

CHANDLER STREET REDESIGN

Creating a safer place to live, visit, and do business.



The City of
WORCESTER



CHANDLER STREET REDESIGN PUBLIC MEETING AGENDA

November 16, 2023
6:30-8:00PM

1. Opening Remarks & Introductions
2. Project Presentation
 - Purpose and Existing Conditions
 - Challenges and Opportunities
 - Preliminary Preferred Alternative
 - Project Timeline
3. Question and Answer Period
4. Close



The City of
WORCESTER

massDOT
Massachusetts Department of Transportation

OPENING REMARKS

Councilor Sarai Rivera
District 4



The City of
WORCESTER



CITY OF WORCESTER PROJECT TEAM

**Stephen Rolle, P.E. –
Commissioner**

**Todd Kirrane – Assistant
Director**

**Brian Pigeon – Senior
Transportation Planner**



The City of
WORCESTER



WSP CONSULTANT TEAM

Kwame Aidoo – Project Manager

Gregory Skiba– Senior Civil
Engineer

Nate Cabral-Curtis – Public
Involvement

Leah Kostick – Public
Involvement



PROJECT PURPOSE

- **Address Safety Concerns**
 - Reduce crash rates
 - Safe access for pedestrians and other vulnerable roadway users
 - Manage speeding
 - Reduce vehicle conflicts
- **Support Neighborhoods**
 - Equitable access to connecting neighborhoods
 - Improve streetscape and environment on Chandler St
 - Meet access needs for businesses and residents along the corridor
- **Upgrade and Modernize**
 - Interconnected traffic signals
 - Transit Signal Priority (TSP)
 - ADA accommodations



CHANDLER STREET CRASH DATA: VEHICLE CRASHES



Vehicle Top 5%
Crash Clusters
(2018 - 2020)

Chandler @ Park
Chandler @ Dewey
Chandler @ Mason
Chandler @ Bellevue
Chandler @ Queen

Chandler @ Piedmont
Chandler @ Irving
Chandler @ Murray
Chandler @ Main

CHANDLER STREET CRASH DATA: PEDESTRIAN AND BIKE CRASHES



Pedestrian Top 5% Crash Clusters (2018 - 2020)



Bicycle Top 5% Crash Clusters (2018 - 2020)

CHANDLER STREET CONGESTION HOT SPOTS



Highly Congested During Peak Periods



Moderately Congested During Peak Periods

MOTOR VEHICLE ACCESS CONSTRAINTS



Prohibited Turns



Right Turn Only



Unsignalized side streets

CHANDLER STREET WRTA BUS STOP LOCATIONS



WRTA Bus Stop Locations

CORRIDOR CHALLENGES - ONE

- **Crosswalks**
 - Excessively wide intersections.
 - Long distances between crosswalks.
 - Many 4-lane crosswalks at unsignalized intersections.
- **Inadequate street lighting in some locations.**
- **High volume intersections at Park Ave and Main St.**
- **Closely spaced intersections.**



CORRIDOR CHALLENGES - TWO

- No bike & micro-mobility accommodations.
- No green space, limited street trees, uninviting streetscape.
- Closely spaced bus stops & lack of amenities
- Traffic signals
 - Uncoordinated operation.
 - Reliability of detection.
 - Split phasing at Park Avenue.



ENHANCEMENT OPPORTUNITIES - ONE

- **Streetscape**

- Street trees and landscape beds.
- Opportunities to for Place Keeping with parklets or modestly expand pedestrian realm.
- Green infrastructure.
- Improved street lighting.



