

# NMCOG Regional Bicycle and Pedestrian Plan

---

Advisory Committee #3



**TOOLE**  
DESIGN

# Agenda

---

1. Welcome and Roll Call (5 min)
2. Existing Conditions Findings (25 min)
3. Public Engagement Findings (30 min)
4. Next Steps in Plan Development (15 min)
5. Wrap-Up and Next Steps (15 min)



**TOOLE**  
DESIGN

# Existing Conditions Findings

---

# 2



# Existing Conditions Assessment

DRAFT

## Existing Conditions Assessment

This report sets the baseline for existing walking and bicycling conditions across the greater Lowell region. It covers the following sections:

1. Existing Plans and Studies
2. Infrastructure Inventory
3. Safety Analysis
4. Demographics
5. Destinations
6. Active Transportation Demand
7. Summary



DRAFT

## Existing Plans and Studies in the Region

This section details past plans and studies related to transportation in the Greater Lowell region, including regional and municipal plans. Plan reviews aim to extract areas of alignment between the vision and goals of this plan and past plans, and recommendations that would help further those goals. Municipal plans were selected based on their relevance and recency – for some municipalities this means including a bicycle and pedestrian focused plan, and for others it means including an Open Space and Recreation Plan (OSRP).

### Municipal Plans

- Billerica Master Plan
- Billerica OSRP
- Chelmsford Bicycle Plan
- Dracut Master Plan
- Dunstable Master Plan
- Lowell Forward Complete Streets Plan
- Pepperell Master Plan
- Tewksbury Pedestrian Plan
- Tyngsborough Master Plan
- Westford Complete Streets Plan
- Westford OSRP

### Regional Plans

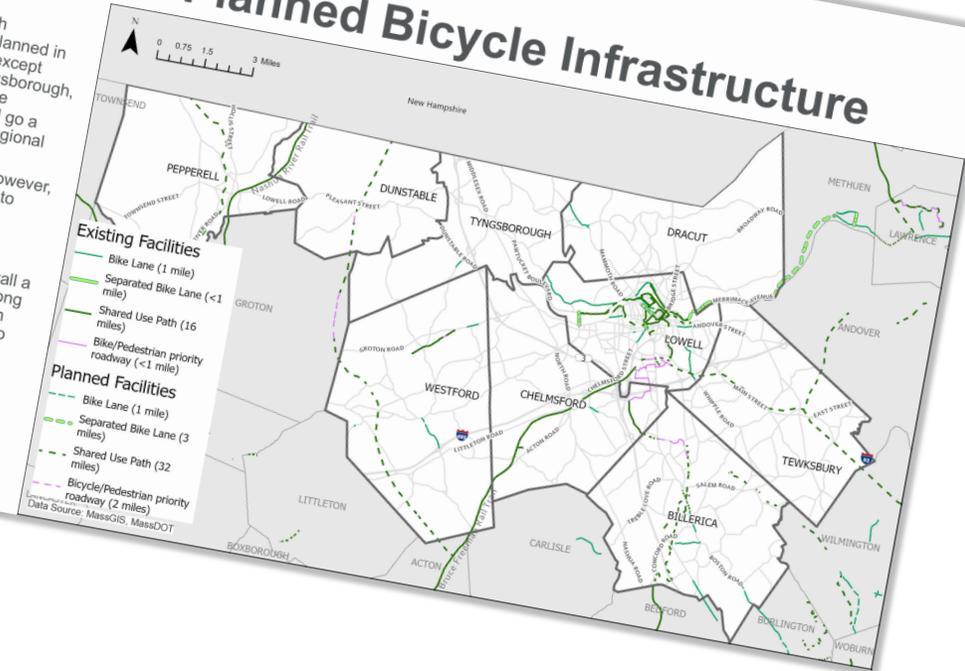
- Northern Middlesex Regional Transportation Plan
- Envision 2050: Long-Range Transportation Plan
- Greater Lowell Vision Zero Plan



DRAFT

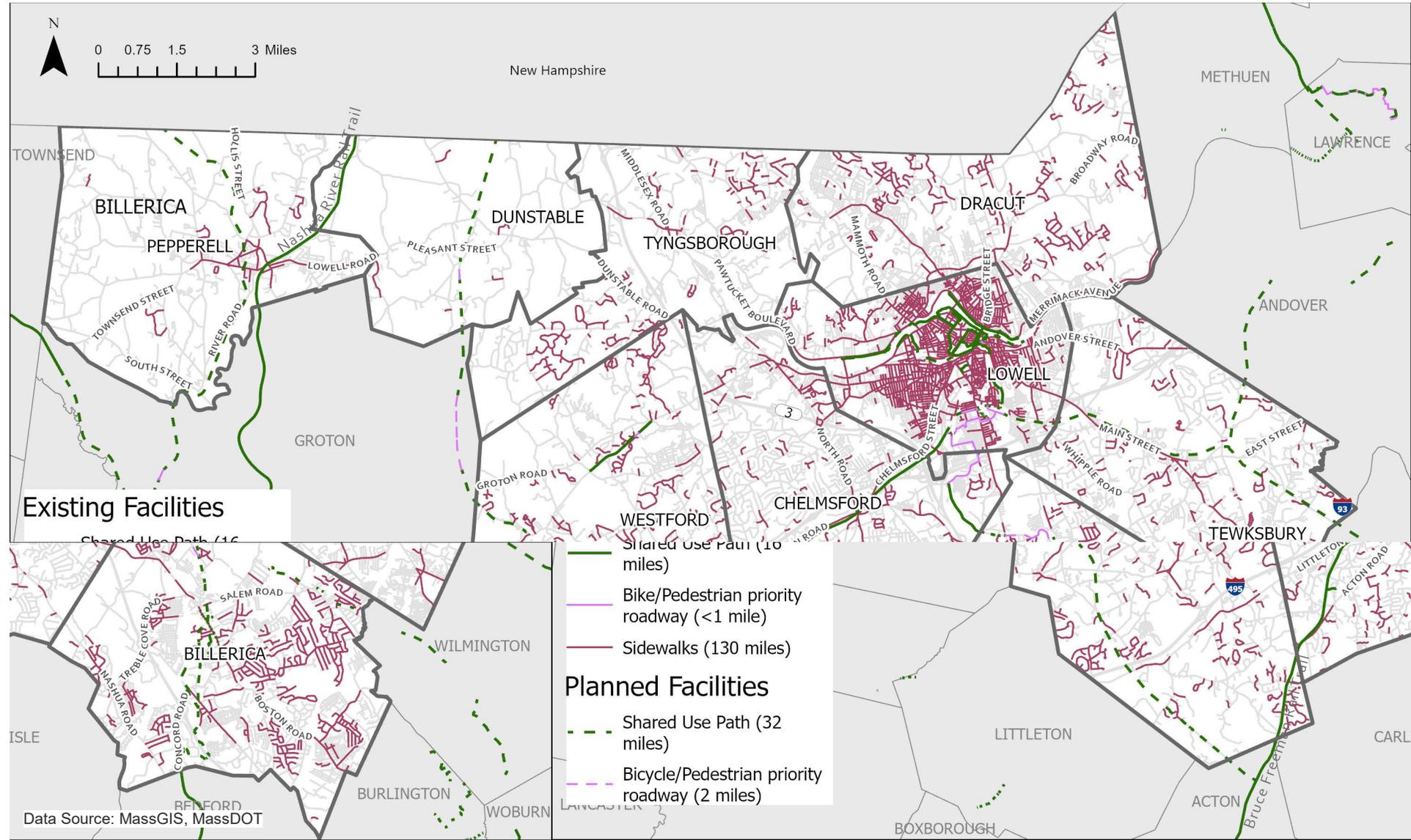
## Existing and Planned Bicycle Infrastructure

