

Chelmsford Street Concept & Signature Properties

Public Workshop on Streetscape Concepts | February 26, 2026



**NORTHERN
MIDDLESEX
COUNCIL OF
GOVERNMENTS**
SERVING THE REGION SINCE 1963

AGENDA

- 1 Project overview
- 2 Existing Conditions and Known Problems
- 3 Chelmsford Street Vision and goals
- 4 Concepts
- 5 Next steps



PROJECT OVERVIEW

Purpose: Help the Town understand the community's streetscape and development priorities for future reconstruction of Chelmsford Street (Route 110).

Goals: Streetscape improvements, funding strategies, and phased action plan.

FOCUS AREAS



Transportation



Safety



Sense of
place



Land use



Parking

WORKSHOP OBJECTIVES

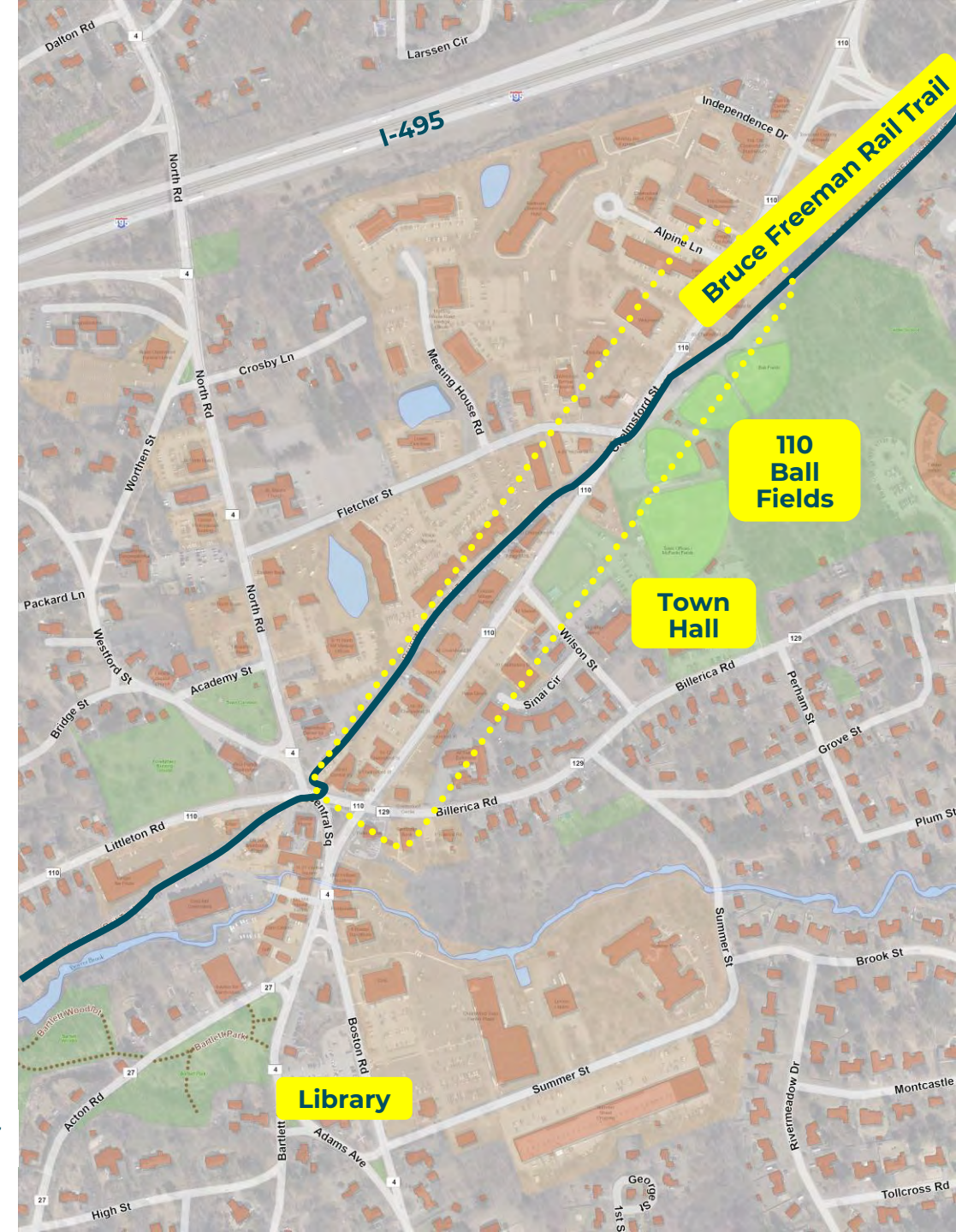
1. Share the outcome of existing conditions and public outreach.
2. Obtain direct feedback on streetscape scenarios.
3. Explain potential project funding sources based on design elements.
4. Identify additional desired streetscape and BFRT amenities to incorporate into final concept(s).
5. Continue conversations with businesses about parking alternatives.



FOCUS AREA

- Full study area includes properties between North Road and Chelmsford Street (north of Center Village), down to the Library and Summer Street (south of Center Village)
- Focus on Chelmsford Street (Route 110) between Billerica Road and Alpine Lane