- **Bus Access**

- Consolidate bus stops
- Install Shelters and/or benches



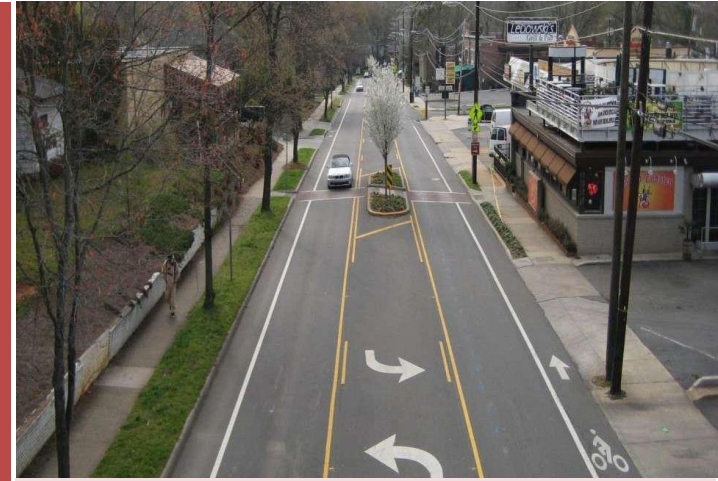
ENHANCEMENT OPPORTUNITIES - TWO

- **Street Configuration**

- Road Diet (4-lane to 3-lane conversion).
- Dedicated two-way left turn lane (TWLTL).
- Reduce intersection width and address skewed intersections.

- **Traffic Control**

- Improved signal timing and coordination.
- Transit signal priority.



ENHANCEMENT OPPORTUNITIES - THREE

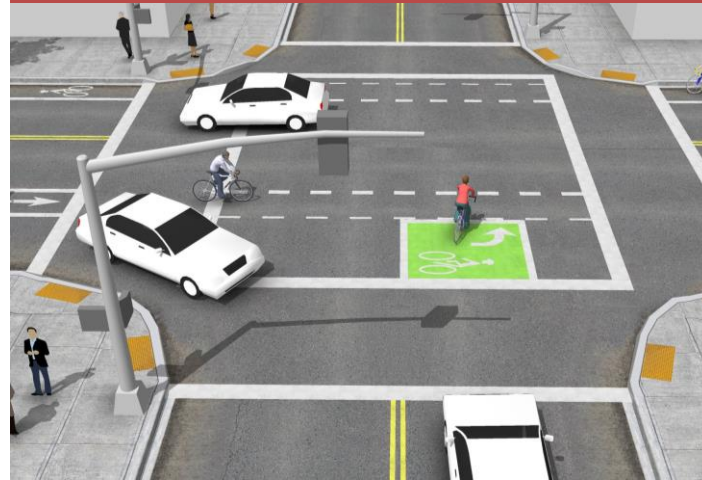
- **Improve Safety and Access at Pedestrian Crossings**
 - Curb extensions (or bulb-outs) provide shorter crossing distances
 - Median refuge islands
 - Rectangular Rapid Flashing Beacons (RRFB)
 - ADA compliant curb ramps and traffic signals.



ENHANCEMENT OPPORTUNITIES - FOUR

- **Improve Safety and Access for Bike & Micro-mobility Riders**

- Protected bike & micro-mobility lanes.
- Intersection treatments.
- Bicycle parking.



DEVELOPING A PREFERRED CONCEPT

Design Components

- Sidewalks and pedestrian accommodations
- Bike & micro-mobility accommodations
- Lane configurations
- Traffic control
- Street lighting
- Stormwater management

Additional Considerations

- Universal design/accessibility
- Constructability
- Maintenance (snow removal & street sweeping)
- Sub-surface utility impacts



DESIGN GUIDANCE

Federal Highway Administration

Manual on Uniform Traffic Control Devices (MUTCD); Safe System Approach Guidance; Guide for the Planning, Design, and Operation of Pedestrian Facilities; other policies and directives

United States & Massachusetts Architectural Access Boards

Americans with Disabilities Act (ADA) Accessibility Standards; Public Rights-of-Way Accessibility Guidelines (PROWAG)

National Association of City Transportation Officials (NACTO)

Urban Street Design Guide, Urban Bikeway Design Guide

American Association of State Highway and Transportation Officials (AASHTO)

Guide for the Planning, Design, and Operation of Pedestrian Facilities; A Policy on Geometric Design of Highways and Streets

Massachusetts Department of Transportation (MassDOT)