- Shared Use Path extensions are planned in all communities except Chelmsford, Tyngsborough, and Dracut – these connections would go a long way toward regional connectivity
- The plans do not, however, include connections to these paths from neighborhoods or downtowns
- There are plans to install a separated bike lane along Merrimack Avenue from Lowell through Dracut to Methuen



# Existing and Planned Pedestrian Infrastructure

- There are 130 miles of sidewalks and 16 miles of Shared Use Paths in the Greater Lowell region, covering only 8% of all roadway miles
- Lowell has the most connected and complete sidewalk network, followed by Billerica's connected network on the eastern side of the municipality
- Majority of municipalities have disconnected or disjointed sidewalk networks
- Dunstable has the most limited sidewalk network





# Existing Conditions Summary Takeaways

Section	Key Findings
1. Existing Plans and Studies	<ul style="list-style-type: none"> <li>• <b>All municipalities have embraced Complete Streets</b> and through local plans they have called for expanded and improved the bicycle and pedestrian networks.</li> <li>• <b>Regional plans set the foundation for a focus on safety</b> and making regional connections.</li> </ul>
2. Infrastructure Inventory	<ul style="list-style-type: none"> <li>• Greater Lowell's <b>16 miles of shared use</b> paths form the backbone of a future transportation network.</li> <li>• Beyond this backbone, there are <b>only a few miles of on-street bicycle facilities</b>.</li> <li>• Compared to 1,762 miles of roadway in the region, there are 130 miles of sidewalks.</li> </ul>
3. Safety Analysis	<ul style="list-style-type: none"> <li>• Between 2018 and 2023, there were <b>11 fatalities and 68 serious injuries in crashes</b> involving someone walking or bicycling, most of these concentrated in Lowell and on arterial roadways.</li> </ul>

# Existing Conditions Summary Takeaways

Section	Key Findings
4. Demographics	<ul style="list-style-type: none"> <li>• Across the region, <b>8,000 households (7%) do not have any vehicles.</b></li> <li>• Transportation vulnerability indicators, predominantly concentrations of seniors and people with disabilities, point to areas of the region in need of improved walking and bicycling connections.</li> </ul>
5. Destinations	<ul style="list-style-type: none"> <li>• <i>More on this later in the agenda...</i></li> </ul>
6. Active Transportation Demand	<ul style="list-style-type: none"> <li>• About <b>one quarter of trips in the region are less than 2 miles</b> – trips that can be made by walking and bicycling with the right infrastructure.</li> <li>• MassDOT's <b>Potential for Everyday Biking and Walking</b> analysis shows core areas in almost every municipality where this could be achieved.</li> </ul>

# Finalizing the Existing Conditions Doc

- Thank you to those of you who already reviewed
- Please share any additional comments by **Friday 9/19**
- This document will serve as an appendix to the final plan, with key graphics and findings in the body of the plan

8/19

Amanuel sent the DRAFT Existing Conditions Document

9/18

Advisory Committee Meeting #3 (today!)

9/19

Final comments due to NMCOG

10/6

Toole to make edits and respond to comments



**TOOLE**  
DESIGN

# Public Engagement Findings

---

3



# Highlights from Public Engagement

---

## What We Did

- 15 Engagement Events – pop-ups in 7+ Communities, regional tourism conference, municipal meetings & workshop
- High-Visibility Venues – markets, festivals, concerts, road races(300–2,000 attendees)
- Engagement Tools – mapping, multilingual surveys, fact sheets, conversations
- Special Initiative – DIY Lowell pedestrian audit → launched in Let's Talk Lowell (12 volunteers, Survey123 app)

# Key themes and priorities emerging from engagement

## Results

- 724 mapped points (comments + mapping exercise)
- 445+ survey responses from across the region
- 46+ hours of direct public engagement
- Input from mapping exercise are organized into Points of Interest, Points of Improvement, Improvement extent and Comments → guiding existing conditions & network design

## Key Themes

- **Safety & Crossings** → safer intersections, trail crossings, speed control
- **Sidewalks & Connectivity** → fill gaps, ADA access, continuous routes
- **Trails & Bike Facilities** → extend BFRT, downtown links, river crossings
- **Regional Access & Equity** → E–W links, cross-town routes, safe access for all ages/abilities
- **Vision & Quality of Life** → scenic trails, access to schools & centers

Takeaway: Strong demand for safety, connectivity, and equity through corridor-level investments.

# Municipal Meetings – Key Findings

---

## GLBPP Municipal Outreach

- Met with Billerica, Chelmsford, Tewksbury, Lowell, Westford, Tyngsborough, Pepperell
- Purpose: ground-truth findings, review capital plans (resurfacing & sidewalks)
- Conducted participatory mapping with municipal staff

## Highlights

- **Chelmsford** → Clears snow on State & municipal roadways and sidewalks; prioritizes maintenance of existing infrastructure over new
- **Westford** → offsets sidewalk costs by using stormwater utility funds to cover drainage component, reducing the capital burden and has long-term goal: create a North–South pedestrian route across town
- **Pepperell** → Top priorities: rail-trail links & school/downtown access; has active sidewalk plan but challenged by traffic growth & seasonal maintenance
- **Tyngsborough** → Sidewalk gaps on Middlesex, Kendall, Westford, Pawtucket Blvd.; parks/recreation access; & Emphasis on maintaining existing sidewalks alongside building new ones.
- In **Lowell, Billerica, and Tewksbury**, emphasis was on corridor connectivity, safety and multimodal links
- **Takeaway:** Towns prioritized safety, maintenance, and connectivity.

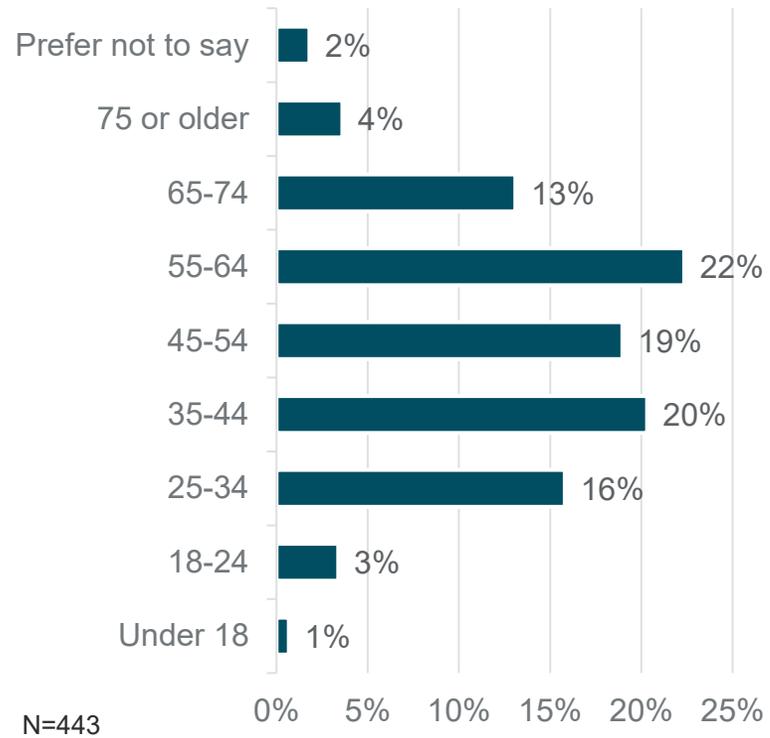
# Online Survey

- 445 total responses!
- 328 from the NMCOG municipalities
- 30 from outside the region
- 87 did not provide a zip code