Chelmsford Center Village general area and focus area

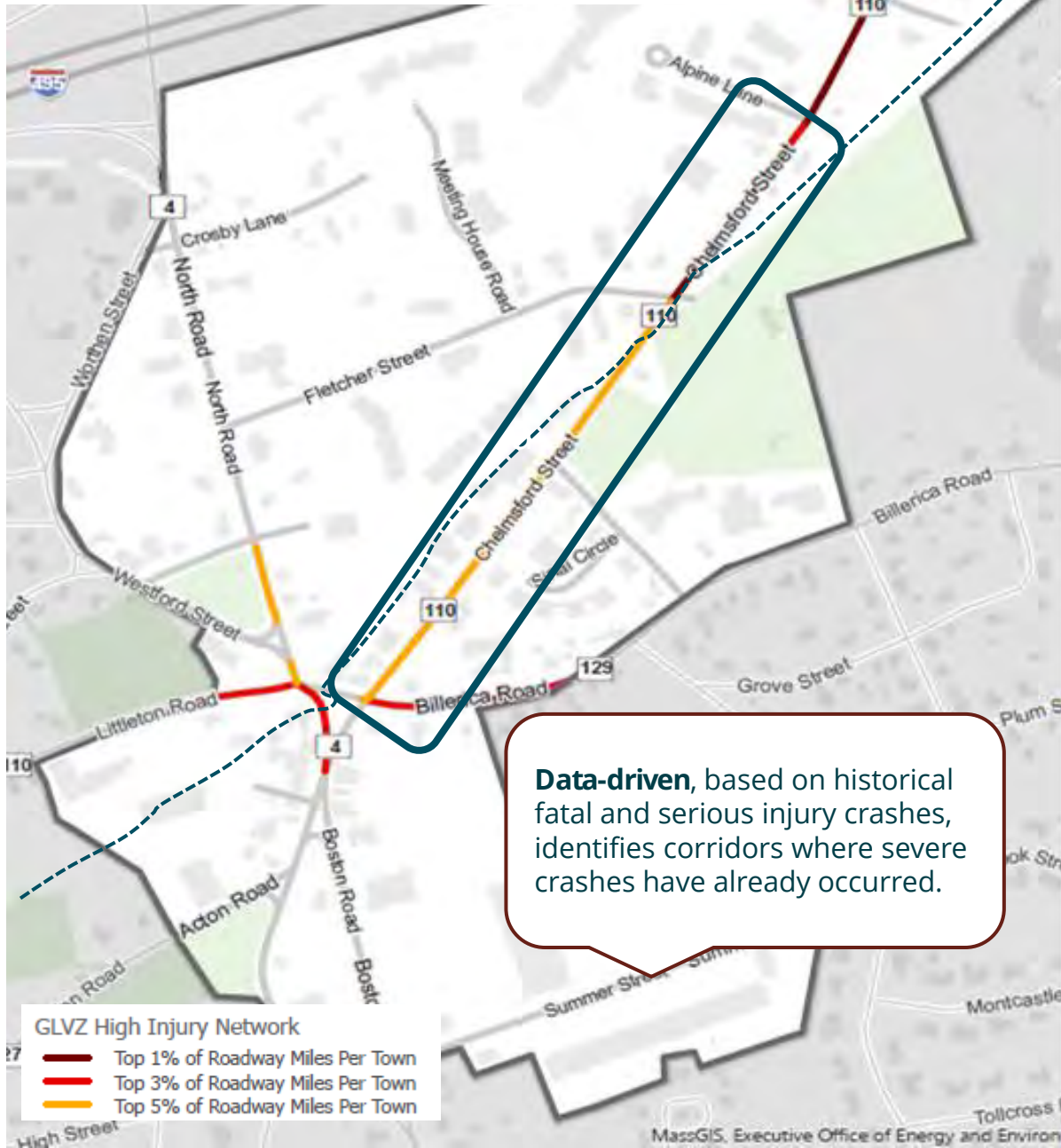


**#1 ISSUE:
SAFETY**

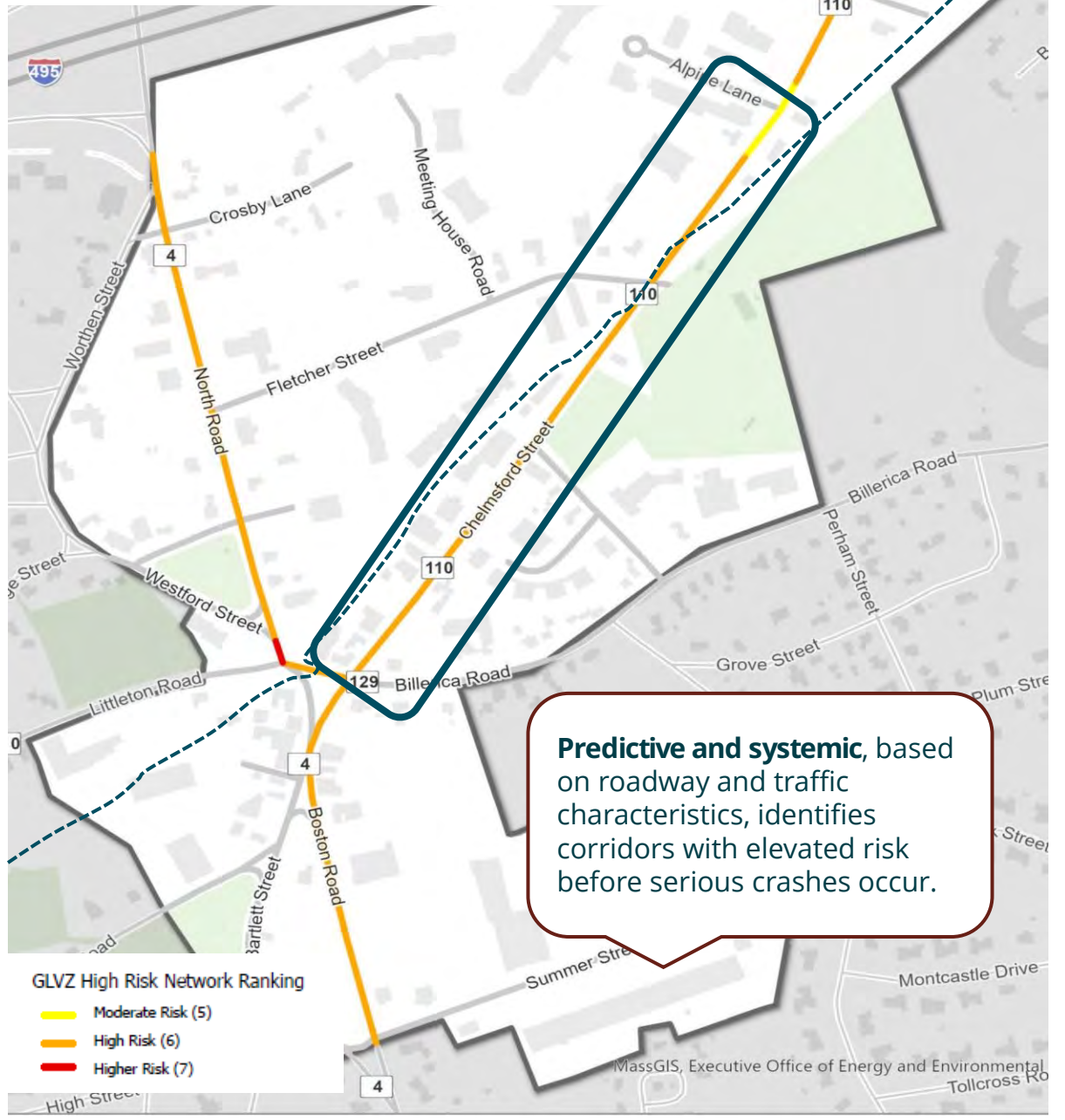
WHAT WE KNOW

existing conditions and survey results

High Injury Network

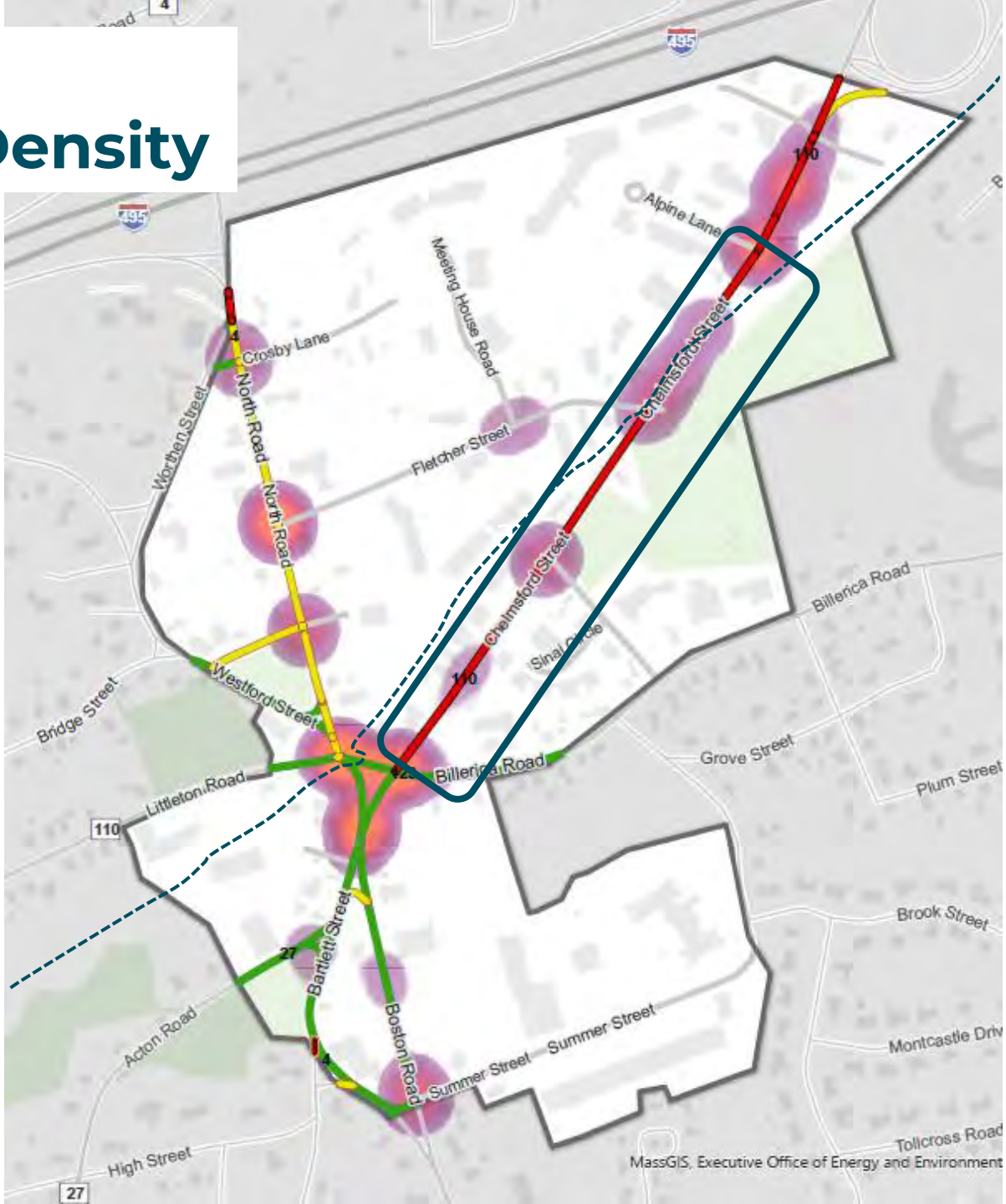


High Risk Network



Density

Map of Billerica, MA, showing density contours and major roads. The map highlights areas of high density (red) and moderate density (yellow) along major thoroughfares like North Road and Billerica Road. A dashed blue line indicates a boundary or route. The map is sourced from MassGIS, Executive Office of Energy and Environment.



Bicyclist Comfort

The Level of Traffic Stress (LTS) score is based on:

- Posted Speed Limit
- Annual Average Daily Traffic (AADT)
- Number of lanes
- Presence of a marked centerline

Data inputs for all streets in the NMCOC region is sourced from MassGIS.

The goal is to highlight where **interested but concerned** bicyclists would and would not feel comfortable riding.

BICYCLIST DESIGN USER PROFILES

Interested but Concerned

51%-56% of the total population

Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separated bicycle facilities or quiet or traffic-calmed residential roads. May not bike at all if bicycle facilities do not meet needs for perceived comfort.

Somewhat Confident

5-9% of the total population

Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders if need be.

