

# Lincoln Street

## Proposed Safety Improvements



8/6/24 Andover Select Board

ANDOVERMA.GOV

# Agenda

- Current Conditions & Evaluation Process
- Connection to Complete Streets & Route 133 Project
- Recap of 4/10/24 & 6/25/24 Public Information Meetings
- Neighborhood Alternatives Requests
- TEC Traffic Analysis
- Recommendations

# Current Conditions

- **What are the issues?**
  - Heavily traveled roadway for students and pedestrians walking and biking
  - Variable width of road makes an ADA accessible sidewalk challenging in sections
  - Vehicle speed
  - Volume
  - Cut-through traffic



# Evaluation Process

- **What options have been evaluated by the Town?**
  - Installing a 5' sidewalk and keeping two 12' lanes of traffic on Lincoln from Marilyn Road to Lowell Street
  - Installing a 5' sidewalk from Marilyn Rd to Lowell St and converting this segment to one way permanently
  - Installing a sidewalk extension through the Marilyn neighborhood instead of down Lincoln Street
  - Turning the entirety of Lincoln St to a one way. This will allow the Town to install an 8'-10' shared use path along the entire road. Both northbound and southbound evaluations completed



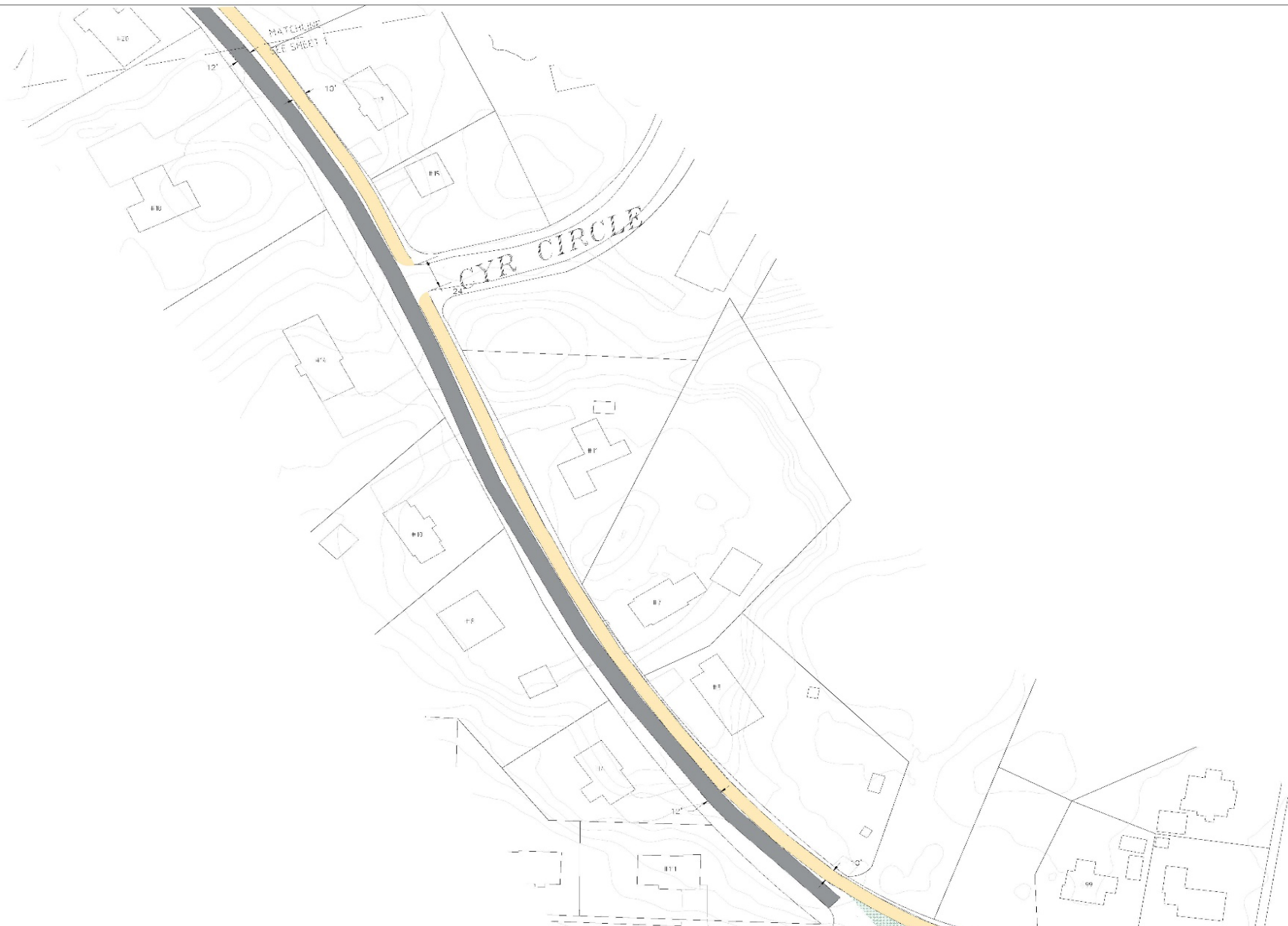
TOWN OF ANDOVER, MA

ANDOVER, MA 01810

SHARED USE PATH  
LINCOLN STREET

REVISIONS		DESCRIPTION
DATE	CEL BY	





REVISIONS		
DATE	CHG BY	DESCRIPTION

TOWN OF ANDOVER, MA  
 ANDOVER, MA 01810  
**SHARED USE PATH  
 LINCOLN STREET**  
 ARTIUR G. MARTINEAU II  
 TOWN ENGINEER  