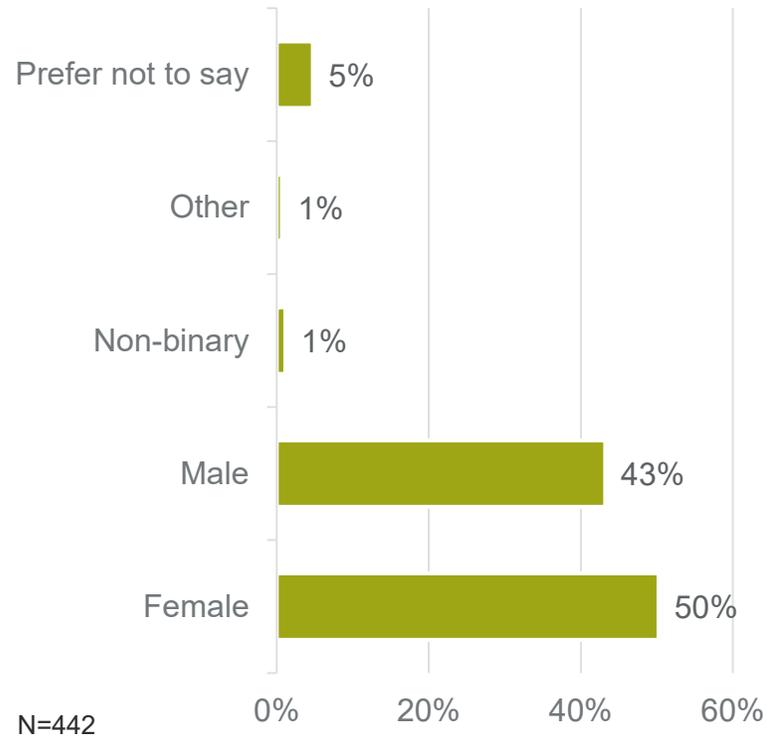
Muni	Zip Code	Count	Muni total
Dracut	01826	66	66
Westford	01886	43	43
Chelmsford	01824	37	42
	01863	5	
Tyngsborough	01879	35	35
Lowell	01852	31	70
	01854	19	
	01851	13	
	01850	6	
	01853	1	
Billerica	01821	25	25
Tewksbury	01876	18	33
	01862	15	
Pepperell	01463	10	10
Dunstable	01827	4	4