Highly Confident

4-7% of the total population

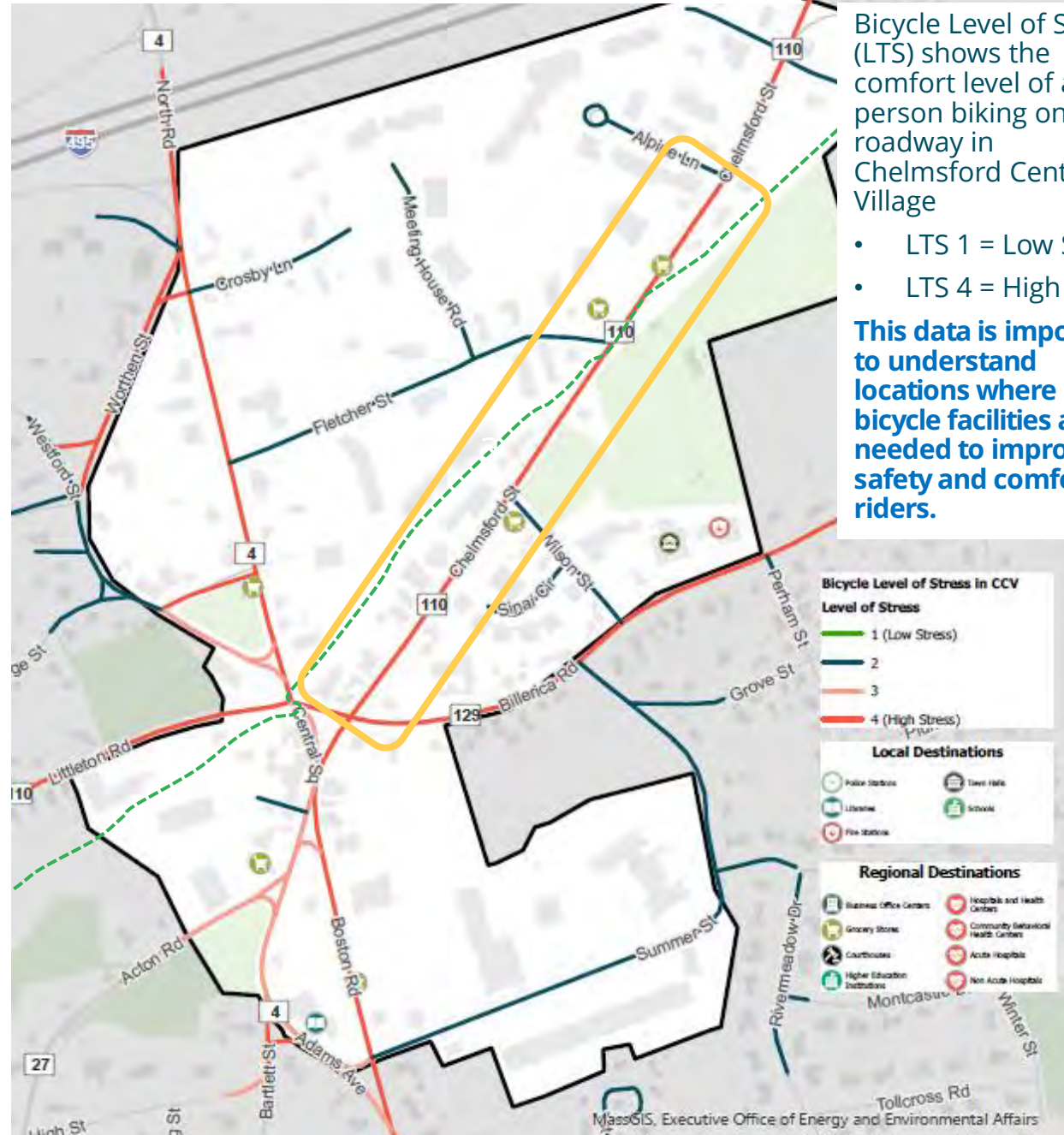
Comfortable riding with traffic; will use roads without bike lanes.



LOW STRESS TOLERANCE

HIGH STRESS TOLERANCE

Bicycle Level of Stress



Bicycle Level of Stress (LTS) shows the comfort level of a person biking on a roadway in Chelmsford Center Village

- LTS 1 = Low Stress
- LTS 4 = High Stress

This data is important to understand locations where bicycle facilities are needed to improve the safety and comfort of riders.

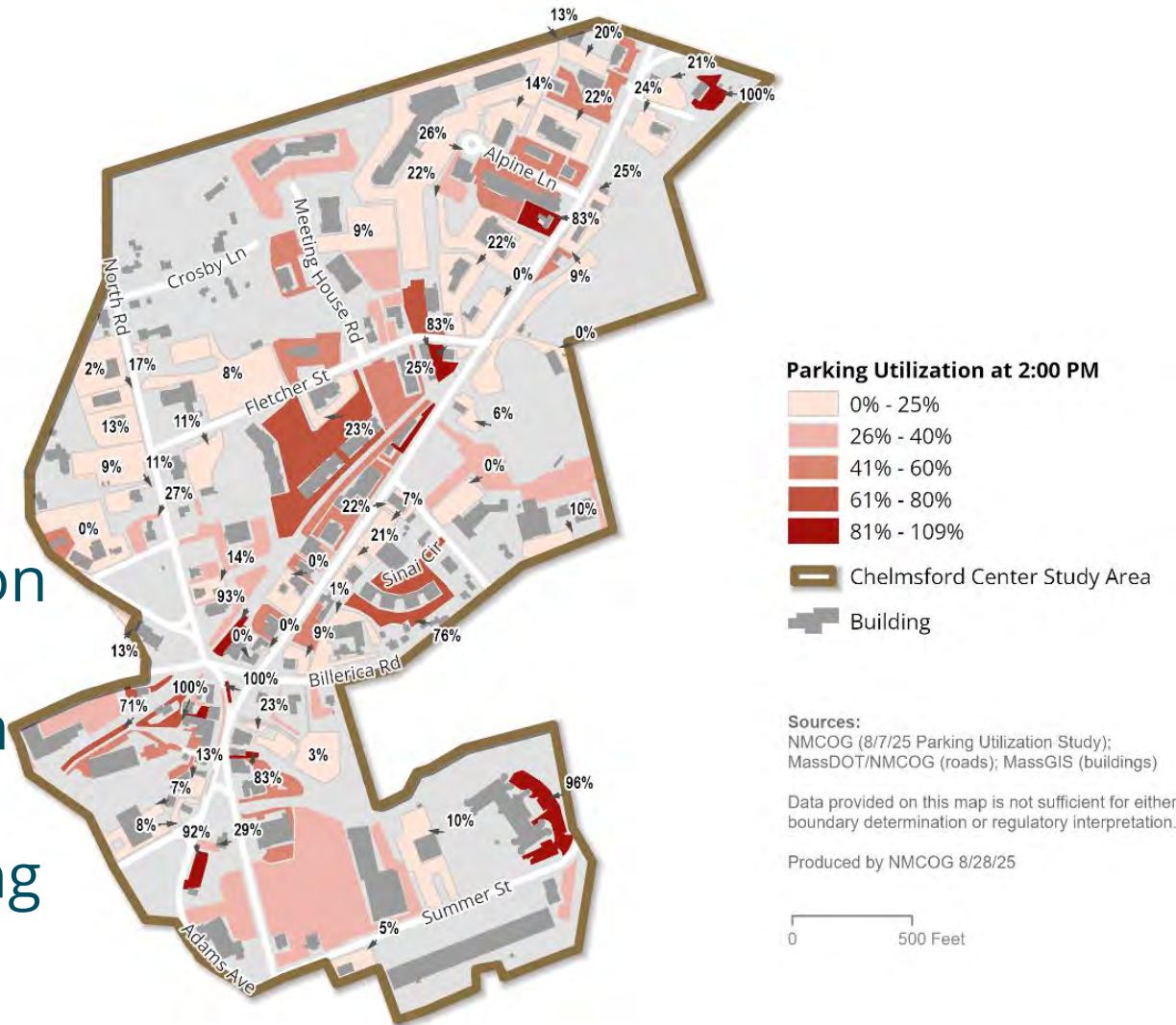


Existing Conditions: Parking

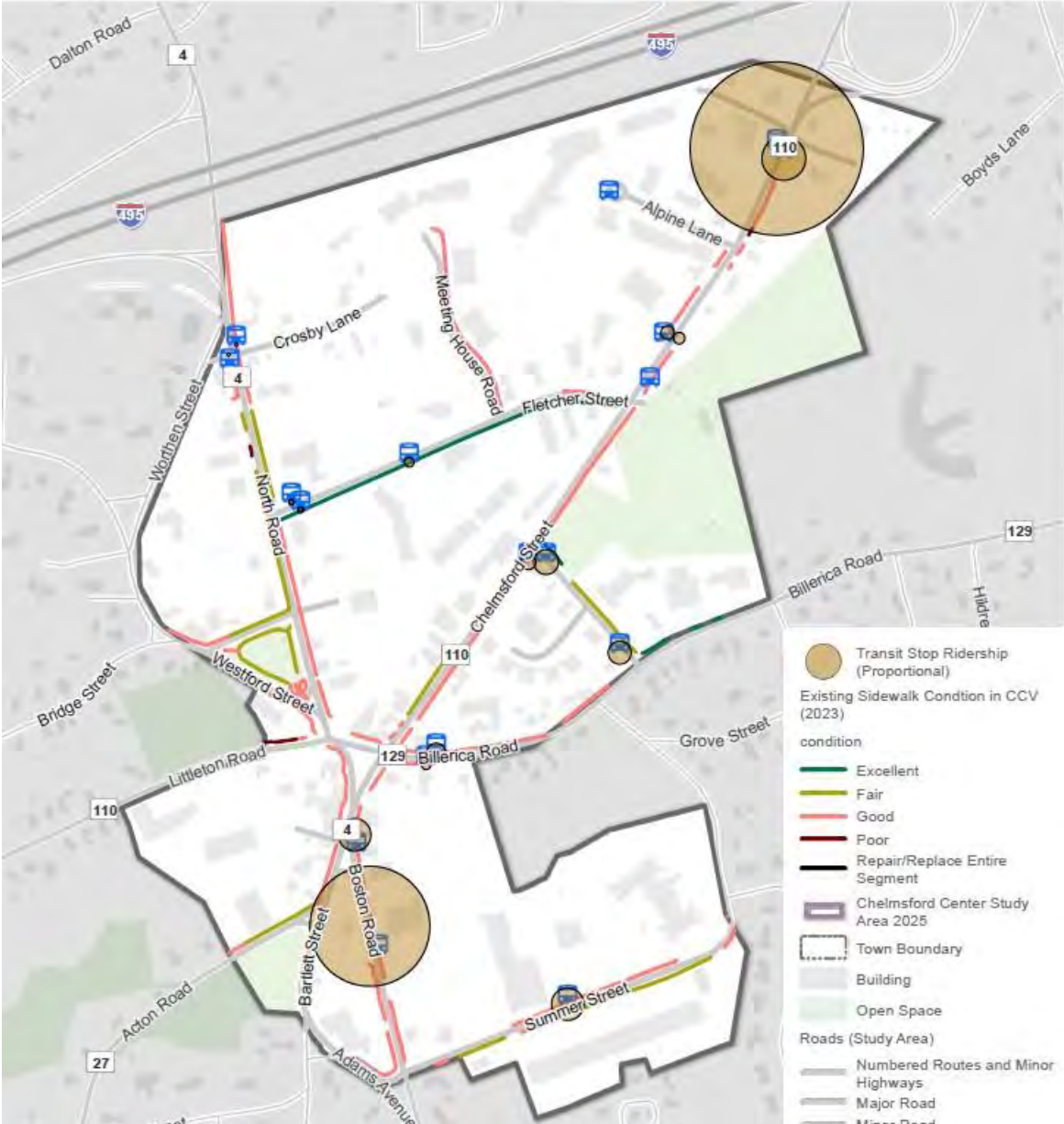
- Total supply: ~4,950 spaces
- Area-wide occupancy: 29-32%
- On-street most constrained