 4/5/2024  
 SCALE: 1"=20'  
 SHEET 1 OF 2



DRAWN BY: JZA

PROFESSIONAL ENGINEER

# Complete Streets

- **Town of Andover adopted a Complete Streets policy in 2022 and submitted a Prioritization Plan to the State in 2024. A shared use path on Lincoln Street scored the highest based on the following criteria:**
- Network Expansion (9 points out of 10) – proposed ped/bike facilities connect a principal arterial to a minor arterial (Lowell St to Shawsheen Rd)
- Safety (8 points out of 10) – project improves ADA accessibility, calms traffic (through the roadway narrowing), & addresses safety concerns
- Public Priority (7 points out of 10) – Moderate number of comments received
- Project Cost (7 points out of 10) – with an estimated cost of \$550k, this project is significantly less expensive than many other top-priority projects
- Multimodal (10 points out of 10) – project serves pedestrians, bicyclists, and motorists

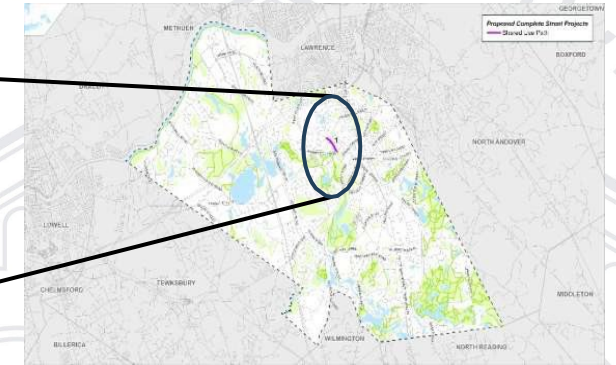
# Resident Comments

- “One Way in Morning Must Be Enforced, add physical barrier”
- “It would be fabulous if the sidewalks could be finished at the end of Lincoln Street to accommodate all the children at two schools, plus neighborhood who use Lincoln Street”
- “School access must have sidewalks”
- “Allow bikes to use Lincoln Street in morning so that kids can safely bike to AHS/WMS”
- “Cut-through traffic”
- “Need sidewalks for students walking to school”
- “Very dangerous for students walking to school”
- “Speeding”