# Demographics

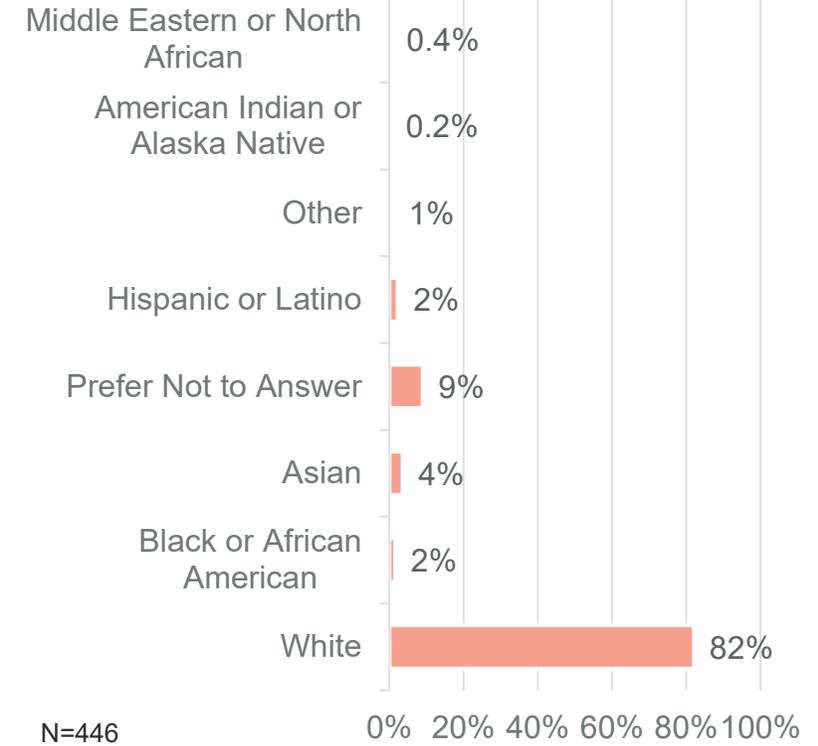
## Age



## Gender



## Race and/or Ethnicity



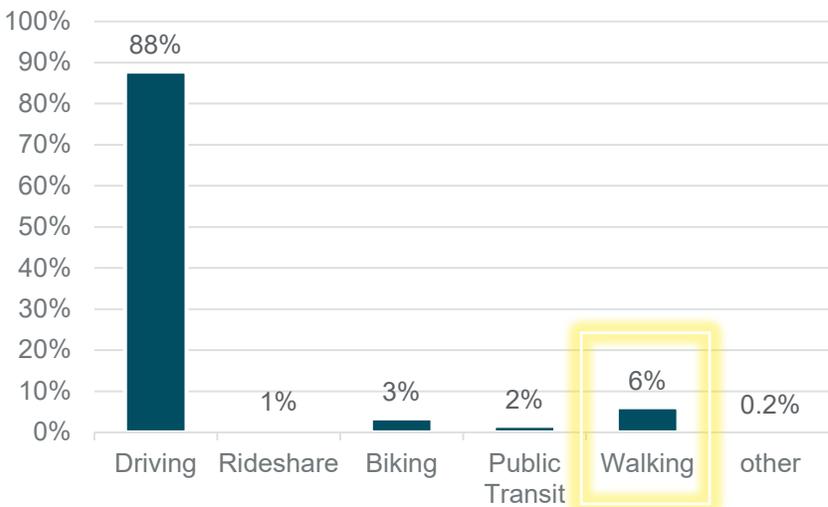


# Do people walk? – Yes!

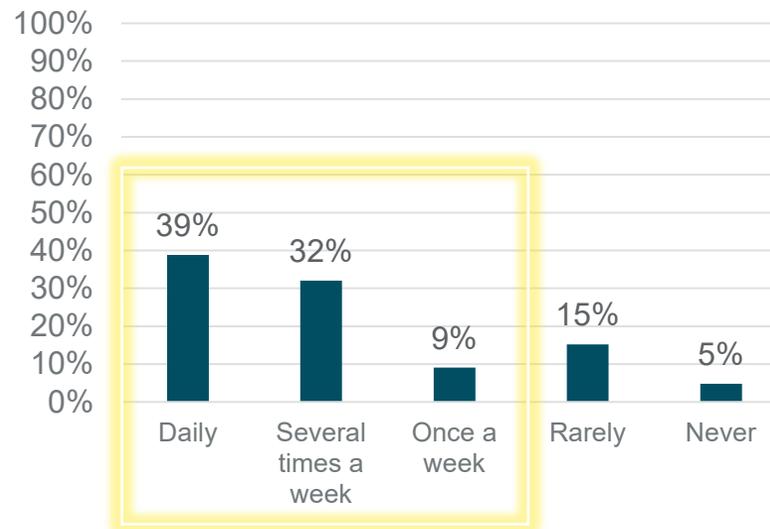
Walking is few people's primary mode

4 out of 5 respondents walk least once a week

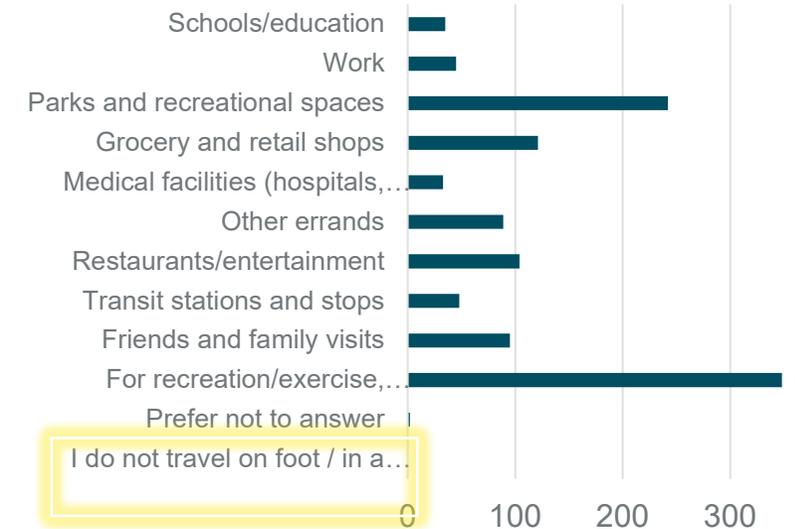
No one said walking is not for them



What is your primary mode of transportation? (select one)



How frequently do you walk?



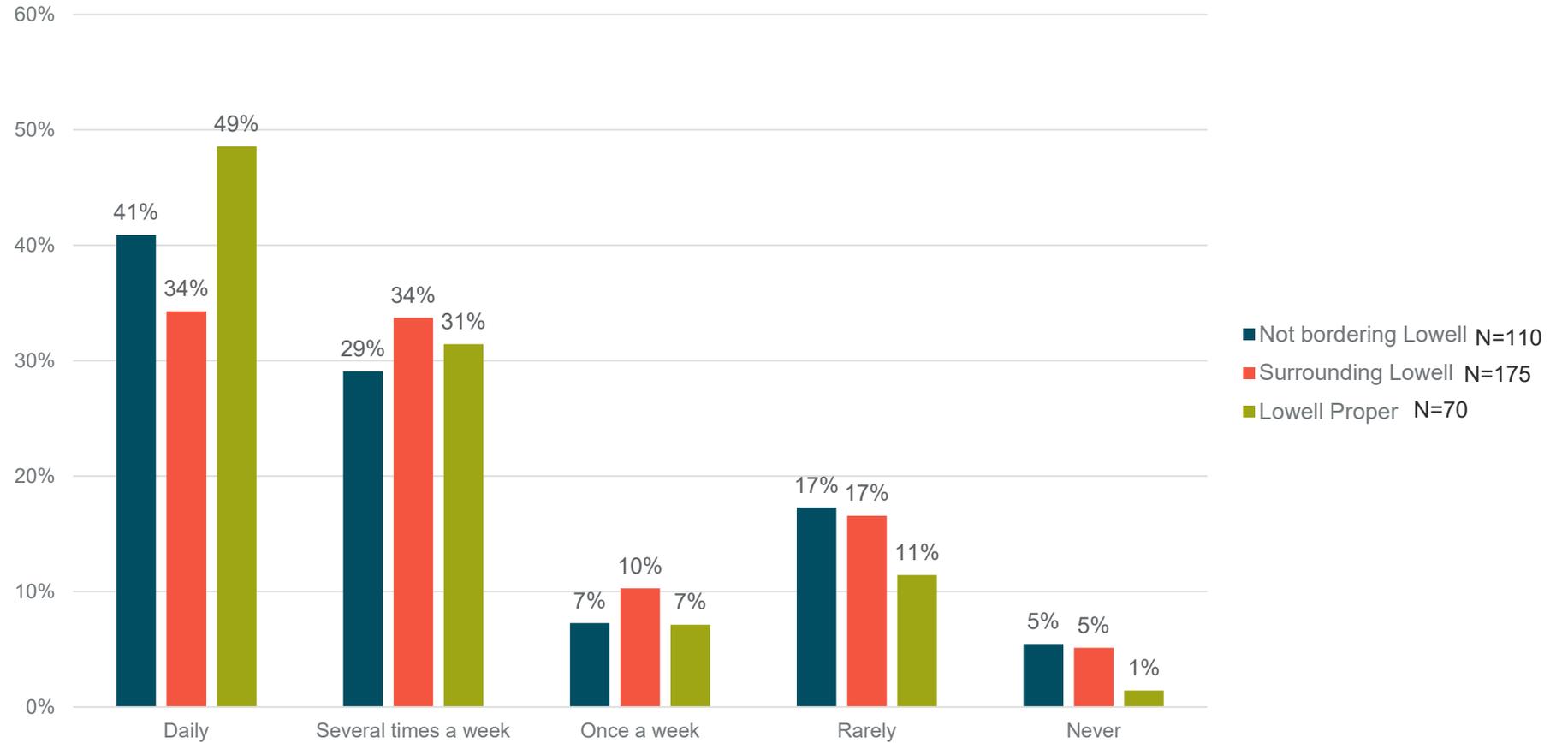
What types of destinations do you currently reach by walking? (select all that apply)



# Frequency of Walking by Zip Code

About half of respondents in Lowell walk daily.

Very few respondents never walk across all location types.