Takeaways:

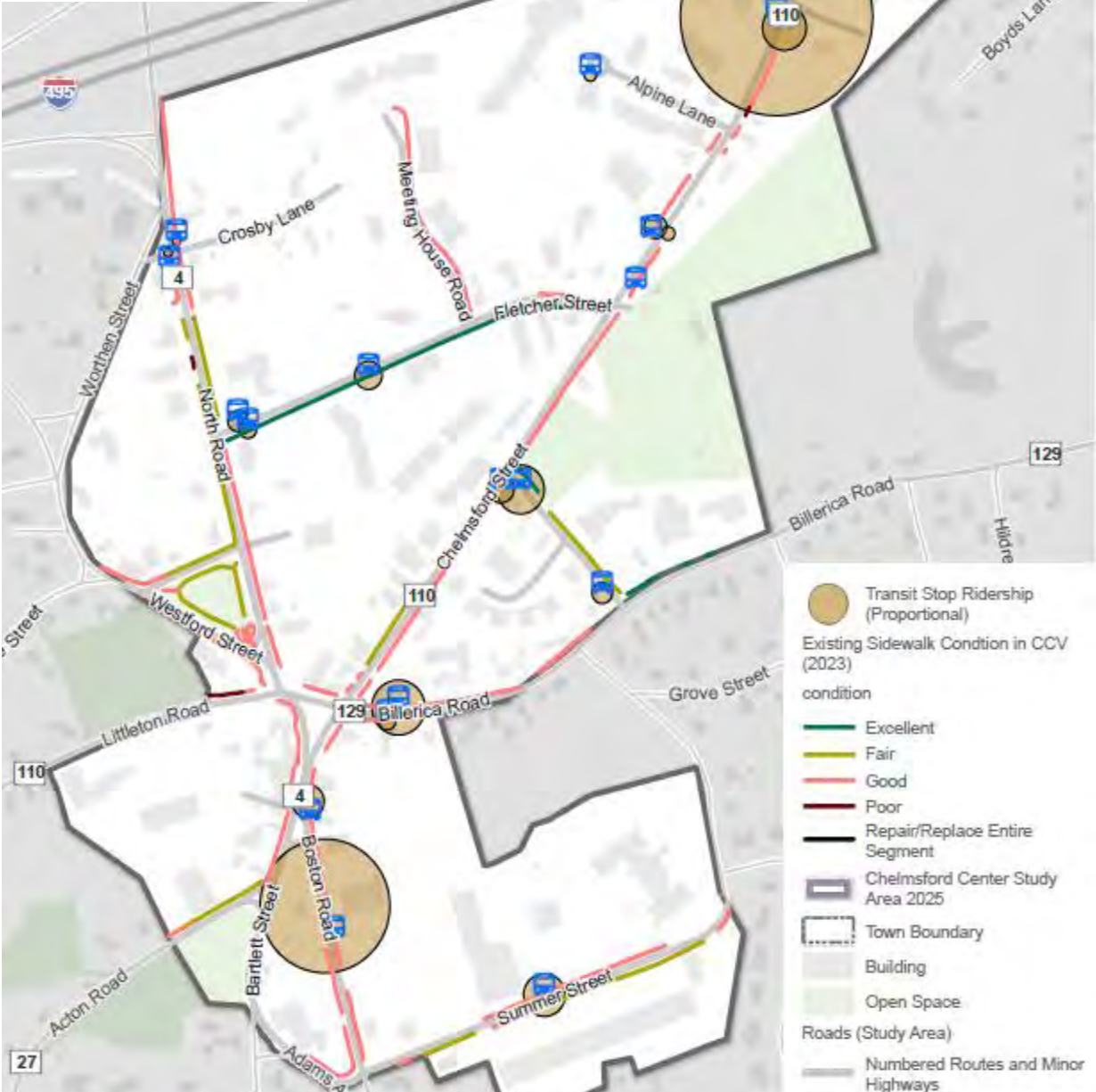
- Imbalance between demand and supply; of 72 lots, 60 have utilization of less than 50%.
- Employee parking drives utilization more than customer turnover.
- High proportion of reserved parking creates uncertainty for visitors.



LRTA Ridership + Sidewalk Conditions

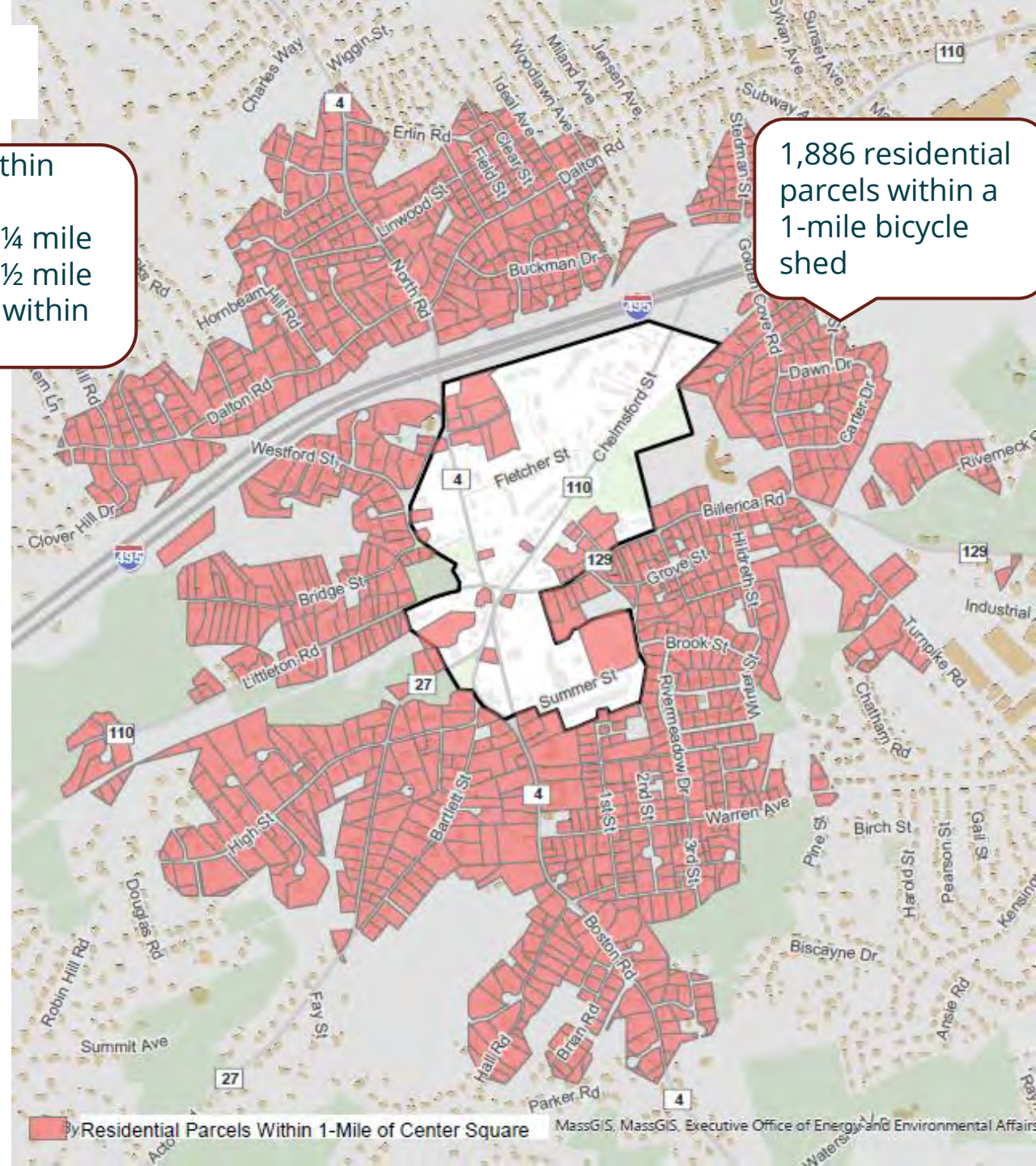
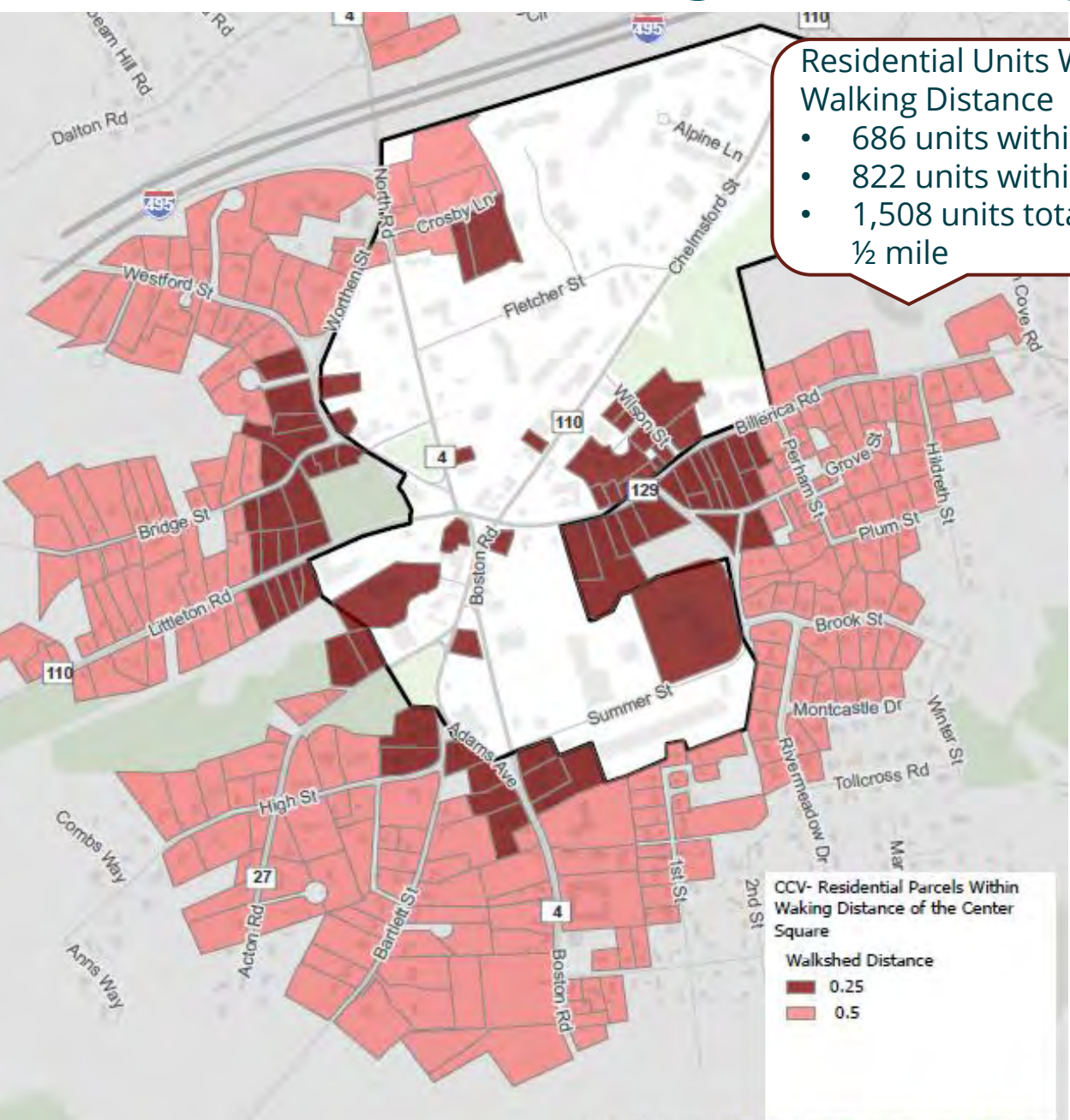