# Shared Use Path



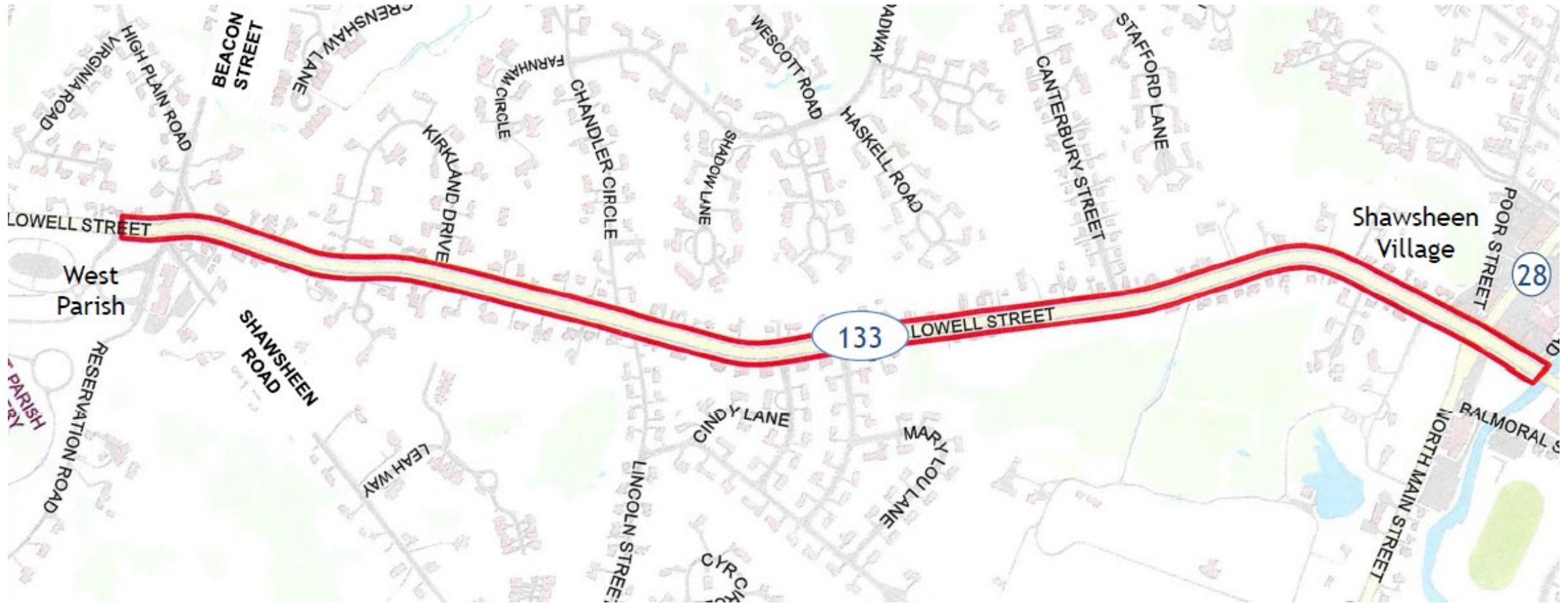
- Construction Cost: \$550,000
- Already under evaluation by DPW, highlighted during Complete Streets process
- Provides increased access to Andover High School & West Middle School
- Closes key network gap between Lowell Street and Shawsheen Road
- Potential impacts to trees, private properties, and drainage could increase residential impacts and costs significantly. To minimize these impacts, this proposal would reallocate some roadway width and convert Lincoln St to one way