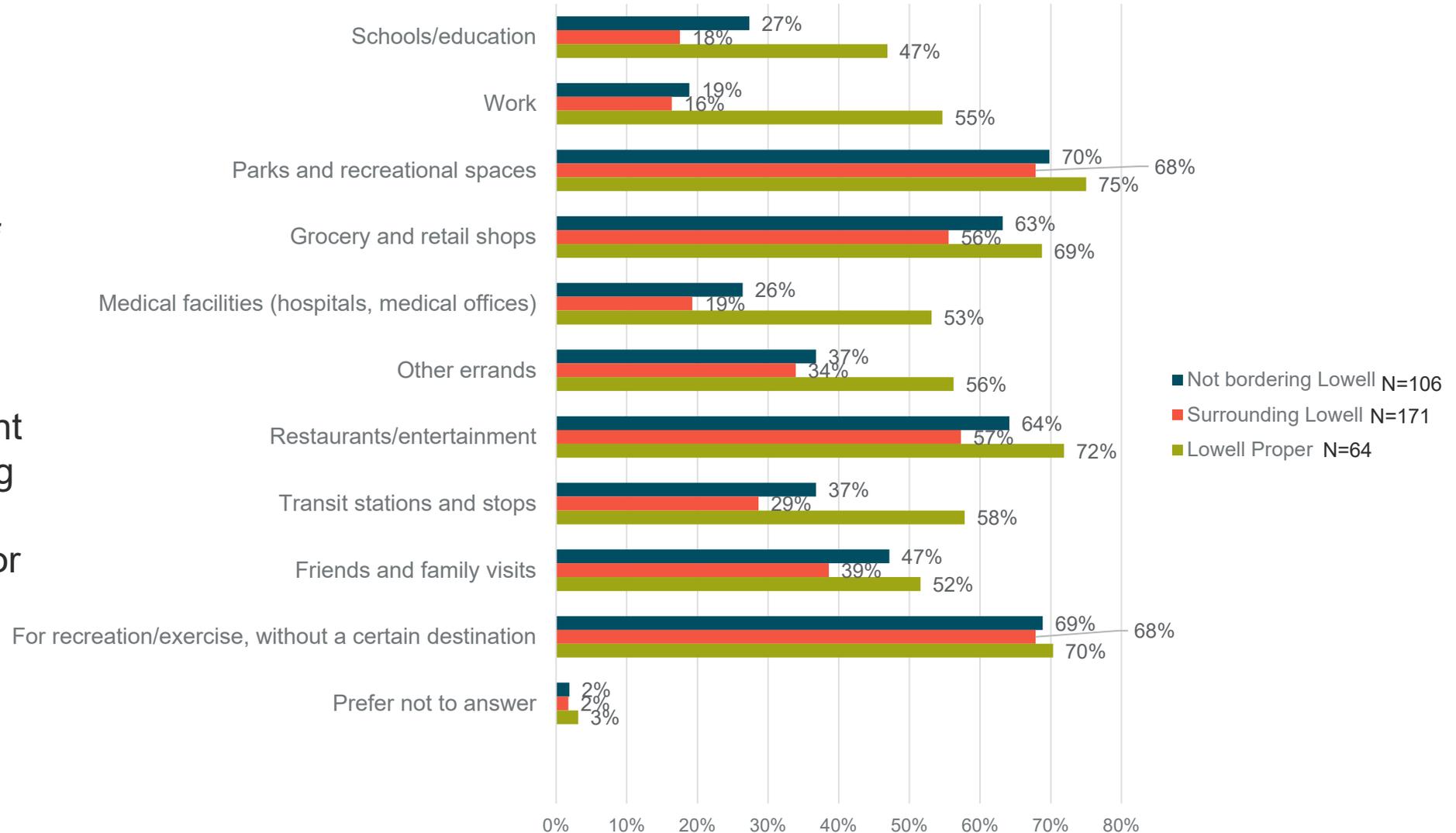




# Desired Destinations to Walk to By Zip Code

Parks and recreational spaces, and for exercise are the top desired destinations for all zip codes, with about 70% of respondents indicating wanting to these destinations.

Restaurants/entertainment and grocery and shopping are also desired destinations, especially for respondents in Lowell proper.



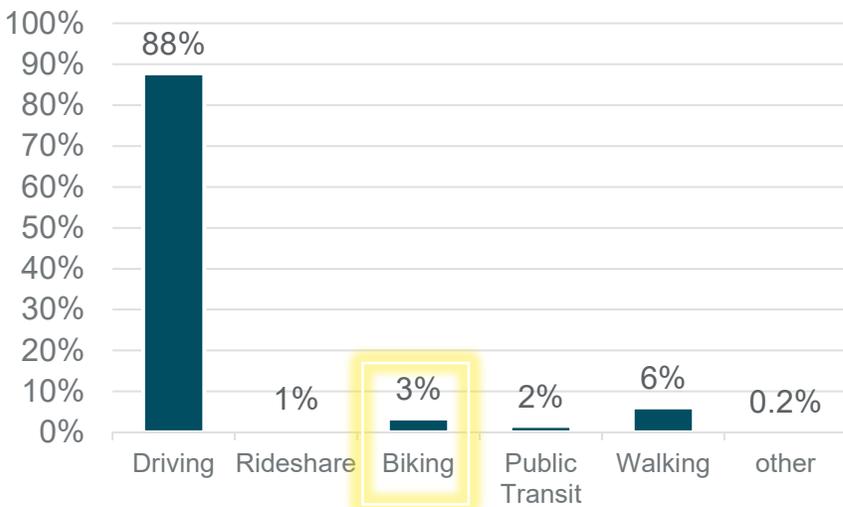


# Do people bike? – Yes!

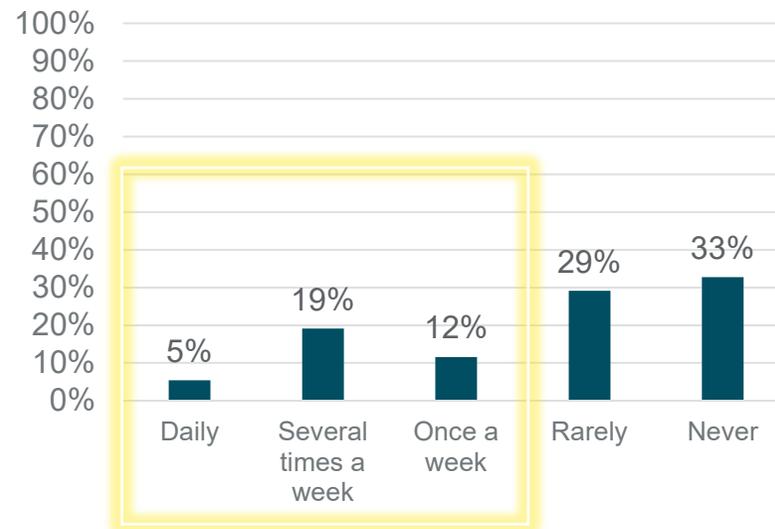
**Biking is few people's primary mode**

**More than 1 out of 3 respondents bike least once a week**

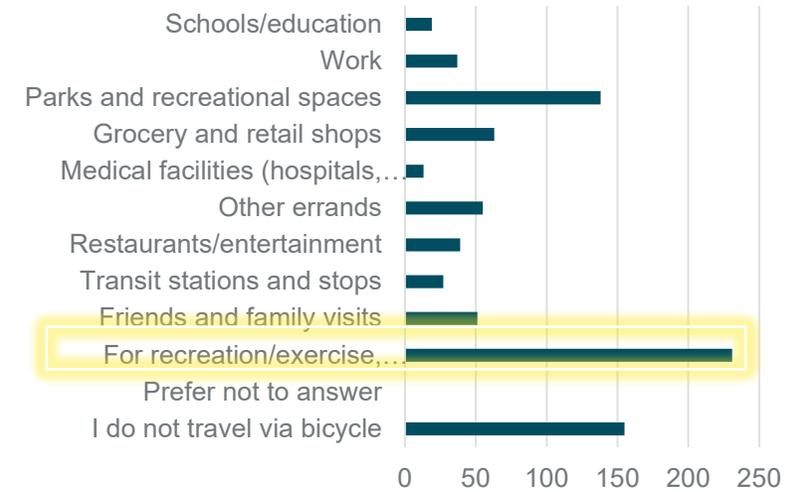
**More than half of respondents bike for recreation and exercise**



What is your primary mode of transportation? (select one)



How frequently do you bike?