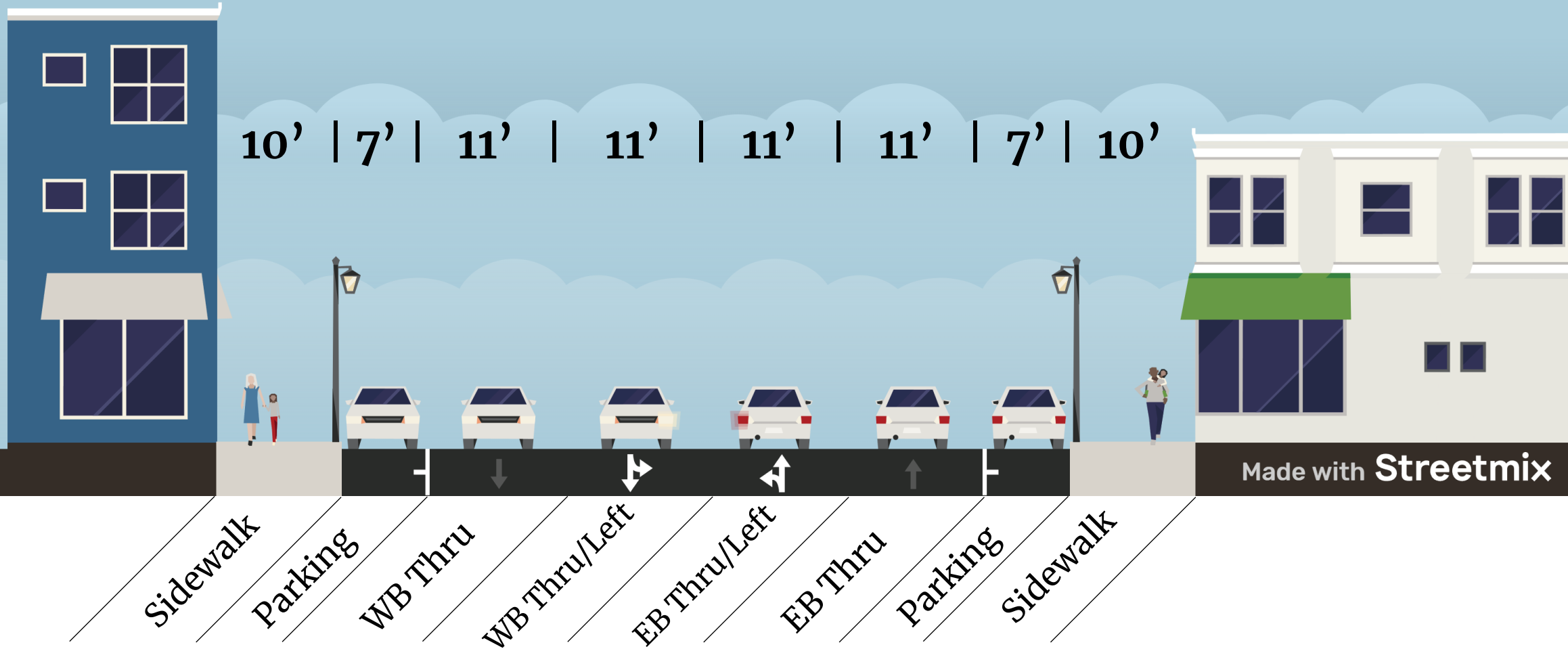
MassDOT Project Development and Design Guide; Safe Speeds Technical Toolkit; Separated Bike Lane Planning & Design Guide; other guidance policies and directives

Industry Best Practices

Institute of Transportation Engineers (ITE); AARP Livable Communities; Arbor Day Foundation; WHO Age-friendly Cities Framework

