

# Toward a Bicycle and Pedestrian Plan for Lincoln

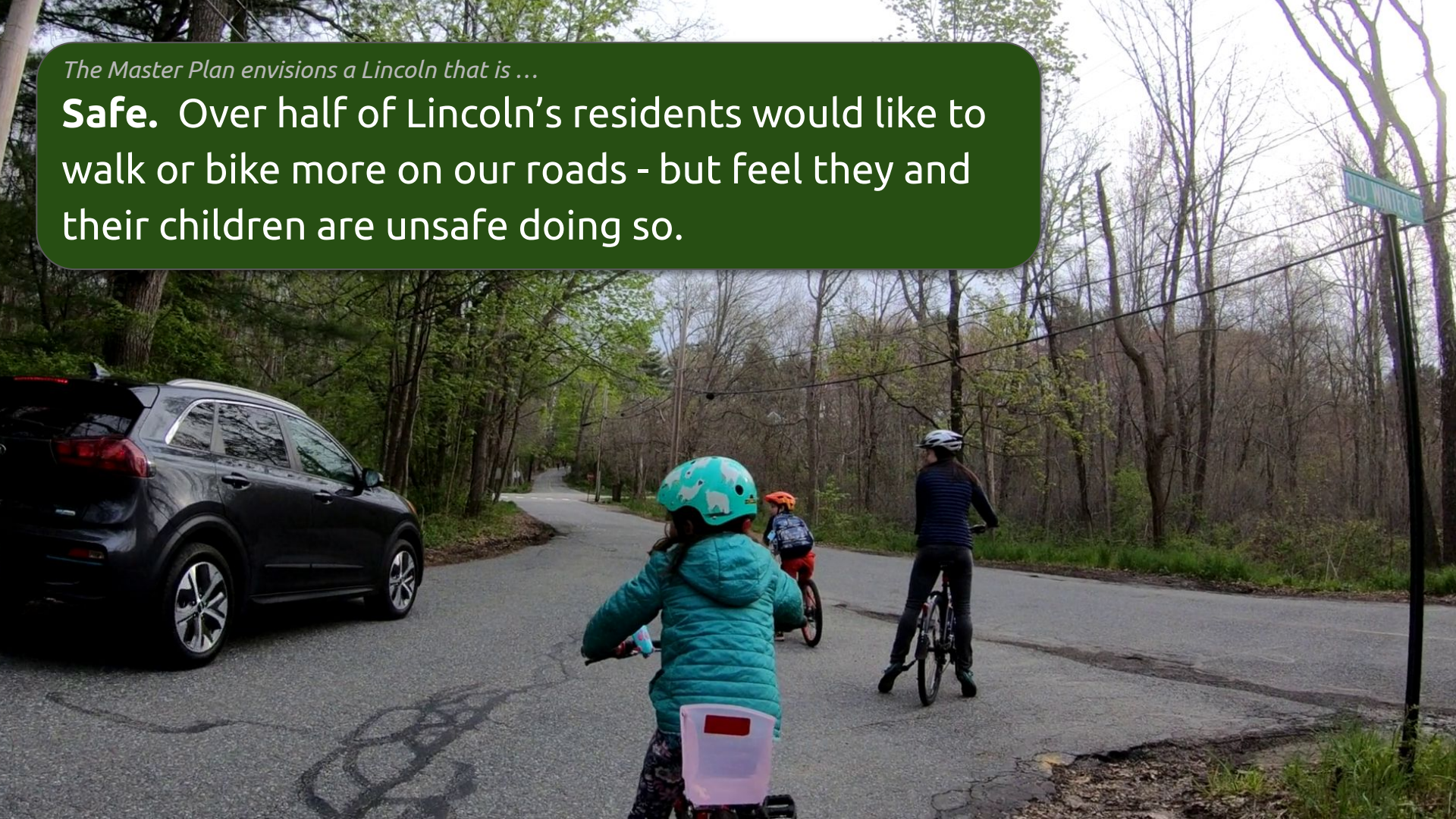


Bicycle and Pedestrian Advisory Committee  
at School Committee, October 2022



*The Master Plan envisions a Lincoln that is ...*

**Safe.** Over half of Lincoln's residents would like to walk or bike more on our roads - but feel they and their children are unsafe doing so.





*The Master Plan envisions a Lincoln that is ...*

**Climate Friendly.** We want to encourage Lincoln residents to reduce their reliance on cars for getting to work, school, shopping and more.





*The Master Plan envisions a Lincoln that is ...*

**Inclusive.** We want walking and biking to be available and accessible for all residents and visitors.





*The Master Plan envisions a Lincoln that is more...*

**Fun.** If we eliminate stress for those on bike or foot in our beautiful town, getting around without a car will be enjoyable, and more people will do it.