Looking at transit ridership data (Saturday, December 2024–April 2025) and sidewalk conditions (2023).



Looking at transit ridership data (Weekday, December 2024–April 2025) and sidewalk conditions (2023).

Potential for walking and biking

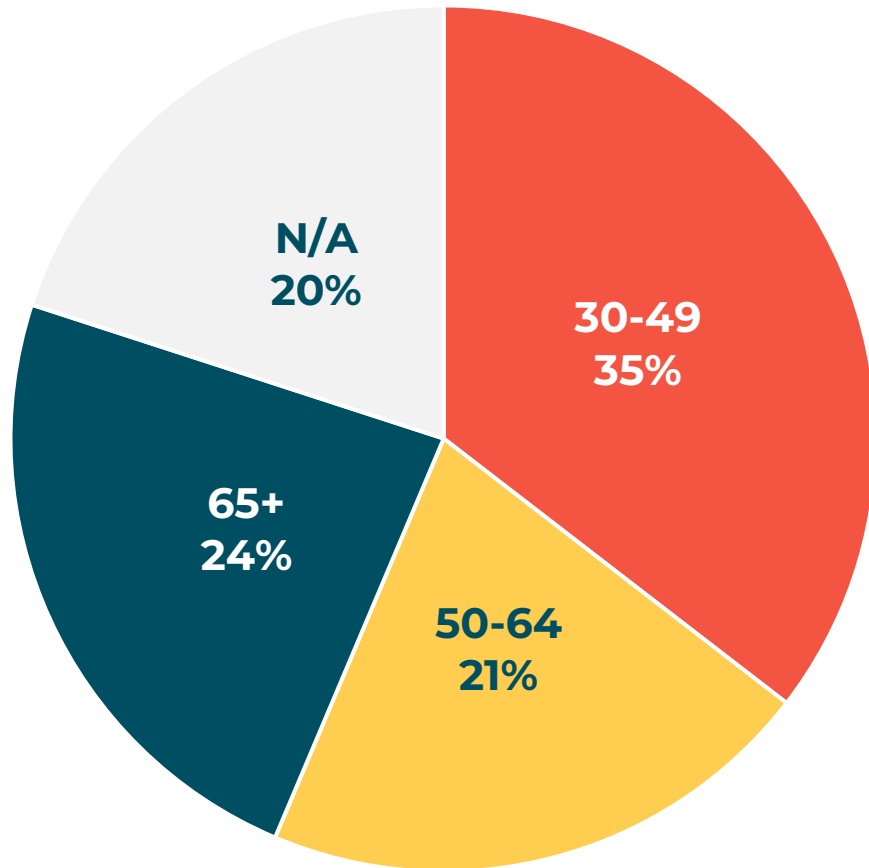


SURVEY RESULTS:

Who took the survey?

- 110 respondents
- No business owners
- Center Village Residents also counted as Chelmsford Residents

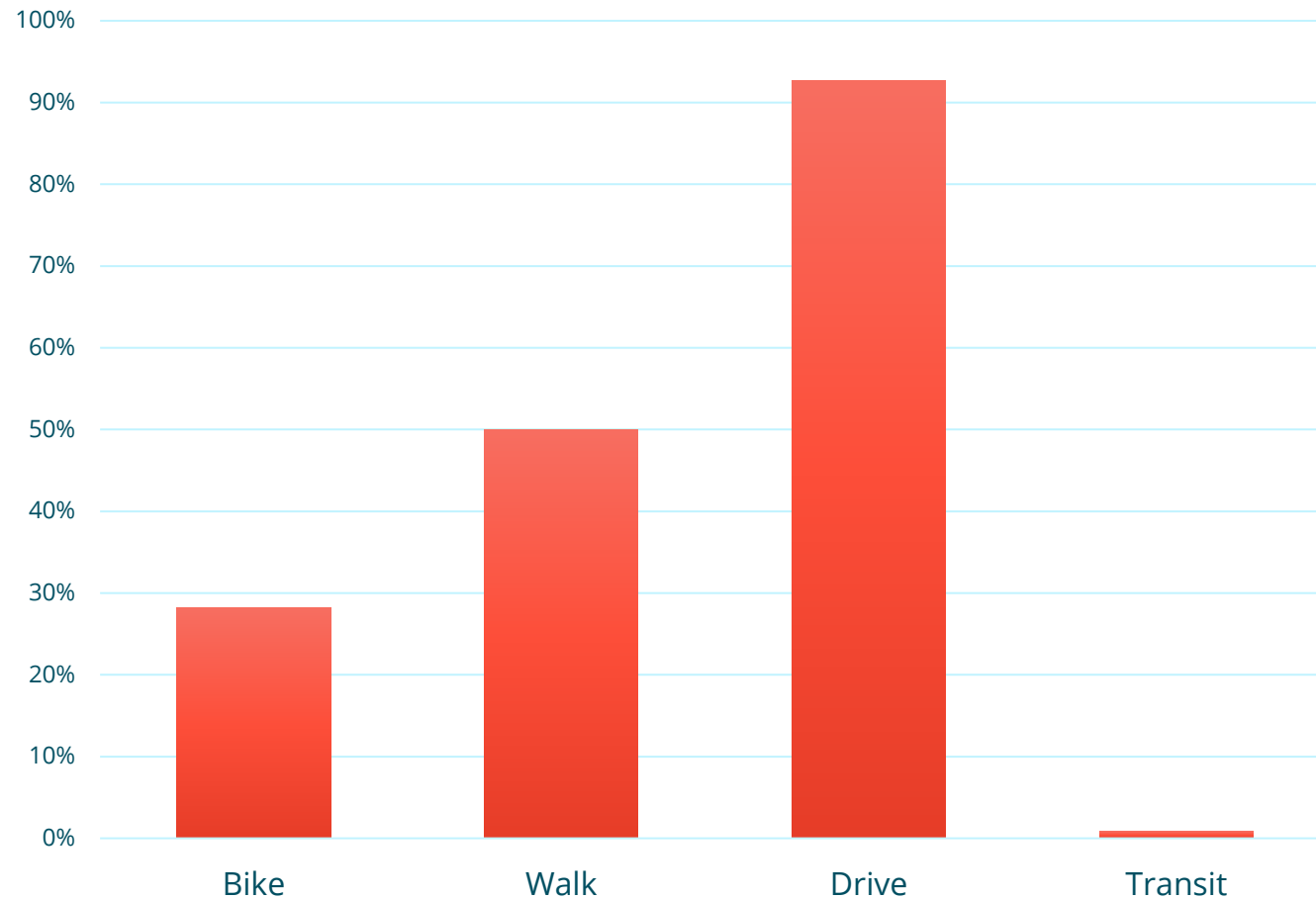
Respondent Age



Affiliation with Chelmsford Center Village

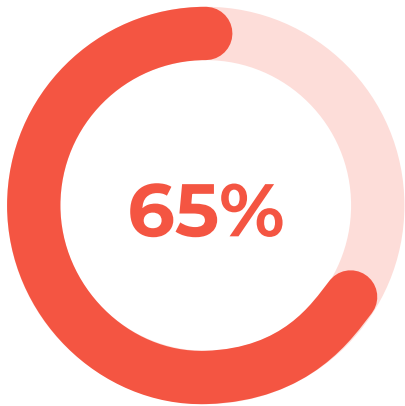


How respondents use or would like to travel on Chelmsford Street



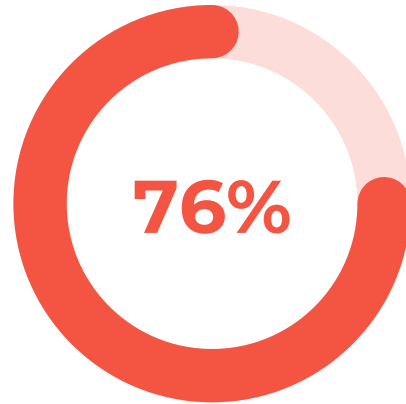
Unsurprisingly, most (93%) of respondents drive on Chelmsford Street, although 50% indicated that they walk or would like to walk and 28% indicated that they bike or would like to bike if conditions were improved.