EXISTING CONDITIONS

Chandler Street: Existing Conditions

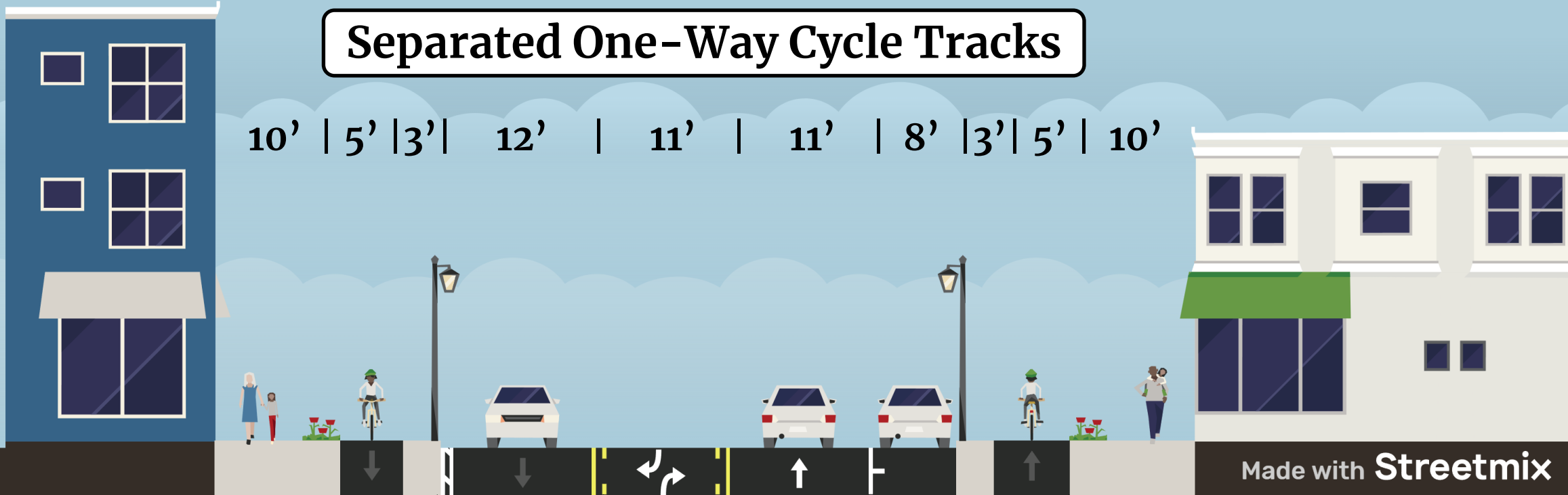


PRELIMINARY PREFERRED CONCEPT - ONE

Chandler Street: Preferred Concept

Separated One-Way Cycle Tracks

10' | 5' | 3' | 12' | 11' | 11' | 8' | 3' | 5' | 10'



Sidewalk

Bike Lane & Buffer