# Shared Use Path



# Route 133 Corridor



# Route 133- Project Need

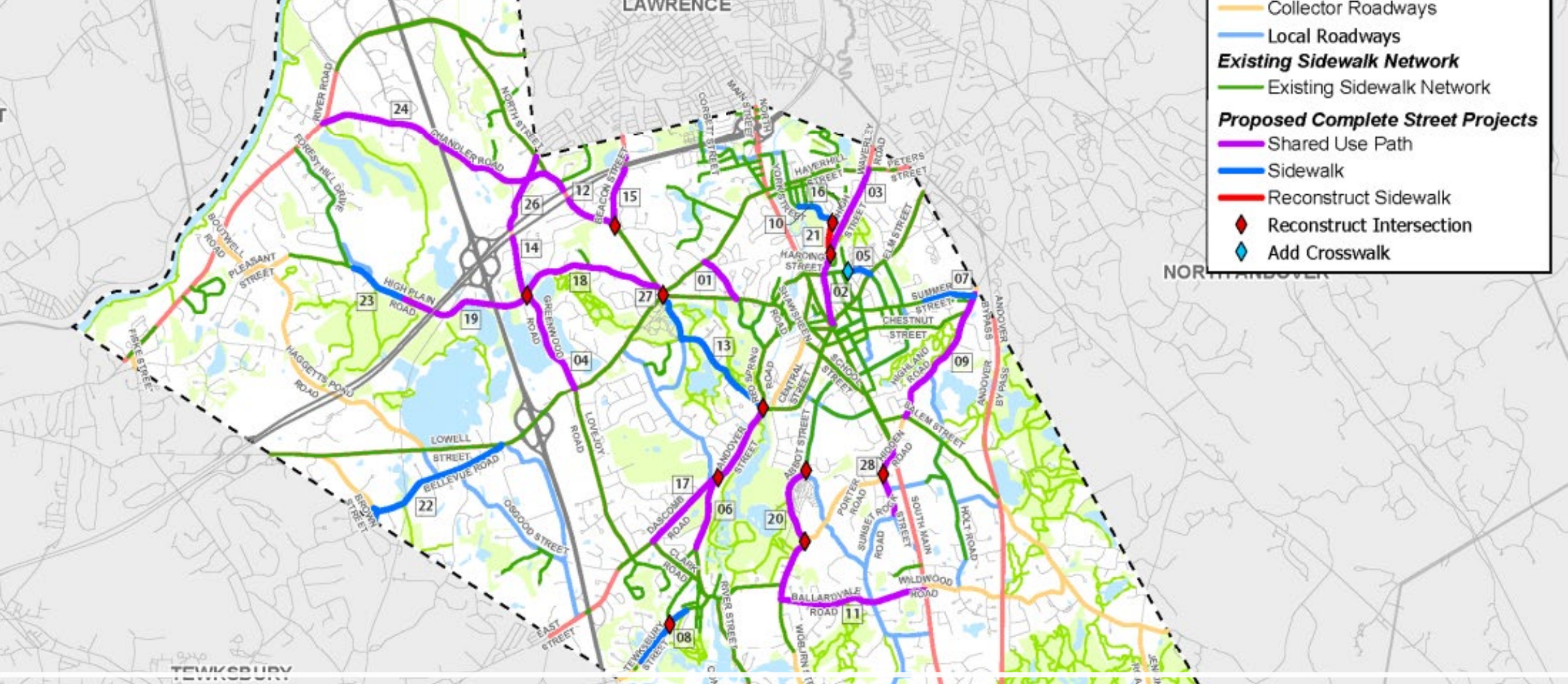
- Poor traffic operations
- Safety issues
- Missing bicycle accommodations
- Insufficient pedestrian accommodations
- Aging infrastructure
  - Water Main Replacement
  - Drainage



