 2024
- Concept Refinement - Jan 2024 to Mar 2024
- Open House #3 - Mar/April 2024
- Concept Approval - Spring 2024
- Potential Funding & Design - Spring 2024 to Winter 2024
- Construction - TBD

Feel free to provide comments online or through paper forms. Check out the project website to stay up-to-date on future events.

Comment Form

https://arcg.is/1DzuDu0

Project Website

www.lawrenceks.org/community-engagement/mass-street-improvements/

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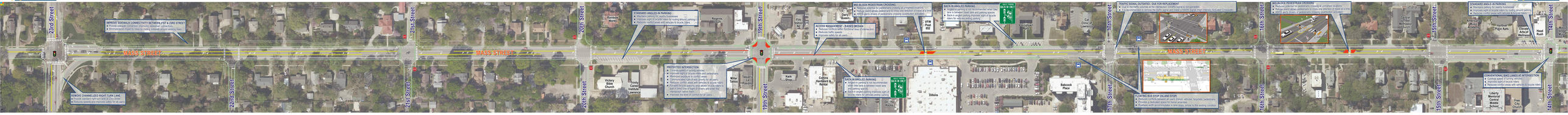
MASS. STREET MULTIMODAL

Preliminary Plans Draft

19th to 23rd Street

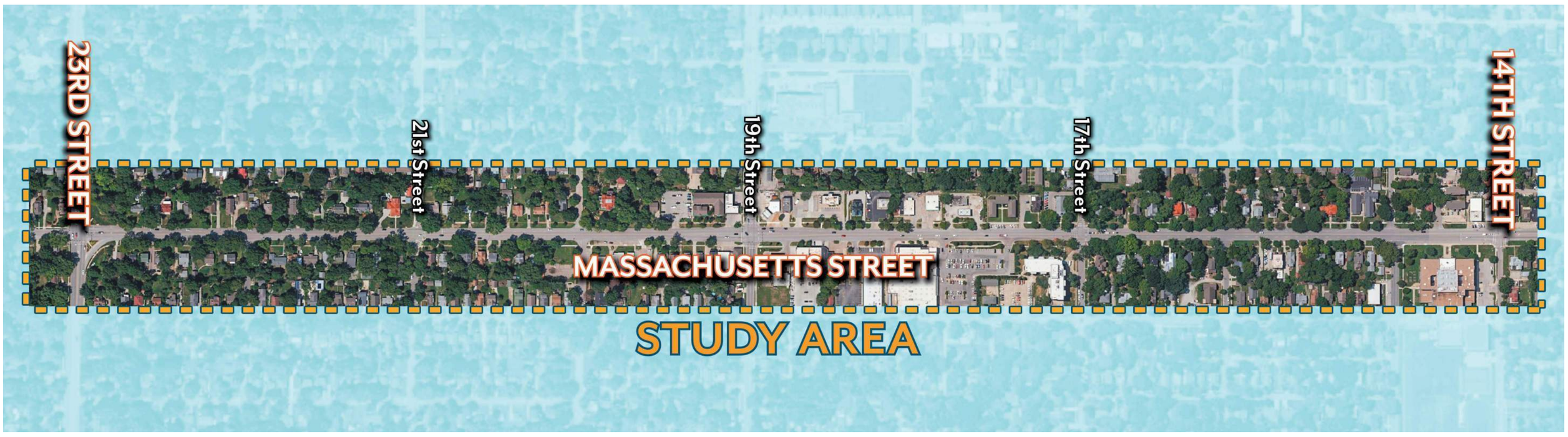


MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

OPEN HOUSE
March 27, 2024 4:30-6:30 p.m.