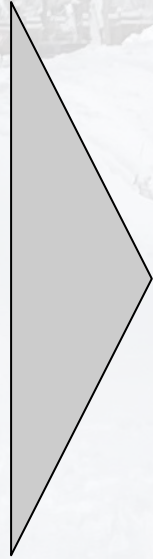
## **For Lincoln to be more:**

Safe

Climate Friendly

Inclusive

Fun



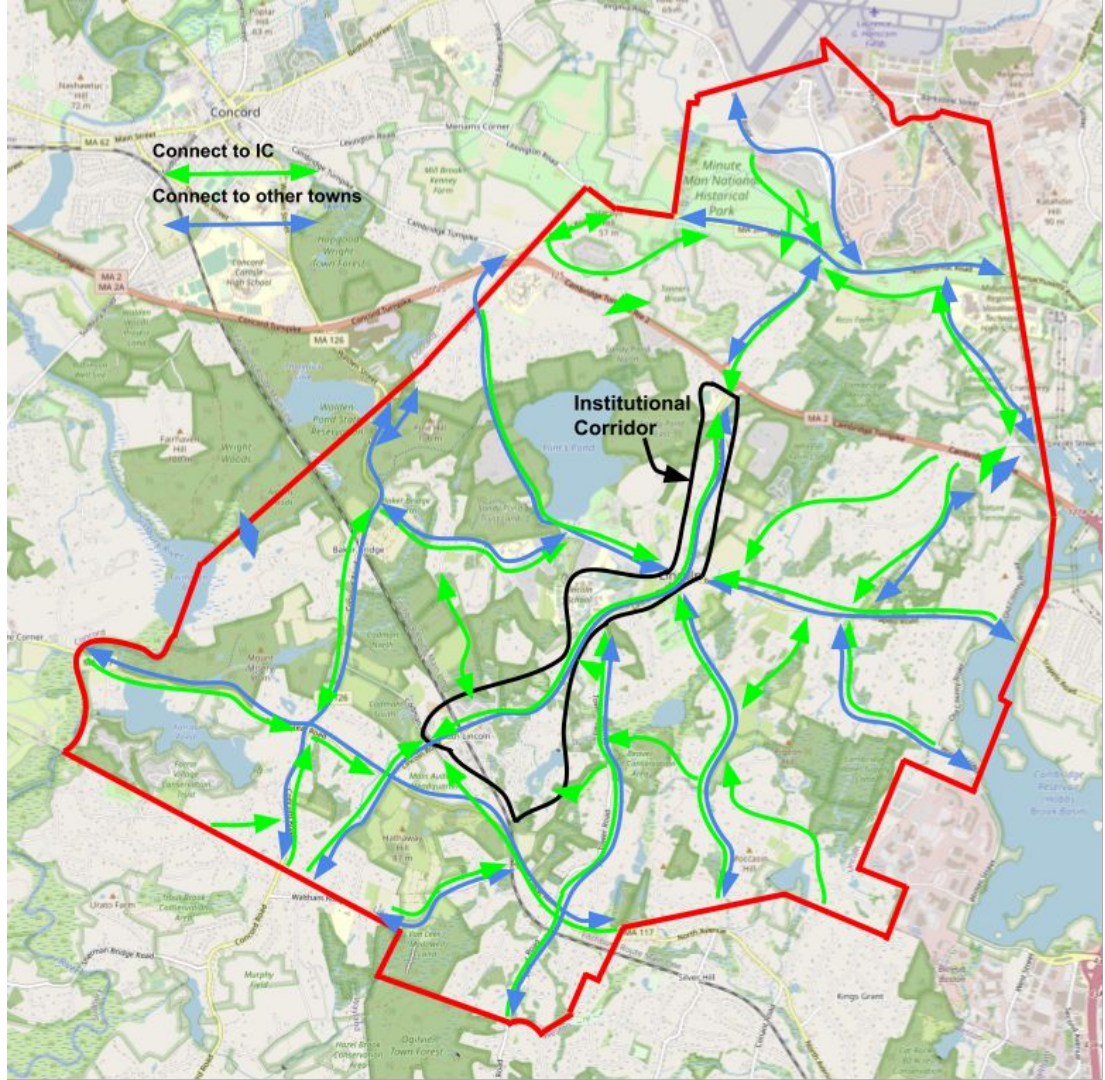
## **Lincoln's bicycle and pedestrian network should:**

Connect all neighborhoods to  
the town's institutional corridor  
with low stress

Ensure safe passages to  
neighboring towns, especially  
shared use paths



To address our goals,  
Lincoln must  
connect an extensive  
network





# Safe System approach

Spans roadway ethics to engineering principles, is the basis of US and MA policy

Vision: Zero deaths and serious injuries

Observations: Humans make mistakes  
Humans are vulnerable

Principles: Collision avoidance  
Reduced impact forces  
Redundancy  
Shared responsibility  
Proactivity  
A culture of safety for the long term



# Safe System opportunities: Roadway standards

## Major connectors

- Narrow travel lanes to 10-10.5' to lower vehicular [speed](#)
- Install 3' shoulders wherever possible, Bikes May Use Full Lane signs where not possible
- Fill gaps in roadside path network; rebuild to minimum multiuser path standards (width 8')