WB Thru & Shoulder

TWLTL

EB Thru

Parking

Bike Lane & Buffer

Sidewalk

Made with Streetmix

PRELIMINARY PREFERRED CONCEPT - TWO



SEPARATED
CYCLE TRACK
ON EACH SIDE

BICYCLE CONFLICT
MARKINGS ACROSS
DRIVEWAYS & SIDE
STREETS

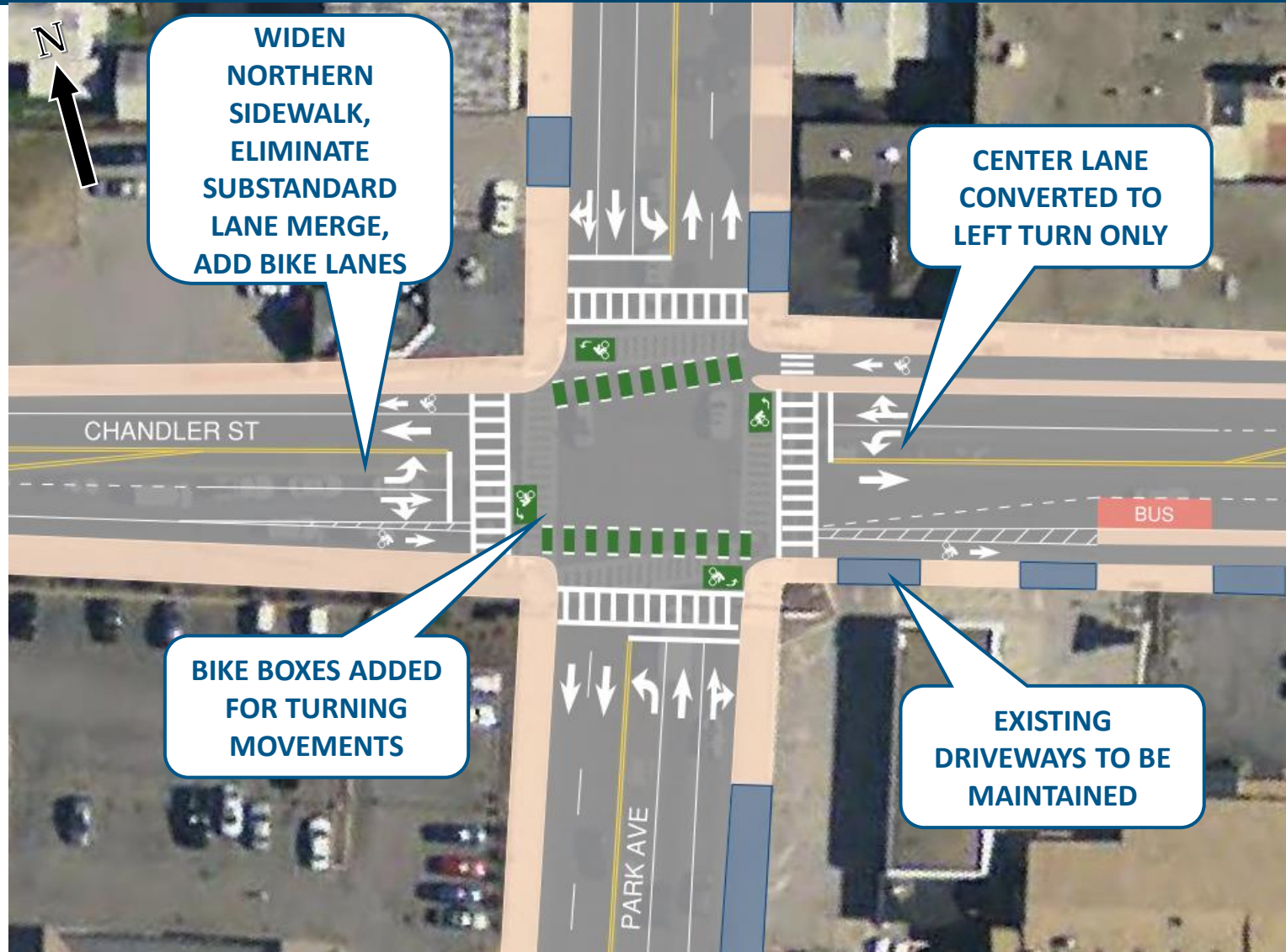
TWO-WAY LEFT
TURN LANE
(TWLTL)