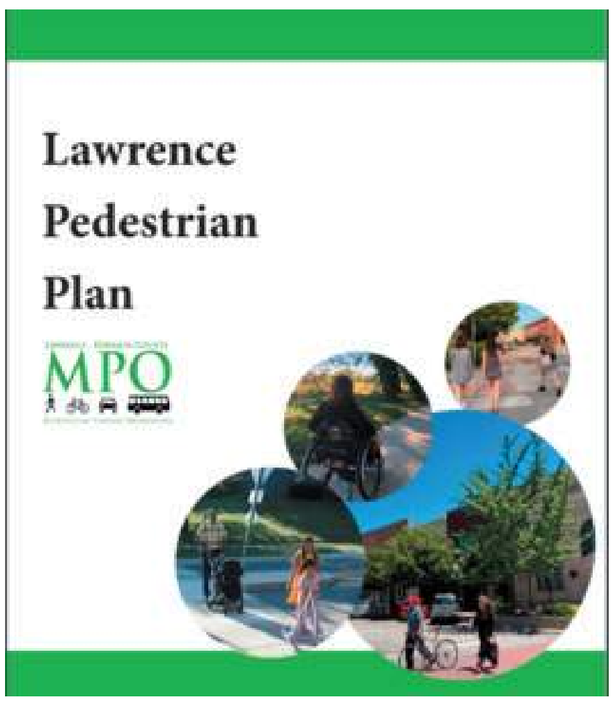
The Massachusetts Street Multimodal Improvements Study seeks to develop new multimodal infrastructure along Massachusetts from 14th Street to 23rd Street.

Multimodal **refers to all types of modes or transportation – including walking, biking, driving, or riding transit.**



Relevant Plans

The Lawrence Bikes Plan identifies Massachusetts Street from 14th Street to 21st Streets as a priority funding segment in the City's bikeway network. Massachusetts Street from 21st Street to 23rd Street is on the secondary funding network. The Massachusetts Street roadway from 14th Street to 23rd Street is currently mostly unmarked for bicycling (sharrows) and contains no bike lanes. **The entire corridor is rated 5 out of 5 for least comfortable to cyclists.**



The Lawrence Pedestrian Plan requires arterial roads to have connected sidewalk on both sides of the roadway. This project will assure sidewalk is in good condition and connected from 14th St to 23rd St. This project will address sidewalk gaps, panel ADA deficiencies, and ADA ramps at intersections and driveways.

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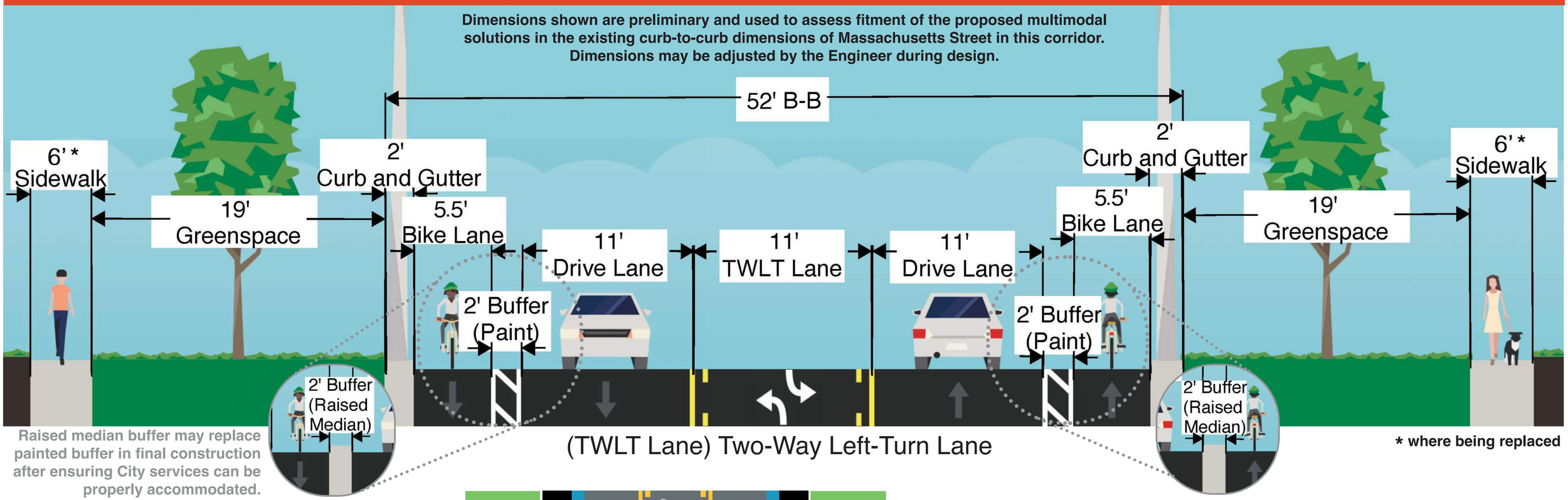
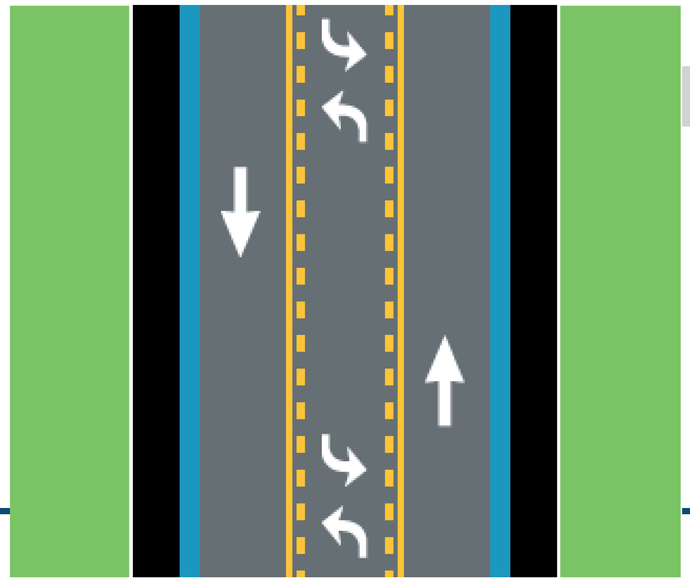
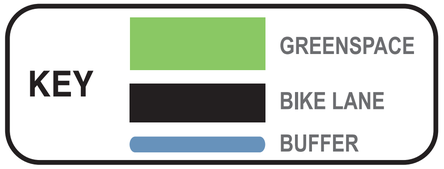
MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