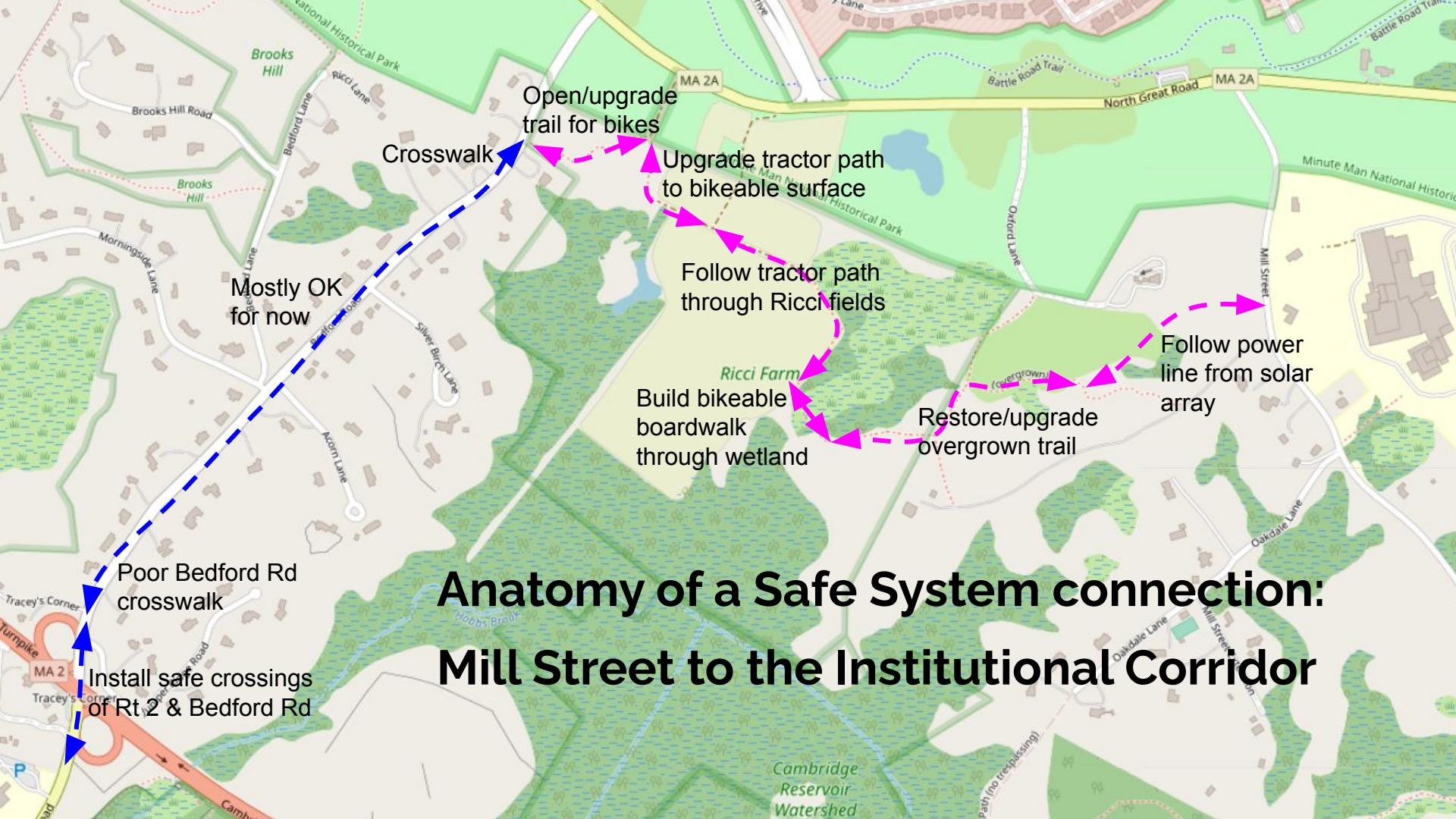
## Minor connectors

- Remove centerlines
- Expand [advisory shoulder](#) installations (pending pilot results)
- Install speed bumps and humps to slow traffic

## Intersections and crosswalks

- Reduce turning radii to slow turns to 15 mph
  - [Mountable installations](#) to enable large vehicle access
- [Bike lanes and boxes](#) when “who goes where” is ambiguous
- Remove [slip lanes](#) (except at Rt 2)
- Install [RRFBs and pedestrian refuge islands](#) at uncontrolled crossings on major connectors
- [Raised crosswalks](#) or other treatments in high pedestrian use zones, e.g., school, station area





Open/upgrade  
trail for bikes

Crosswalk

Upgrade tractor path  
to bikeable surface

Follow tractor path  
through Ricci fields

Build bikeable  
boardwalk  
through wetland

Restore/upgrade  
overgrown trail

Follow power  
line from solar  
array

Mostly OK  
for now

Poor Bedford Rd  
crosswalk

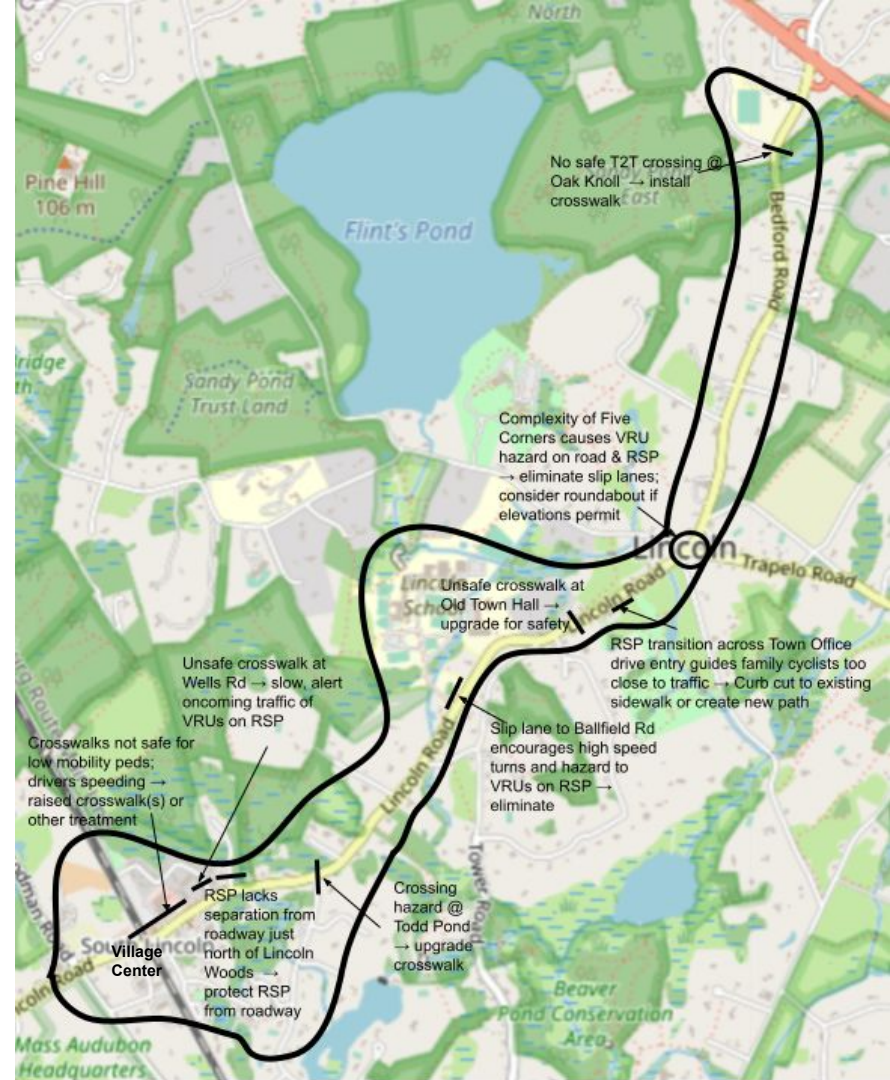
Install safe crossings  
of Rt 2 & Bedford Rd