PARKING LANE
GENERALLY ON
ONE SIDE
ONLY

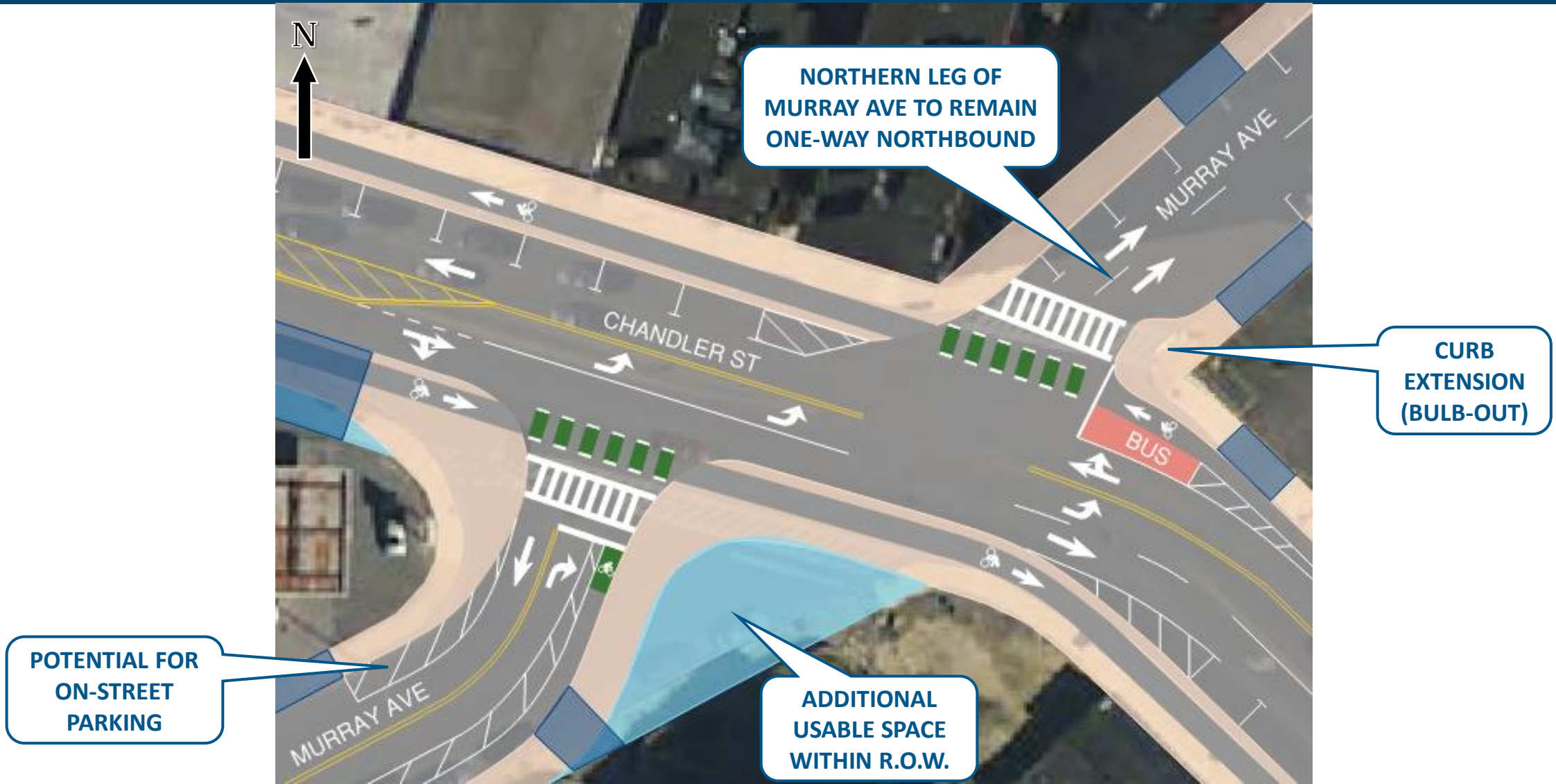


CHANDLER ST AND PARK AVE INTERSECTION

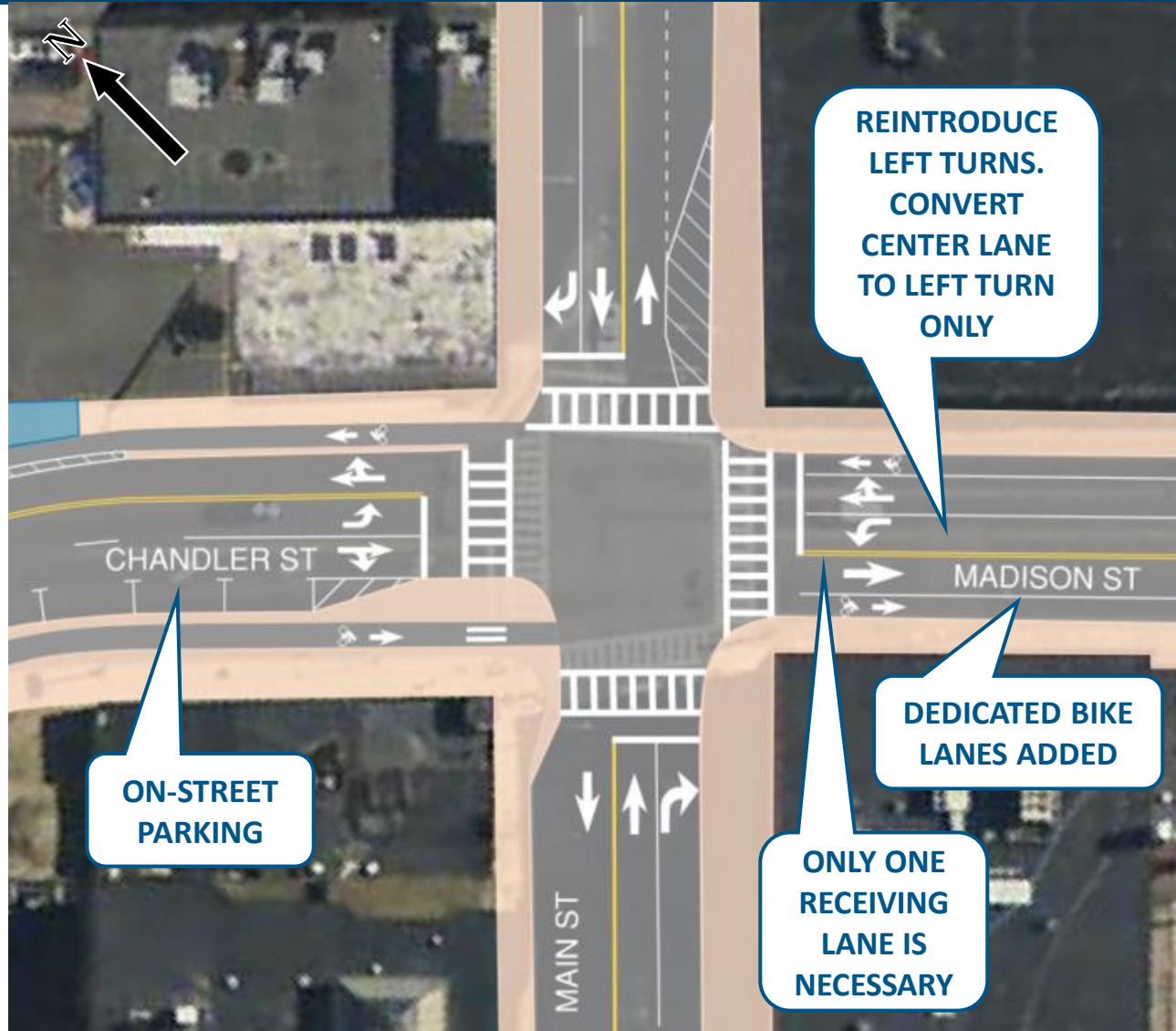
3-LANE ALTERNATIVE



CHANDLER ST AND MURRAY AVE INTERSECTION ONE-WAY ALTERNATIVE



CHANDLER ST AND MAIN STREET INTERSECTION



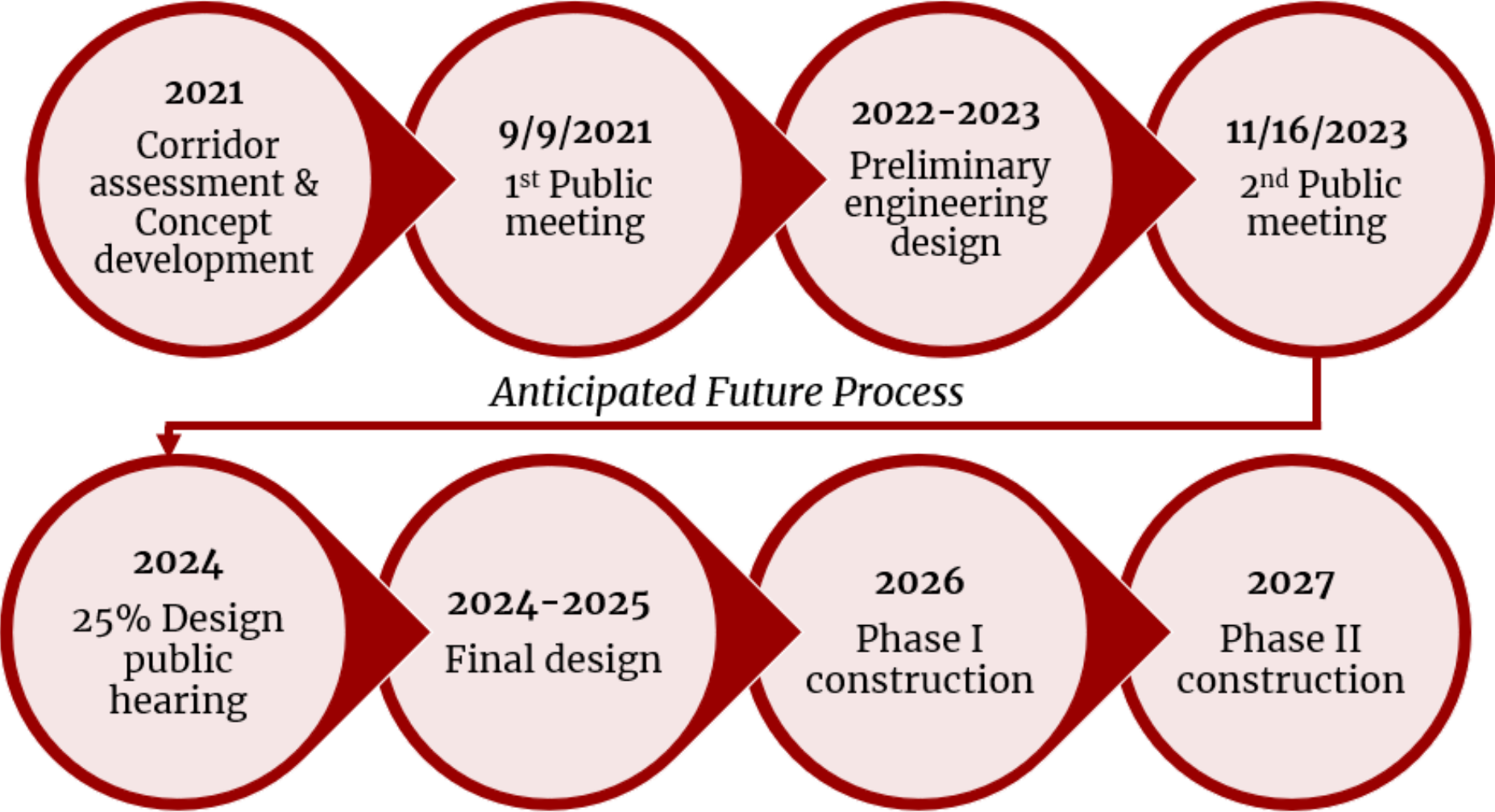
RECAP CHANGES - ONE

	Existing	Current Proposal
Travel Lanes	<ul style="list-style-type: none">• 2 lanes in each direction• No center turn lane	<ul style="list-style-type: none">• 1 lane in each direction• 1 center turn lane
Traffic Signals	<ul style="list-style-type: none">• Not coordinated.• Park Ave operates “Split Phase”• Not up to date in terms of current MUTCD and ADA requirements.	<ul style="list-style-type: none">• Signals coordinated and equipped with video detection.• Park Ave operates concurrent phasing with protected left turns.• Meet all MUTCD and ADA requirements.• New signal proposed at Mason St.