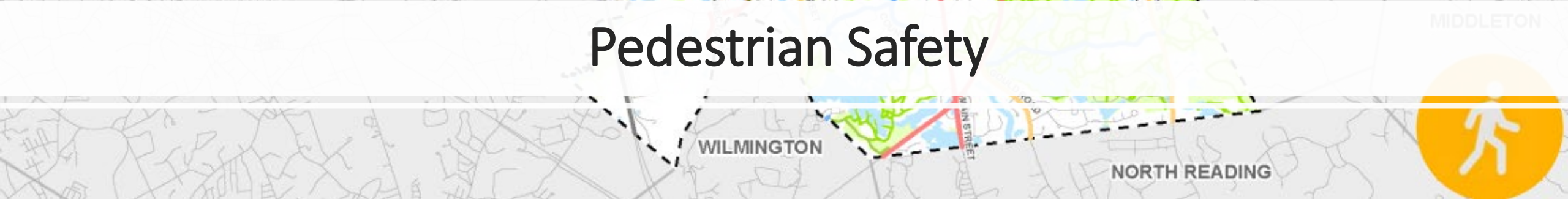
# Route 133- Project Goals

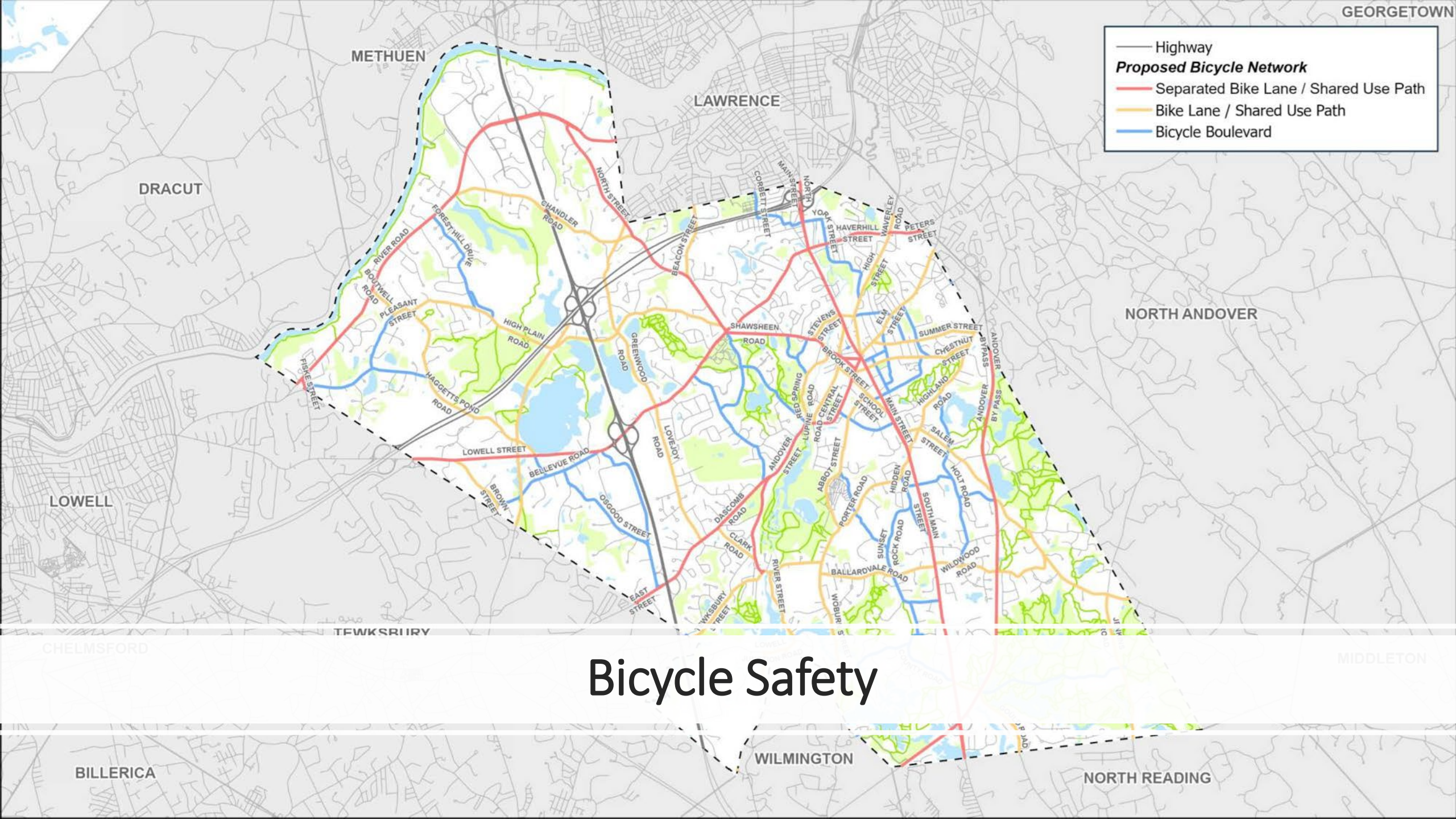
- Improve traffic operations
- Expand pedestrian accessibility
- Calm traffic & enhance safety
- Preserve character and aesthetics
- Enhance access to businesses
- Maintain & expand village parking