## Anatomy of a Safe System connection: Mill Street to the Institutional Corridor



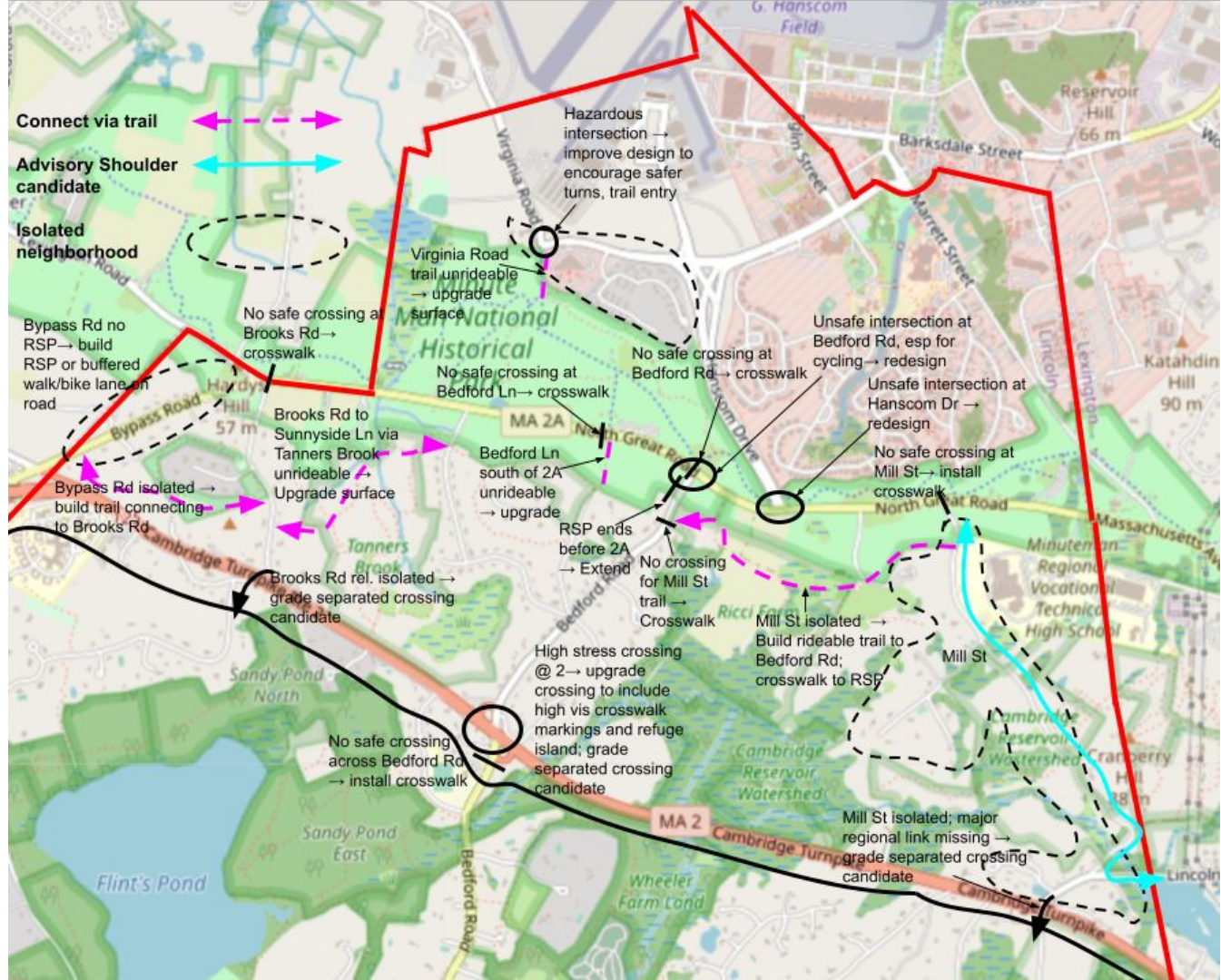
# Infrastructure opportunities

## Lincoln's Institutional Corridor (IC)

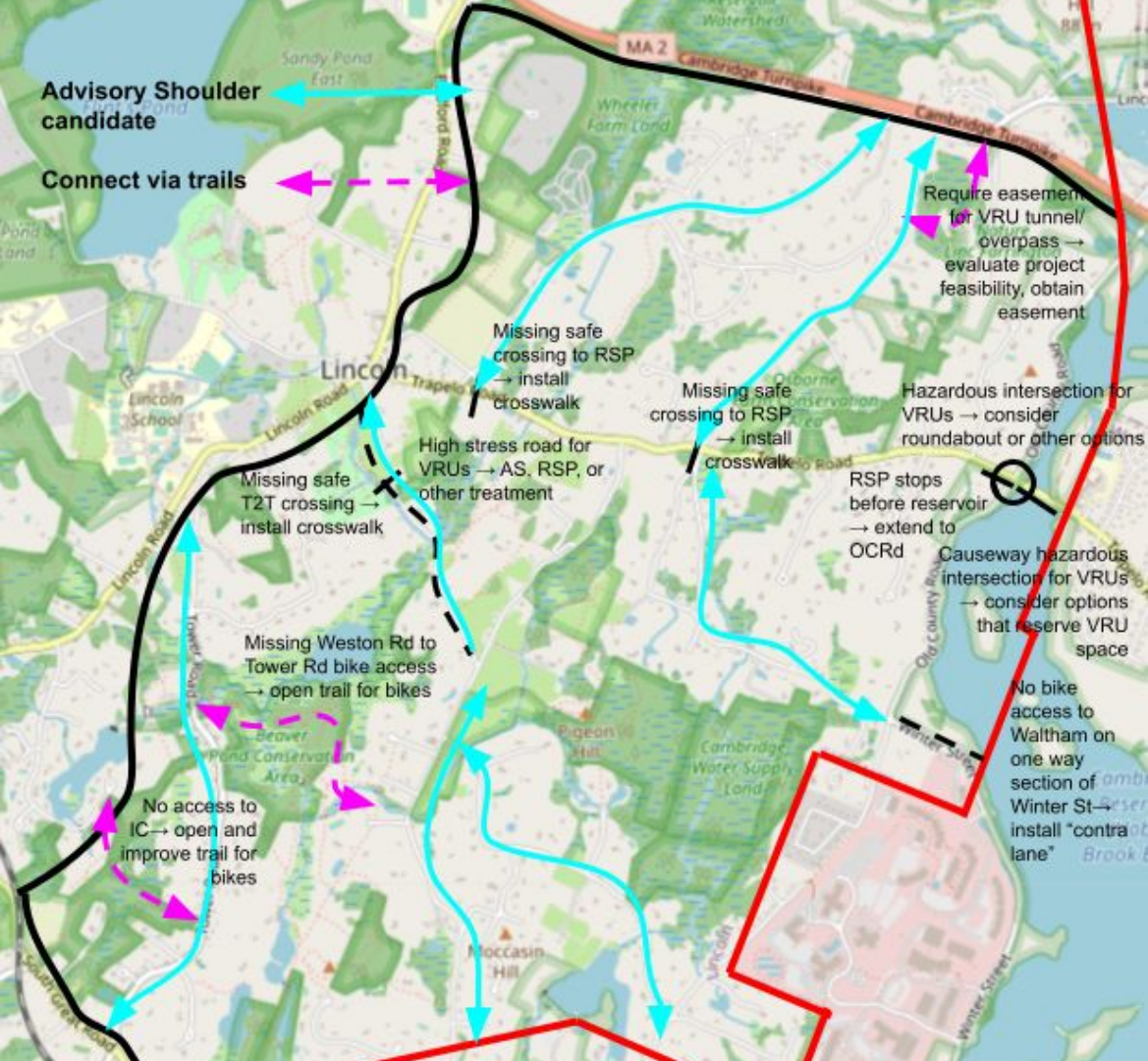




# North Lincoln

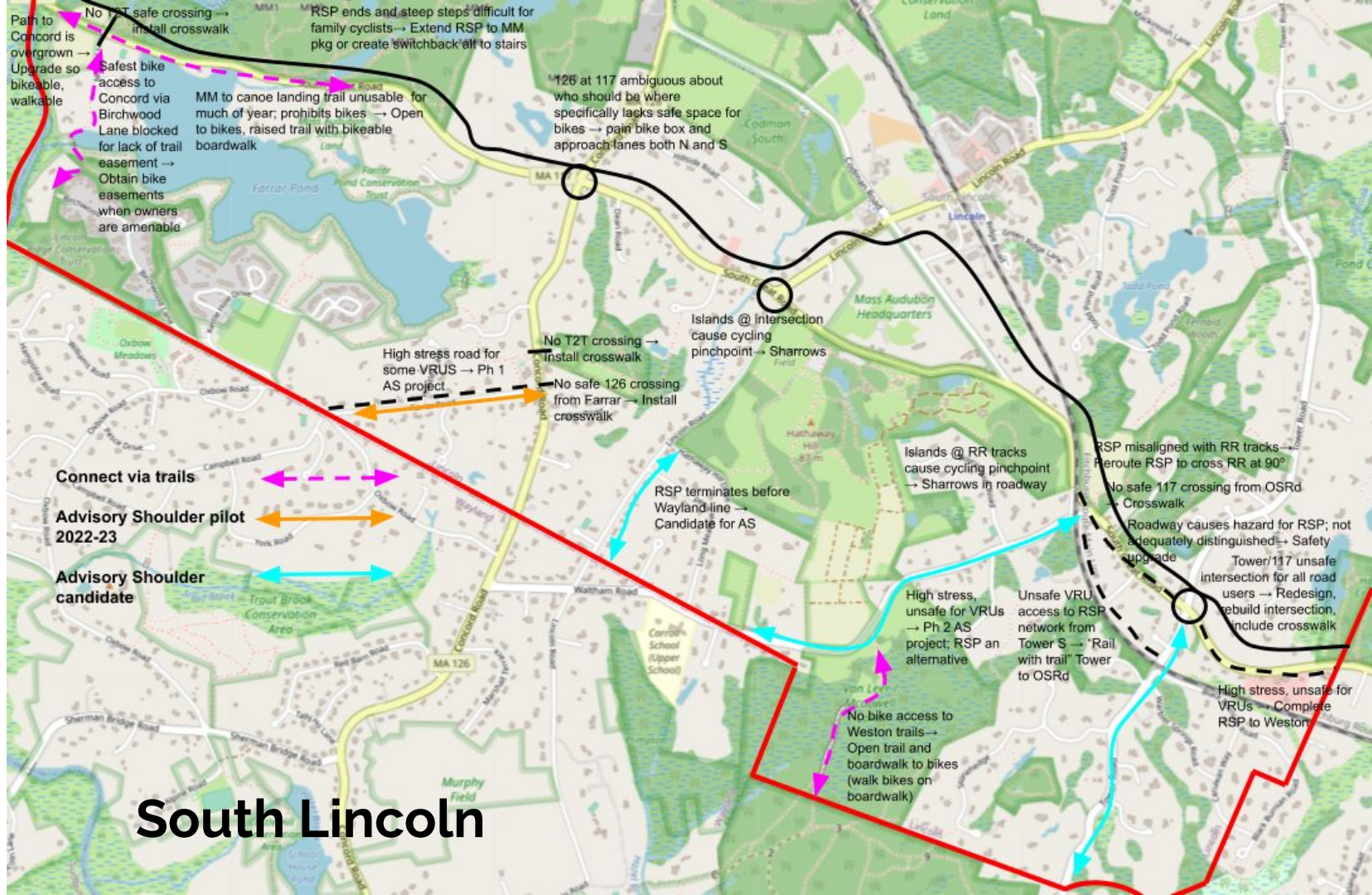






## East Lincoln











# Roadway & roadside path maintenance

## *Past & Present*



## *Future*

Safe, low stress  
maintenance standards

Lincoln appropriate  
roadway and roadside  
path preservation plan

- Requires a study
- Updated status inventory
- Annual planned investments
- Transition plan