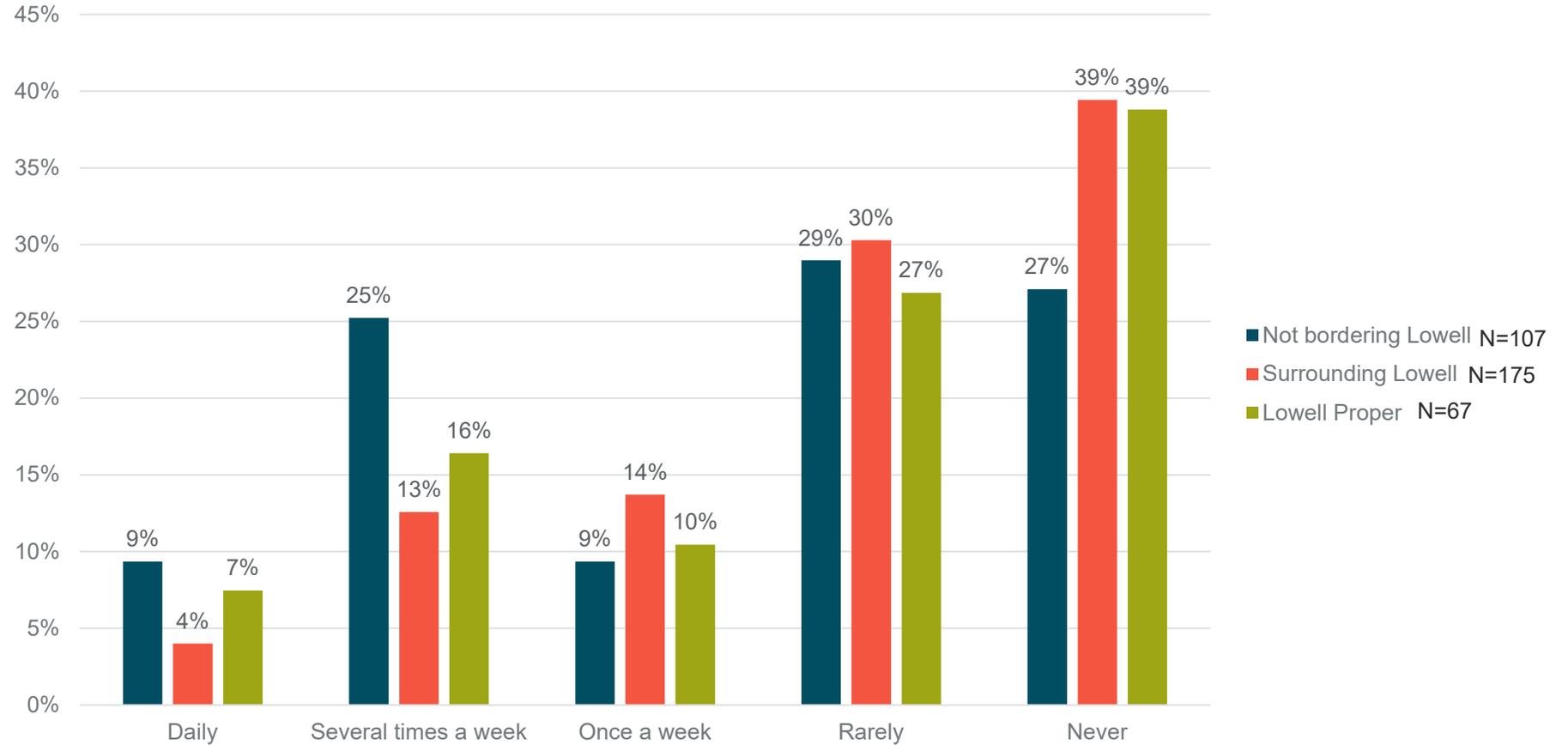


What types of destinations do you currently reach by bicycling? (select all that apply)



# Frequency of Biking by Zip Code

Higher number of respondents from zip codes furthest from Lowell bike daily (9%) or several times as week (25%). This may be a result of more off-road trails in the more suburban/rural areas.