MASS STREET FINAL CONCEPT DESIGN

Roadway Reconfiguration: 4-Lane to 3-Lane Conversion with Bike Lanes







Final Concept Design Benefits

- Improved pedestrian facilities
- Improved bike facilities
- Anticipated reduction in rear-end crashes
- Anticipated reduction in left-turn crashes
- Anticipated reduction in right-angle crashes
- Fewer lanes for pedestrians to cross
- Opportunity to install pedestrian refuge islands
- Reduced traffic speeds
- Accommodations for all users

Lawrence KANSAS TREKK Shockey

MASS. STREET MULTIMODAL IMPROVEMENTS STUDY
14th to 23rd Street

NEXT STEPS & ADDITIONAL ENGAGEMENT OPPORTUNITIES

PROJECT SCHEDULE:

- ☑ Open House - October 25, 2023
- ☑ MMTC - December 2023
- ☑ Open House - February 7, 2024
- ☑ MMTC - March 2024
- Open House - March 27, 2024
- ☐ MMTC - April 1, 2024
- ☐ City Commission - April 16, 2024

MMTC - Multimodal Transportation Commission

Check out the project website to stay up-to-date on on the project or contact the project manager with questions or comments.

Project Website

www.lawrenceks.org/community-engagement/mass-street-improvements/

Project Manager

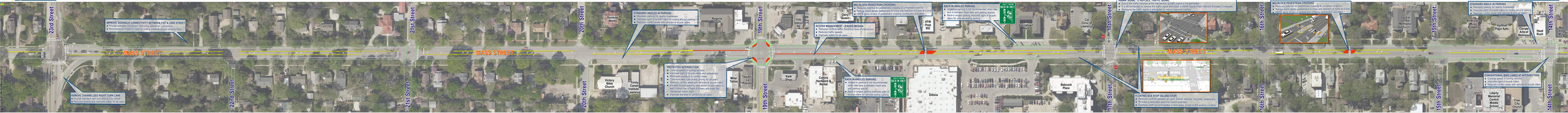
Aaron Parker,
P.E., ENV SP, Project Engineer
City of Lawrence
Municipal Services and Operations
PO Box 708
Lawrence KS 66044
785-760-7264
aparker@lawrenceks.org

Lawrence KANSAS TREKK Shockey

MASS. STREET MULTIMODAL

Transportation Study

23rd to 22nd Street



MASS. STREET MULTIMODAL

Transportation Study

23rd to 22nd Street