Town acceptance of plan  
with budget



# Safe System Approach beyond infrastructure:

Enforcement

Education

Encouragement

Evaluation





# How can the School Committee & Administration help?

Establish a point of contact for Safe Routes To School grants

Feedback on the Master Plan

Collaboration on our Education & Encouragement efforts

- Lincoln School Walk Bike & Roll to School week in May
- Opportunity for pedestrian & bike safety instruction during school time



# How we get this done

Target opportunities based on priority, ease, and opportunity

Secure funding

- Grants for major projects (e.g., Complete Streets, MassTrails, Safe Routes to School)
- Augment Chapter 90 funds for maintenance

Engage with residents from all affected neighborhoods


Collaborate across town staff and committees

Initiate pilot programs and [quick build options](#)

[Commit for the long term. A Safe System culture.](#)



# Proposed Master Plan Timetable: 2022 - 2023



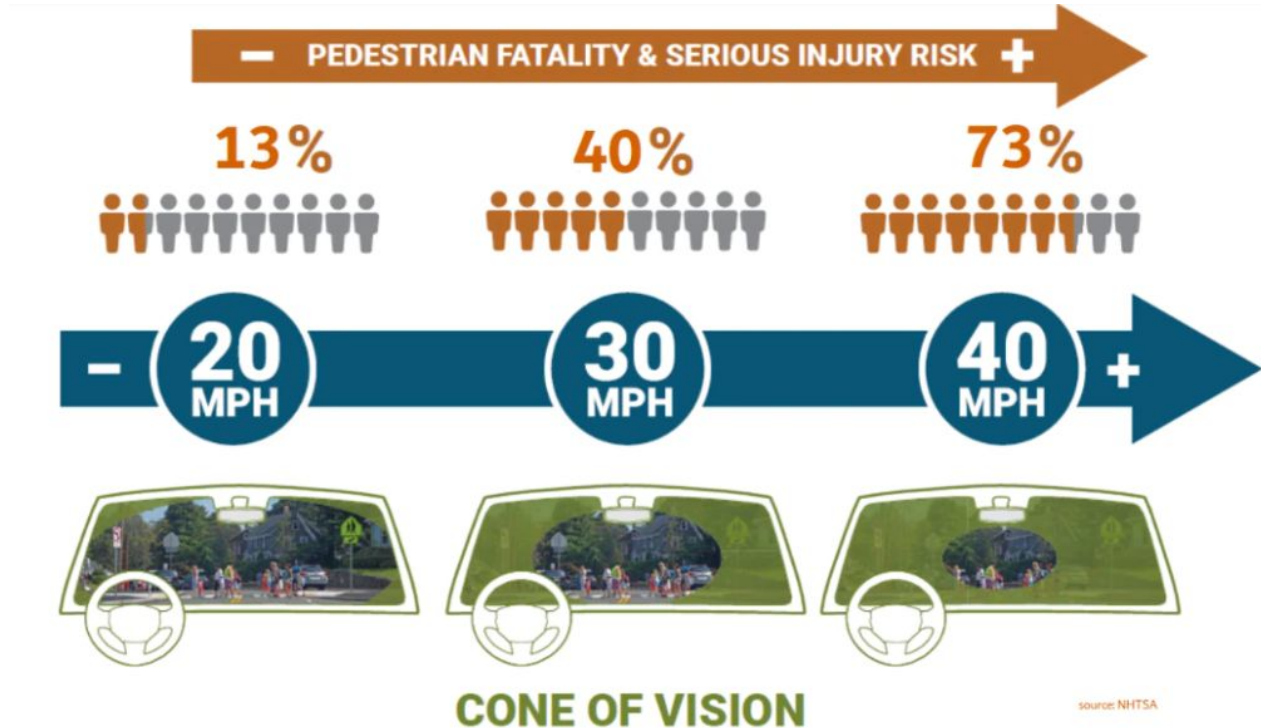
May	Met with Select Board with draft slide outline
June-Oct	Met with town boards, committees, staff
Oct-Nov	Public forums, each with regional focus
November	State Of The Town - Lincoln in 2050
Dec-Jan	Revisit with Select Board if necessary
Feb-March	Town-wide meeting in run up to Town Meeting
March	Town Meeting