Where folks agree...



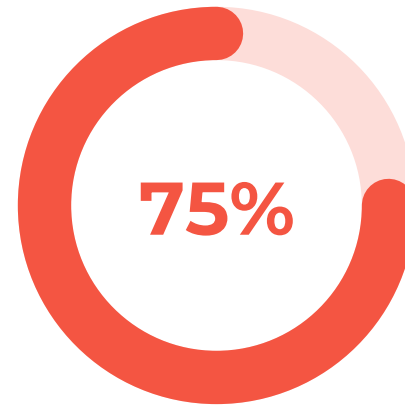
**It is unsafe
to bike**

agree or neutral



**Parking is
easy to find**

76% can usually
find a parking spot
81% know where to
find public parking



**Unaware of or
view public
transportation as
inadequate**

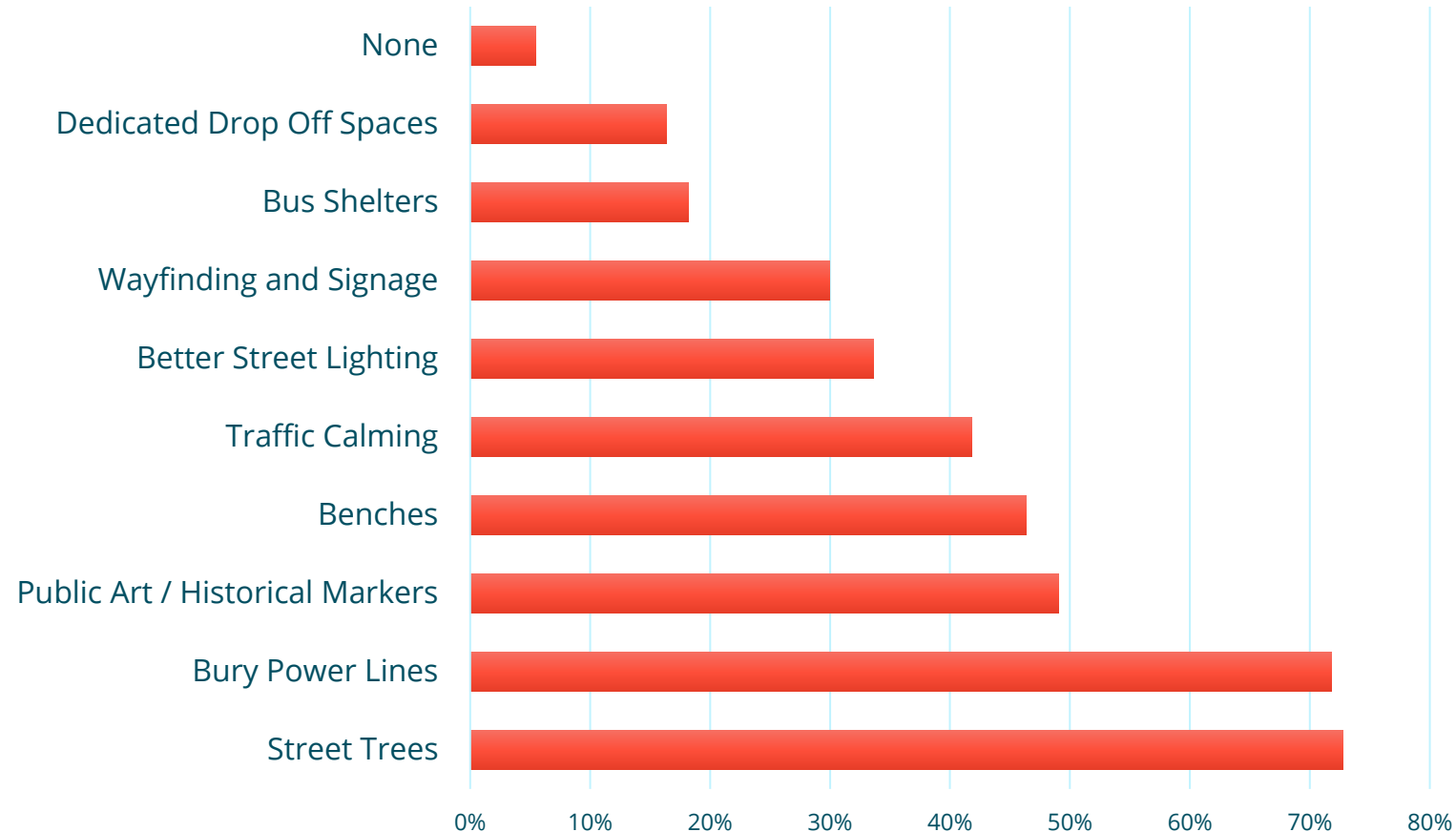


**Aesthetics could
be improved**

agree or neutral

Where folks agree...

...on desired streetscape amenities

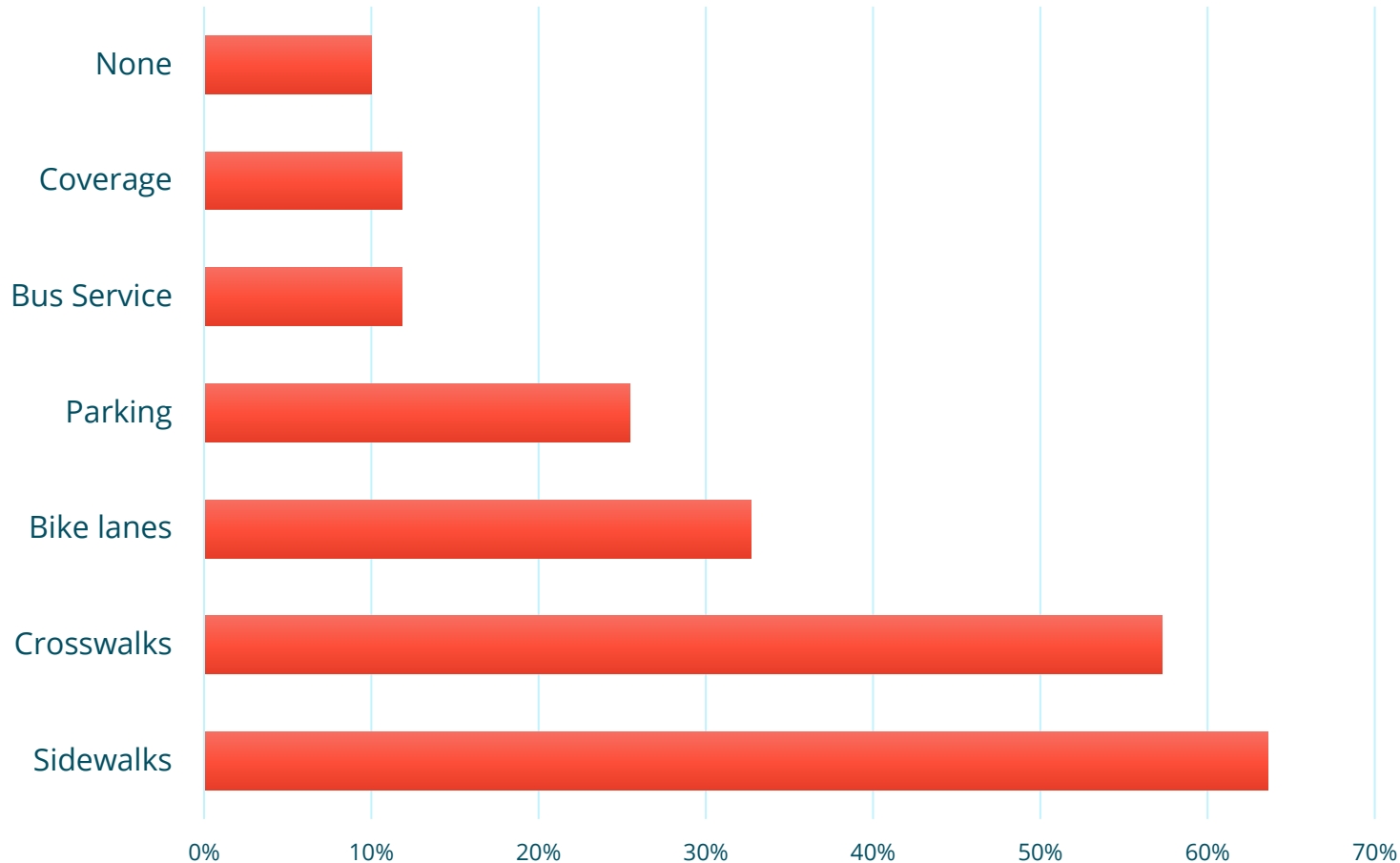


Among potential streetscape amenities, **burying the power lines** along Chelmsford Street (or even the portion closest to Center Village) (72%) and adding **street trees** (73%) ranked highest, although **traffic calming** (42%), **benches** (46%), and **public art / historical markers** (49%) also scored well.