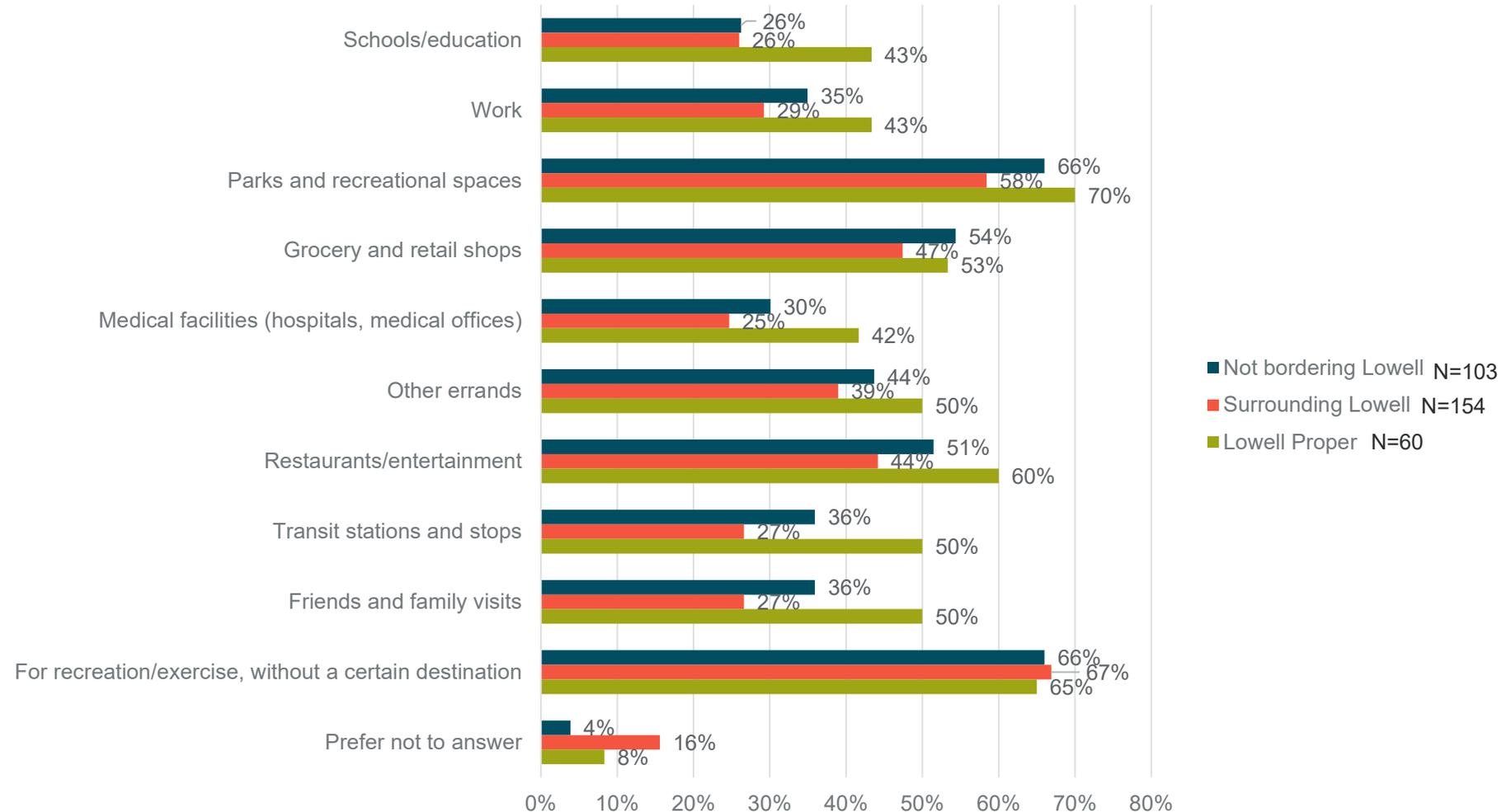




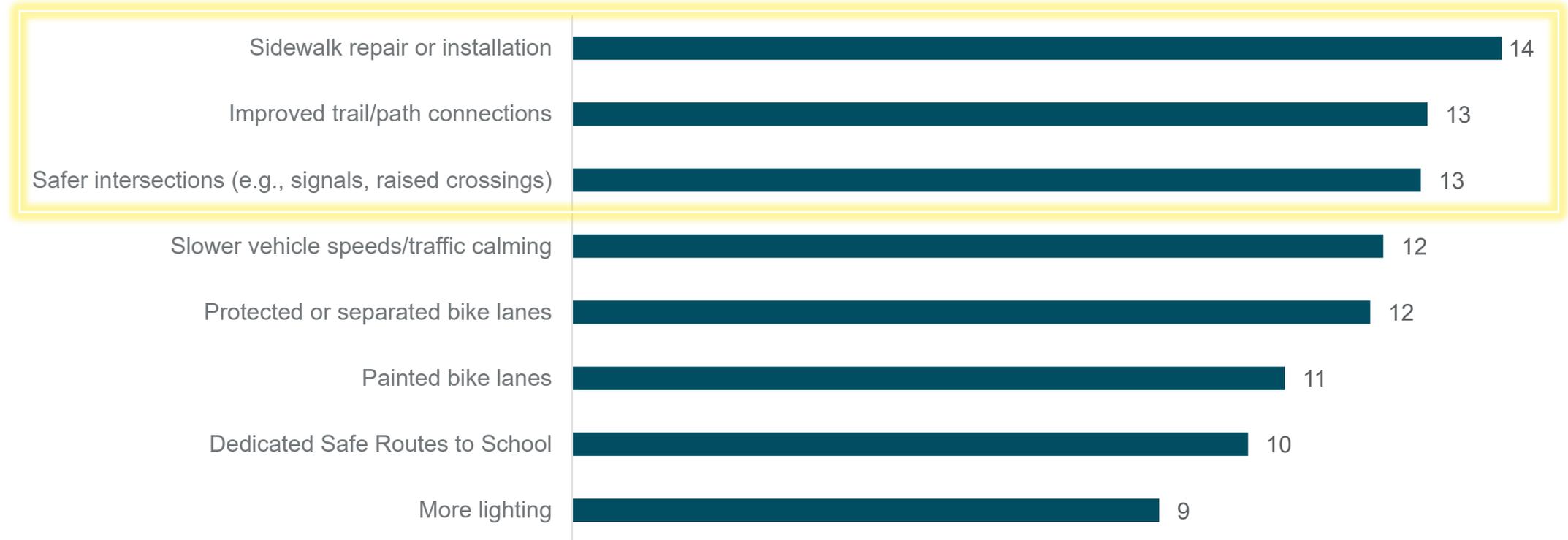
# Desired Destinations to Bike by Zip Code

Just as with walking, parks and recreational spaces and for exercise are the top desired destinations for all zip codes.

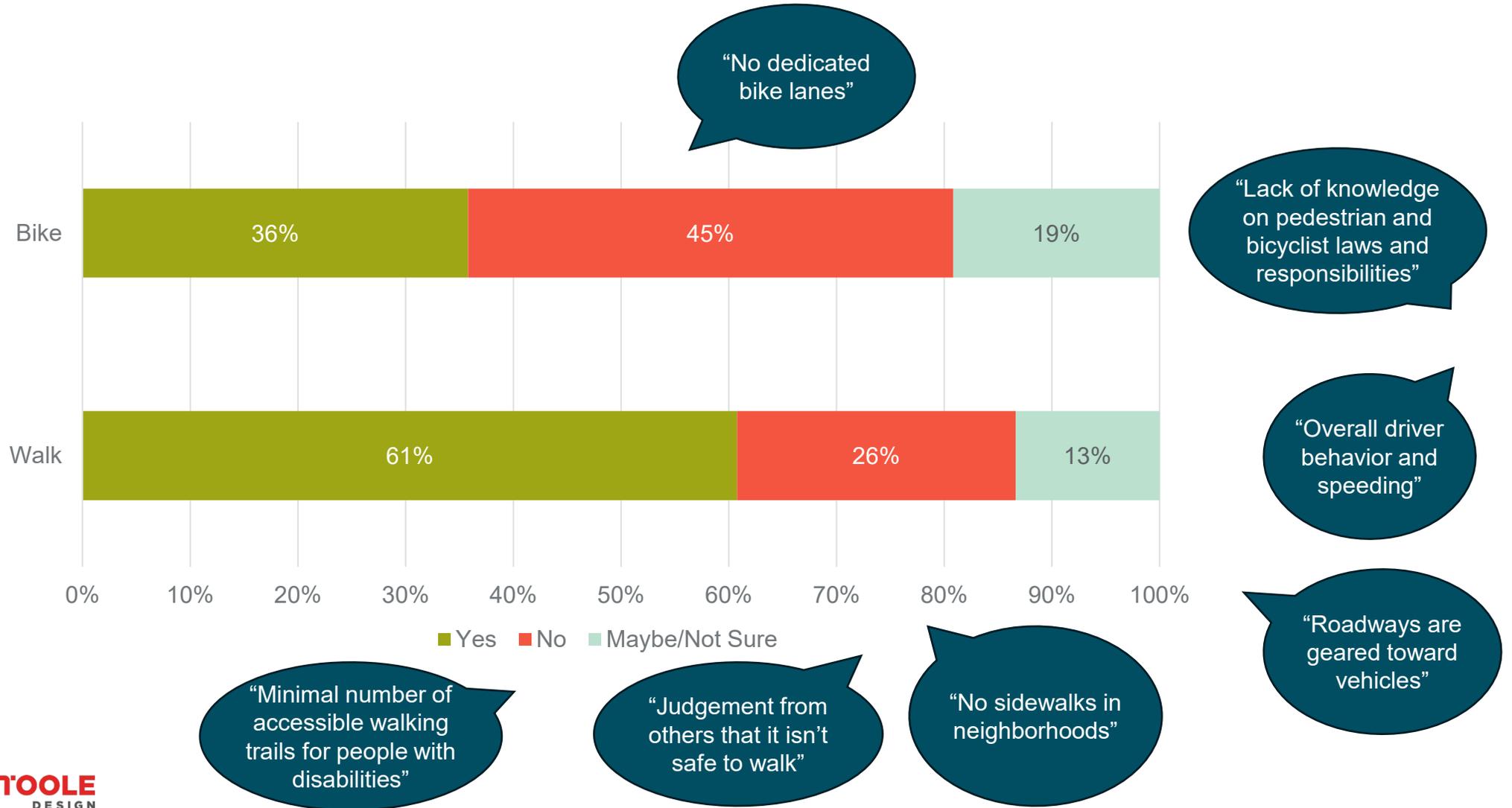
Similarly, restaurants/entertainment and grocery/retail shopping also rise to the top for desired destinations.