**Linked slides to follow**



# Speed is a core issue

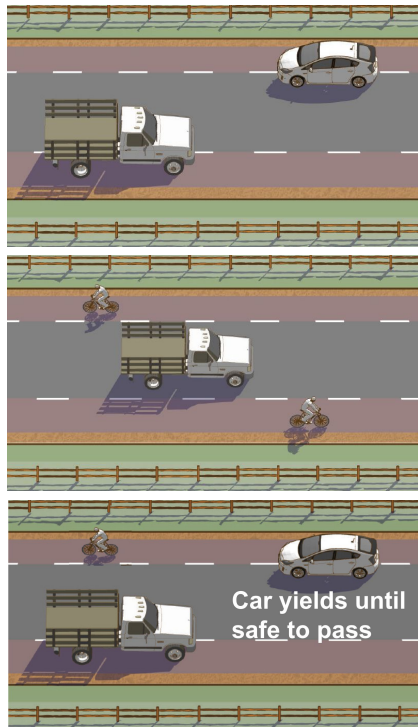


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# Advisory shoulder plan

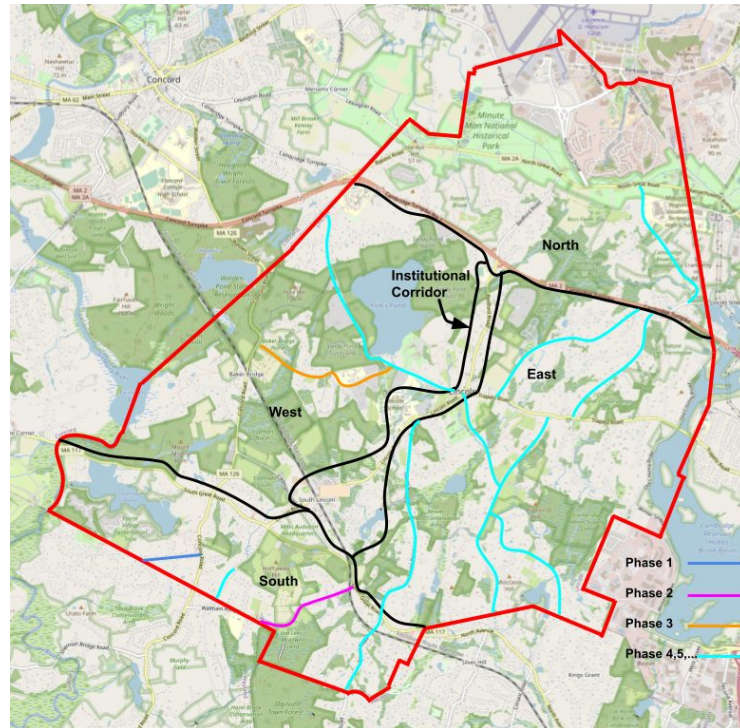
## The concept



## The present



*The future?*



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# Mountable intersection installations





# Bike boxes & lanes on Central St at Mass Ave, West Acton



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# Slip lane at Ballfield Road