Verified in outreach events: repeated requests for shade, benches, plantings, and a more cohesive streetscape; the Center was repeatedly identified as important to Chelmsford's identity.

Where folks agree...

...on desired transportation and mobility amenities



Pedestrian-oriented improvements ranked highest, with **sidewalks** (64%) and **crosswalks** (57%) garnering majority support.

Verified in outreach events:

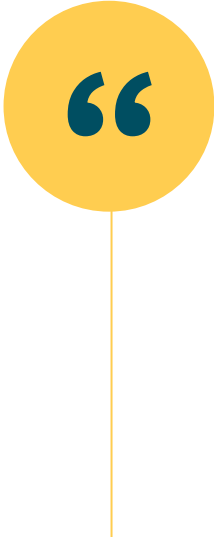
Participants avoid Center Square due to difficulty crossing; note discontinuous routes, fences blocking movement, and desire for “more connected” Chelmsford Street.

Key Themes

- Improve multimodal safety and connectivity
- Improve basic infrastructure (roadway, drainage, maintenance)
- Reduce curb-cut conflicts
- Increase parking awareness, access, and wayfinding
- Support business vitality
- Strengthen identity, public space, and activation as an important place in Town
- Enhance aesthetics and streetscape quality

VISION & GOALS

Chelmsford Street and the surrounding area will become a walkable, vibrant corridor that links Center Village Square with the surrounding neighborhoods through safe streets, attractive public spaces, and thriving local businesses. A streetscape revitalized with greenery and accessibility will transform the area into a destination for residents, visitors, and users of the Bruce Freeman Rail Trail.



“

Goals

*Chelmsford Street and the surrounding area will become a **vibrant, multimodal** corridor that links Center Village Square with the surrounding neighborhoods through **safe streets**, attractive **public spaces**, and thriving **local businesses**. A streetscape revitalized with **greenery** and **accessibility** will transform the area into a **destination** for residents, visitors, and users of the Bruce Freeman Rail Trail.*

1

Develop a **safe**, accessible, and **multimodal** corridor that prioritizes vulnerable road users.

2

Optimize parking access and wayfinding to support a **park-once-and-walk** village center.

3

Invest in coordinated **infrastructure and maintenance** improvements to support safety, accessibility, and resilience.

4

Strengthen and expand **local businesses** in Chelmsford Center Village.

5

Promote context-sensitive **infill and redevelopment** to reinforce walkability.

6

Enhance **placemaking and community identity** through high-quality streetscape design.

CHELMSFORD STREET CONCEPTS

A note on funding...

Town and Grant-Funded

Pros:

More flexibility on design elements.
Project *could* be advanced more rapidly.

Cons:

Grants are not guaranteed sources of funds; need to be tied to plans, goals, implementation, and often growth.
Town funding largely comes from local revenue (e.g., commercial and residential taxes)

TIP-Funded*

Pros:

80-100% of design funding and 100% of construction funding comes from MassDOT / FHWA
Project advances on a clear schedule once programmed.

Cons:

Less flexibility on design elements – must meet MassDOT Complete Streets design requirements.

* Funding for design, engineering, and construction accessed through the Northern Middlesex Metropolitan Planning Organization Transportation Improvement Program (FHWA and MassDOT)

Keep in mind...

1. Not all concepts are MassDOT compliant; non-compliant concept would require Town capital or grant funding
2. These are **not final** concepts – we are looking for your input, ideas, and ways to improve or augment the plans
3. Concepts only explore what is possible within the existing right of way. Additional amenities *could* be provided if easements were obtained.