# Weighted Ranking of Infrastructure Preferences



# Do you feel that you personally have access to safe, comfortable places to walk or bike in your neighborhood?





**TOOLE**  
DESIGN

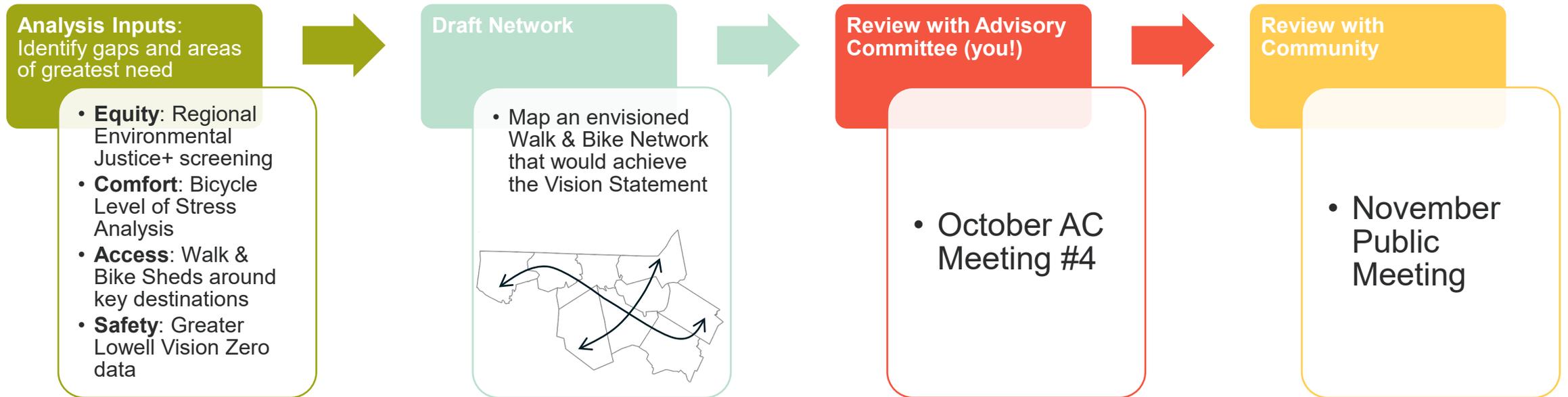
# Next Steps in Plan Development

---

# 4



# Developing a Draft Walk & Bike Network



# Developing a Draft Walk & Bike Network

**Analysis Inputs:** Identify gaps and areas of greatest need

- **Equity:** Regional Environmental Justice+ screening
- **Comfort:** Bicycle Level of Stress Analysis
- **Access:** Walk & Bike Sheds around key destinations
- **Safety:** Greater Lowell Vision Zero data

# Destinations List

Categorical			
Destination Category	Location Name	Muni	Community Engagement
K-12 schools		Regional	☑
College and universities	<ul style="list-style-type: none"> <li>UMass Lowell</li> <li>Middlesex Community College</li> </ul>	Regional	
Libraries & Civic Spaces		Regional	☑
Hospitals		Regional	☑
Grocery stores		Regional	
Retail centers		Regional	
Transit stops and stations		LRTA and Commuter Rail service area	☑
Historical Sites		Regional	☑

From Engagement			
Destination Category	Location Name	Muni	Community Engagement
Cultural and Community Destinations	<ul style="list-style-type: none"> <li><b>Lowell:</b> Western Ave</li> <li><b>Billerica:</b> Nutting Lake</li> <li><b>Chelmsford:</b> Vinal Square and Chelmsford Center</li> <li>Pawtucket Farm Wildlife Sanctuary</li> </ul>	Different Munis	☑
Rail trails and trailheads	<ul style="list-style-type: none"> <li>Narrow Gage Trail</li> <li>Bruce Freedman Trail</li> <li>Nashua River Rail Trail</li> </ul>	Regional	☑
Business/Office centers	<ul style="list-style-type: none"> <li>Cross Point Towers</li> </ul>	Lowell	☑
Apartment Complexes	<b>Existing and Proposed</b> <ul style="list-style-type: none"> <li>West</li> <li>Chel</li> <li>MCO Cottage Rental</li> <li><b>Dracut:</b> senior housing</li> </ul>	Regional	☑
Parks and Cemeteries	<ul style="list-style-type: none"> <li>Vietnam Veteran's Park</li> <li>Fox Hill Cemetery</li> <li>Smallpox Cemetery</li> <li>Lowell Cemetery</li> <li>Shedd Park</li> <li>Lampson Memorial Field</li> <li>Hovey Park</li> <li>McPherson Park</li> <li>Hadley Field</li> </ul>	Regional	☑





**TOOLE**  
DESIGN

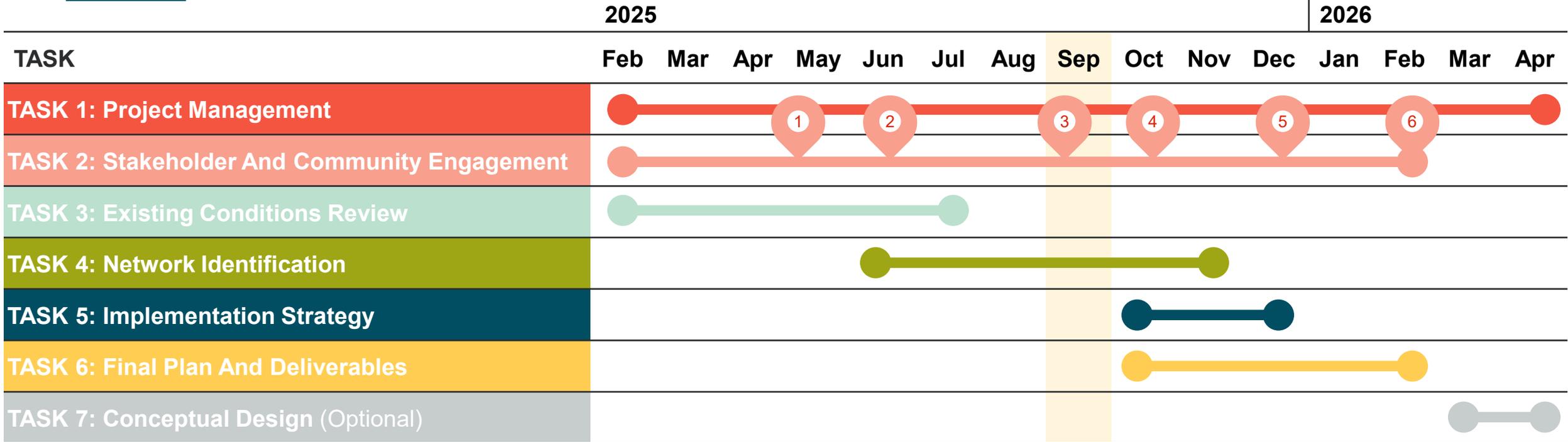
# Wrap-Up and Next Steps

---

5



# Schedule



 = Advisory Committee Meetings