# RRFB and refuge island at Rt 117 & Lincoln Road

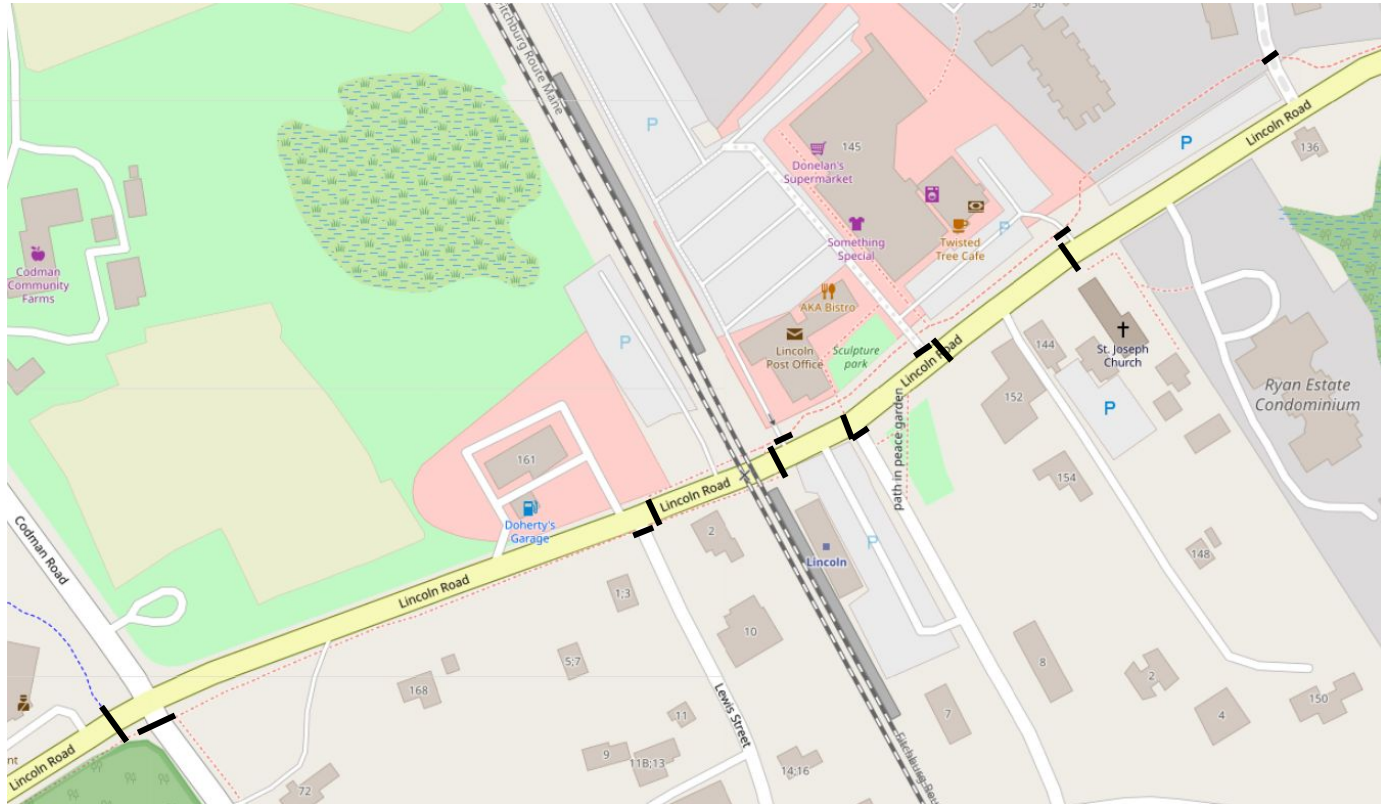


# Raised crosswalk





# Village Center crosswalks



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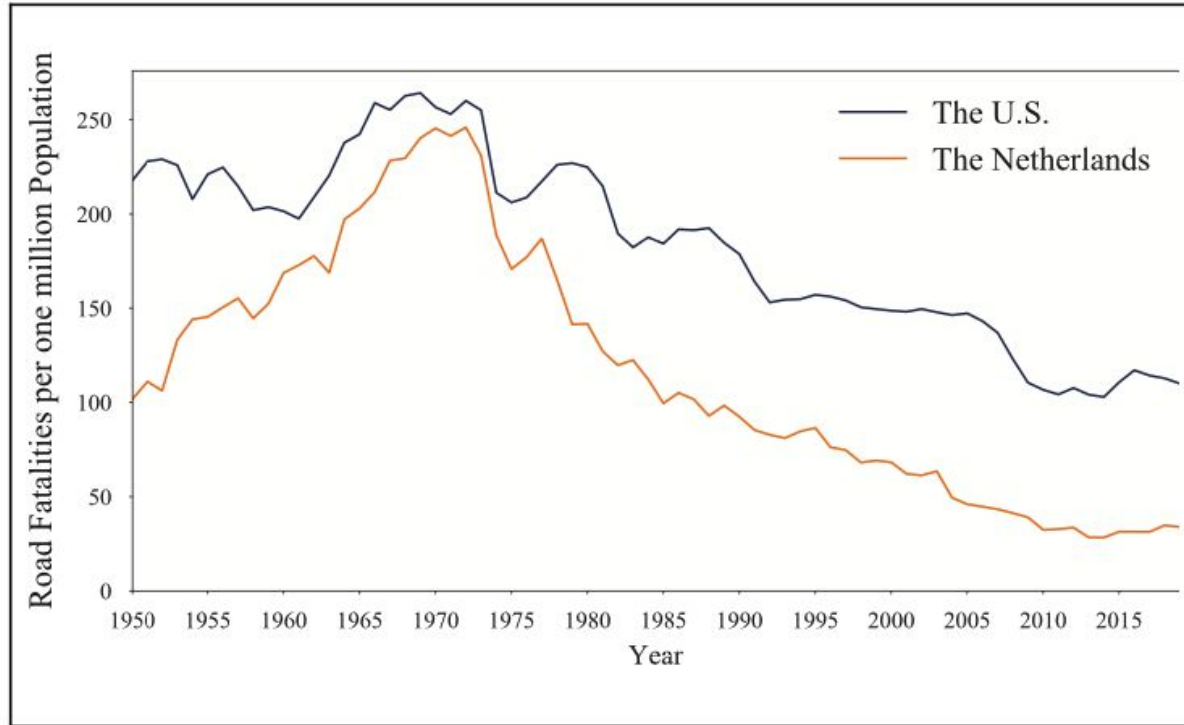
# Randall & Hudson Rds intersection, Stow



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# The Netherlands progress to safe roads

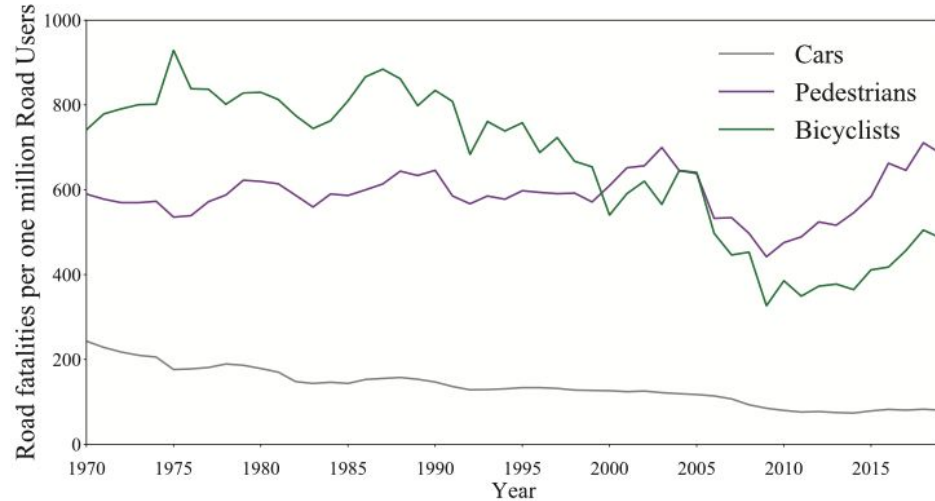


Source: Sustainable Safety in The Netherlands Creating a Road Environment where People on Foot and on Bikes are as Safe as People in Cars. Transportation Research Record, 2021

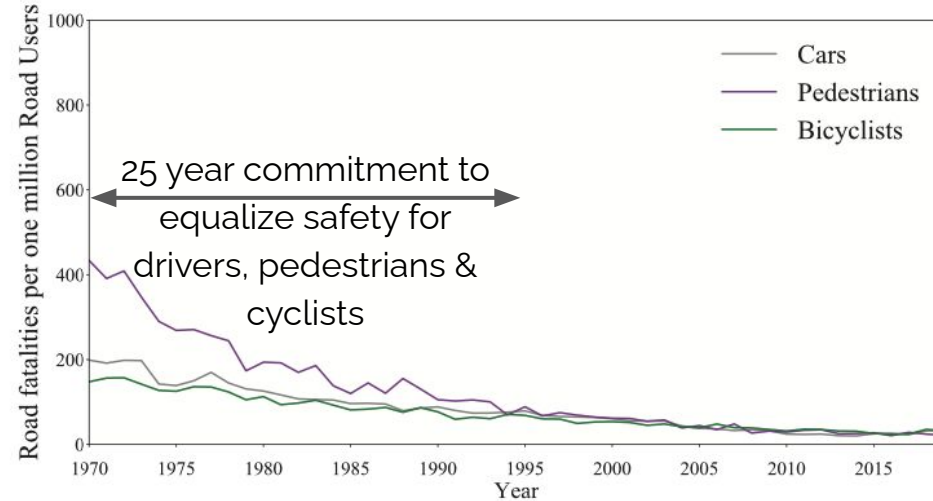
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# Lincoln's goals achievable with long run commitment

*USA*



*The Netherlands*



Source: Sustainable Safety in The Netherlands Creating a Road Environment where People on Foot and on Bikes are as Safe as People in Cars. Transportation Research Record, 2021

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