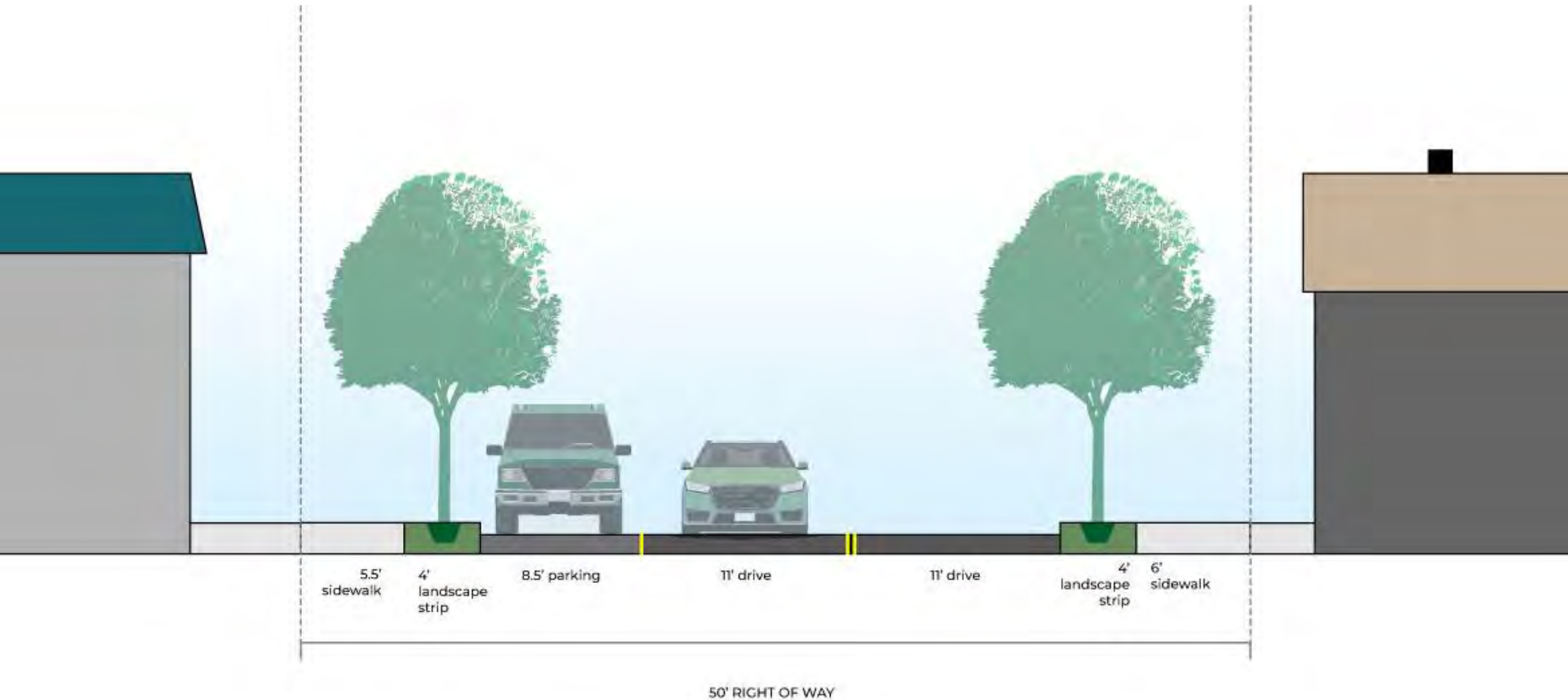




55' RIGHT-OF-WAY

CONCEPT 1: BILLERICA RD TO FLETCHER ST

Note: would need to be locally or grant-funded due to lack of bike lane

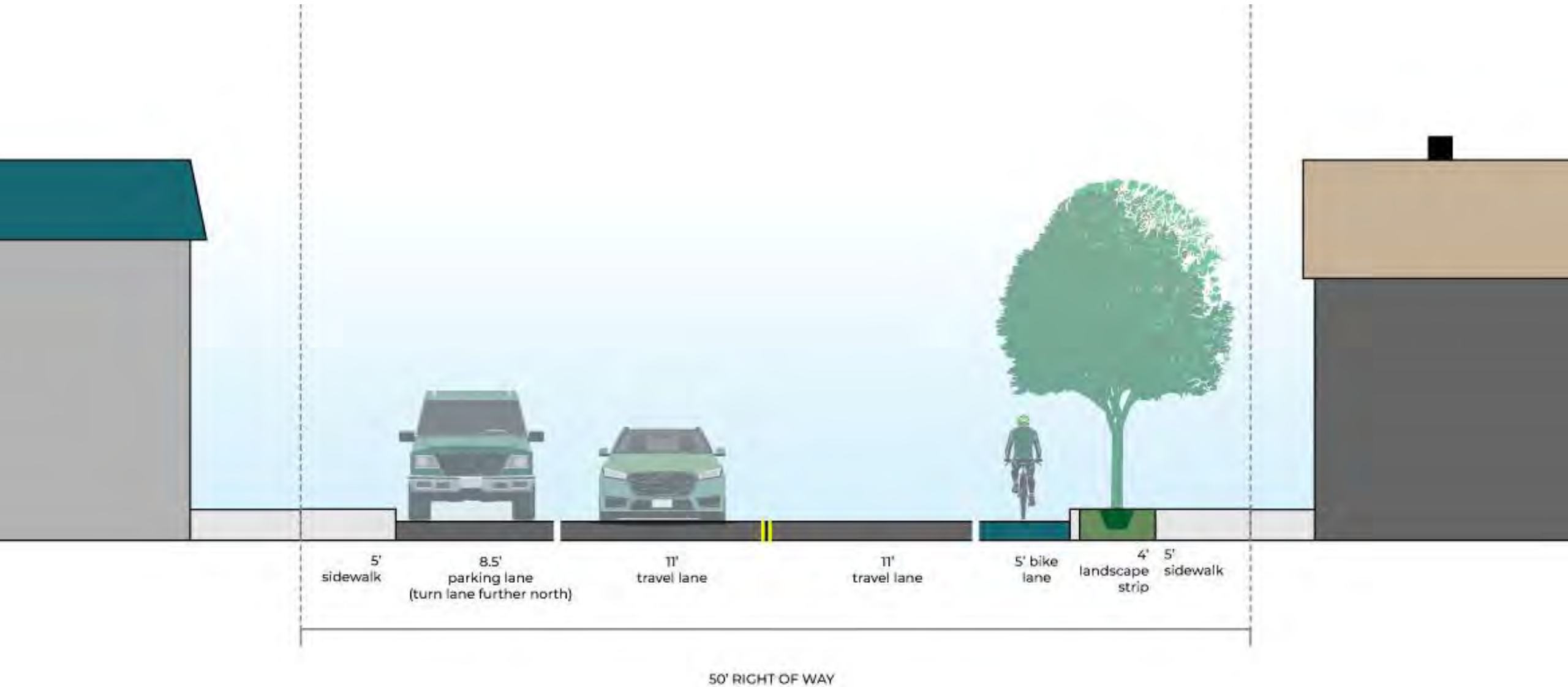






CONCEPT 2: BILLERICA RD TO FLETCHER ST

Note: could be funded through MassDOT and Federal Highway due to inclusion of a bike lane





CONCEPT 1: FLETCHER ST TO ALPINE LN

Two-way travel lanes, parallel parking / turn lane.

Bike lane raised to sidewalk level.

Full sidewalks (5') on both sides of street with 4' landscaping area on east side.







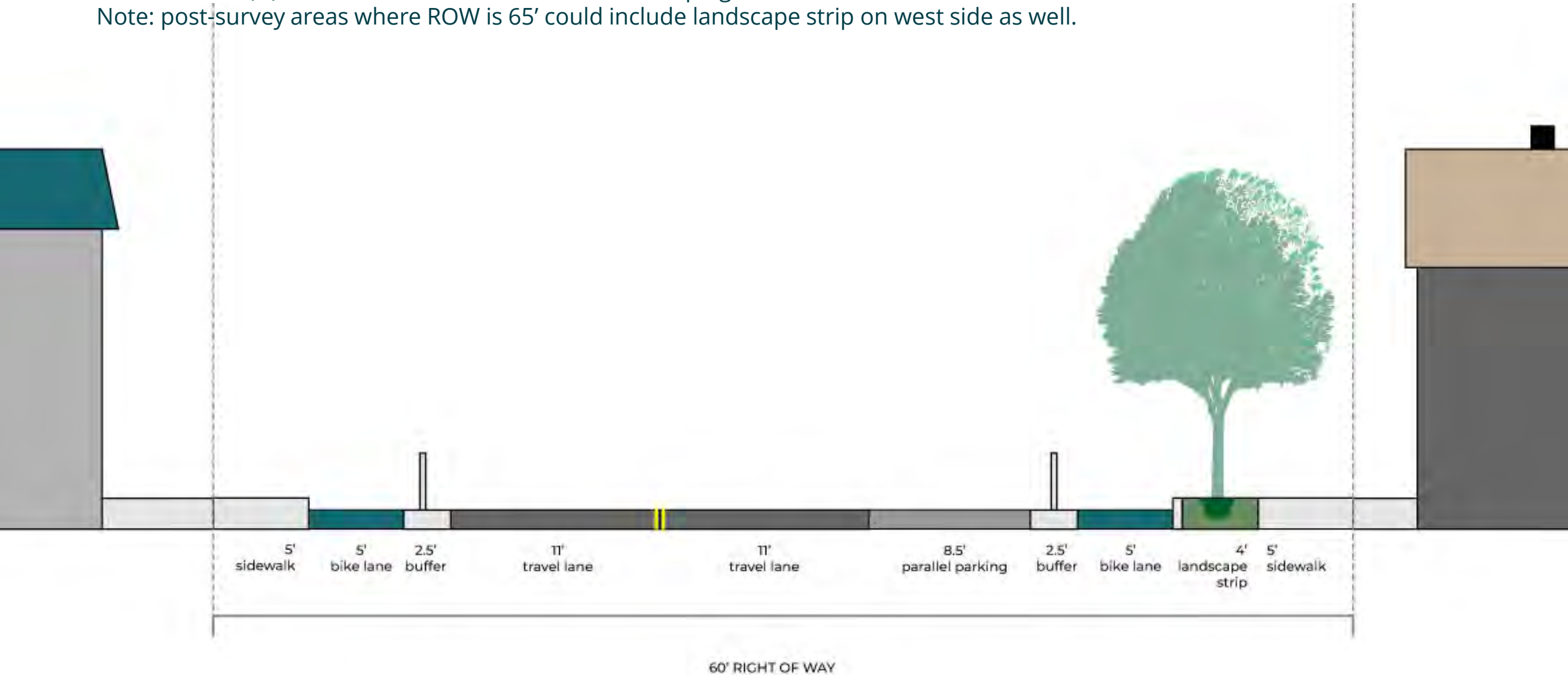
CONCEPT 2: FLETCHER ST TO ALPINE LN

Two-way travel lanes, parallel parking / turn lane.

On-street bike lane with 2.5' buffer (flex-posts optional)

Full sidewalks (5') on both sides of street with 4' landscaping area on east side.

Note: post-survey areas where ROW is 65' could include landscape strip on west side as well.



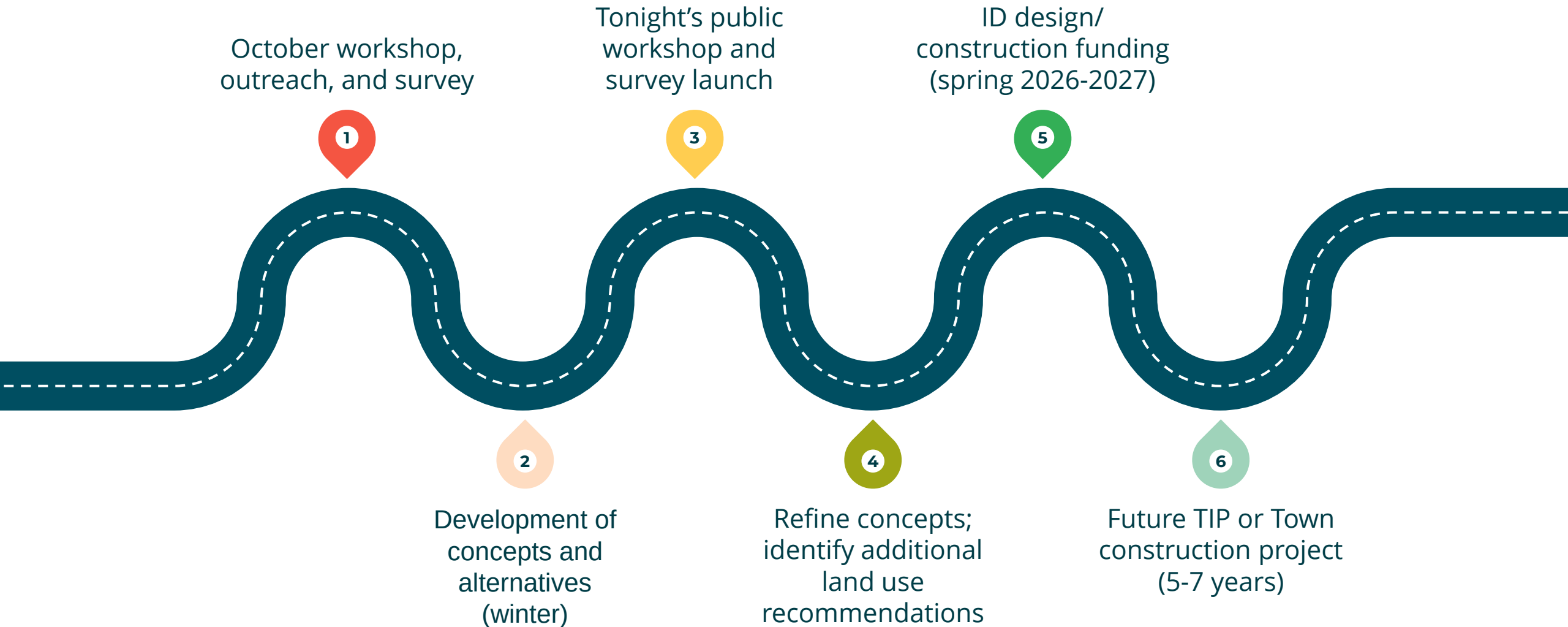
WHAT WE WANT TO HEAR FROM YOU

1. What additional amenities do you want to see along Chelmsford Street?
2. Where else should connections be built to the Bruce Freeman Rail Trail?
3. Interest in funding sources
4. Changes or additions to either concept
5. Comments on Chelmsford Street vision and goals
6. Business and property owners who want to meet with us 1:1 to discuss building access and parking



NEXT STEPS

ROADMAP





NORTHERN MIDDLESEX COUNCIL OF GOVERNMENTS

SERVING THE REGION SINCE 1963

Kelly Lynema

Deputy Director
klynema@nmcog.org

Chris Hayes

Director of Housing
& Econ. Devt.
chayes@nmcog.org

Amanuel Regassa

Transportation
Planner II
aregassa@nmcog.org

Mike Asciola

Sr. Planner, Housing &
Land Use
masciola@nmcog.org