Access	<ul style="list-style-type: none">• Many turn restrictions at Main St intersection; Main South neighborhood is especially impacted.	<ul style="list-style-type: none">• Restore left turn from westbound Chandler St to Main St.• Eliminate left turn from Chandler St to Murray St.

RECAP CHANGES - TWO

	Existing	Current Proposal
Pedestrians	<ul style="list-style-type: none">• 10 ft sidewalks.• Minimal streetscape and street trees.• Several unsignalized 4-lane crosswalks	<ul style="list-style-type: none">• 10 ft sidewalks.• Enhanced streetscape with street trees.• Reduced crossing width.• Protected median refuges.• Addition
Bicyclists & Micromobility	<ul style="list-style-type: none">• No accommodations	<ul style="list-style-type: none">• Protected, separated path on each side of street.• Bike facilities extend through entire length of project.
Access	<ul style="list-style-type: none">• Many turn restrictions at Main St intersection; Main South neighborhood is especially impacted.	<ul style="list-style-type: none">• Restore left turn from westbound Chandler St to Main St.• Eliminate left turn from Chandler St to Murray St.

PROJECT TIMELINE



THANK YOU!

Q&A

For additional comments or questions, please contact:

Project Email:

chandlerstreet@worcesterma.gov

Project Website:

www.worcesterma.gov/chandler-street-redesign-project



The City of
WORCESTER

WHAT DO YOU
THINK?

OUTREACH EFFORTS

Advertisements

- Worcester Telegram and Gazette: Print 11/2 & 11/9, Digital 11/2 - 11/16
- Worcester Sun: Digital Blast 11/2 & 11/9
- Worcester Business Journal: Week of 11/30 -11/16
- Patch: 10/26-11/26
- Worcester Public Access Cable: Week of 11/30 -11/16
- Vocero Hispano: Print 11/3 & 11/10, Digital 10/30 - 11/16
- City of Worcester Municipal Calendar: 10/17-11/16
- City of Worcester Instagram, Facebook, X (previously Twitter), & LinkedIn: 11/7-11/16

Flyer Drops

- Worcester City Hall: 11/6
- Worcester Public Library: 11/6
- WRTA Hub at Union Station: 11/6
- 27 businesses on & around Chandler Street: 11/6 & 11/7

Worcester Sun

facebook

LinkedIn

TELEGRAM & GAZETTE



Patch



WCCA TV 194



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