# Pedestrian Safety





— Highway

**Proposed Bicycle Network**

- Separated Bike Lane / Shared Use Path
- Bike Lane / Shared Use Path
- Bicycle Boulevard

# Bicycle Safety

# 4/10/24 Meeting Recap

- Town presented a concept that would designate Lincoln Street a one-way (Shawsheen to Lowell) with an 8-10' shared use path for walkers and bikers
- Town committed to additional data gathering and traffic analysis to help the community better understand safety benefits as well as tradeoffs to any proposal aimed at increasing pedestrian safety in the area
- Town committed to doing due diligence as to what would be required as it relates to impacts to private properties, utility poles, cost, and time required to create room for a 5' sidewalk for the entire length of Lincoln Street that maintains the street as a two-way road

# 6/25/24 Meeting Recap

- Town presented a modified concept that would designate Lincoln Street a one-way southbound (Lowell to Shawsheen) with an 8-10' shared use path for walkers and bikers. Modified concept also widened one way to accommodate delivery vehicles
- Town presented TEC traffic analysis and raw crash and speed data to help the community better understand safety benefits as well as tradeoffs to any proposal aimed at increasing pedestrian safety in the area
- Town presented challenges and impacts to private properties, utility poles, cost, and time required to create room for a 5' sidewalk for the entire length of Lincoln Street that maintains the street as a two-way road

# Alternatives

- Town explored opportunities and obstacles related to private property and utilities to create room for 5' sidewalk and maintain a two-way road
- Alternative not deemed feasible in terms of public procurement law as the betterment would be built on private property. Town could not bid this work or ensure prevailing wage
- Alternative not deemed financial best practice to make a straight payment to a homeowner for a betterment due to issues with liability and oversight of work completed using public funds
- Utilities could not commit to a cost or a general timeframe to consider the work required
- Moving from a grant funded project to public funded, eliminates or pushes off other important sidewalk construction throughout Town

# Data Requests

- **After 4/10 public meeting, Town engaged TEC to evaluate traffic data in the Lincoln Street area including:**
  - Performing a turning movement count at both: Lincoln @Lowell and Lincoln @ Shawsheen Road
  - Performing field work to confirm general traffic operations and existing turn restrictions along adjacent streets (Cindy, Marilyn, Arthur, and others)
  - Providing an assessment of the level of additional traffic that may be diverted to neighboring streets based on both one-way options
  - Providing travel time runs to document approximate travel times associated with diverted traffic from both one-way options to areas such as Downtown, Shawsheen Square and Lowell/Beacon/Shawsheen intersection

# TEC One-Way Flow & Cut Through Assessment



Lincoln Street Corridor Safety Improvements

# TEC Recommendation

- **TEC recommends a Lincoln Street southbound one-way flow condition as:**
  - a) There is not expected to be any substantial change in traffic along the connecting neighborhood streets (Cindy Lane, Marilyn Road, Arthur Road, and Theodore Avenue),**
  - b) The more applicable desire for non-resident Lincoln Street use appears to be northbound regardless of the existing posted restriction, and**
  - c) The general benefit, in most conditions, of resident travel time in the Lincoln Street southbound direction**

It can be expected that the overall Lincoln Street southbound traffic volumes would be retained as part of this condition in which the northbound traffic volumes are removed. In addition, it would be expected that the traffic volumes between 7:30 am and 8:30 am along Lincoln Street will slightly increase with the removal of the posted turn restriction; however, this slight increase should be limited to only this hour

**REGARDLESS OF FLOW DIRECTION THE OVERALL TRAFFIC VOLUME ALONG LINCOLN STREET WILL BE REDUCED**

# One Way Trial Proposal

- Proposal would include a five-week trial converting Lincoln Street to a one way southbound (Lowell to Shawsheen from Monday, August 19th through Sunday, September 22<sup>nd</sup>. **Andover Public Schools begin on Wednesday, August 28th**
- DPW and APD would utilize temporary measures to simulate road width of a one way and a shared use path (flex posts, barrels, signage, etc.)
- Conduct community wide survey during trial
- Gather focused feedback with direct abutters
- Intercept interviews with walkers and bikers
- Community meeting at the conclusion of trial

