

**West Concord Junction
Pedestrian & Bike Safety Audit Findings 2021-2022**

GOALS:

- To improve walkability and biking in West Concord.
- To identify key areas for improvement.
- To propose a timely, actionable and doable path forward.
- To make the walking experience more coherent;

We collaborate with WCJCDC, Transportation Advisory Committee, and BFRT Committee + Public Works



Why should we care about pedestrian and bike conditions in West Concord Junction?

Safety

Protecting our kids, our seniors, our guests and ourselves

Economics and Sustainability

Supporting a thriving local business district that can be enjoyed on foot or by bike. Per the Envision Concord Plan, town residents say that they value the village centers as vital pedestrian-friendly, economic, and social hubs

Responding to Change

Addressing the walkability and bikeability gaps highlighted by new open space resources (BFRT) and COVID (more weekday foot traffic).

Equity

Making walking and biking safe and inviting for people of all ages and abilities in all of Concord's village centers



Because West Concord Junction is a vital part of our lives.

cultural district // charming village center // community hub + commuter hub // destination for arts + dining + shopping + entertainment + recreation



Complete Streets plans for Commonwealth Ave are an exciting step towards further pedestrian improvements



West Concord Junction Pedestrian and Bike Safety Walkabout

October 15, 2024



The group on the path.

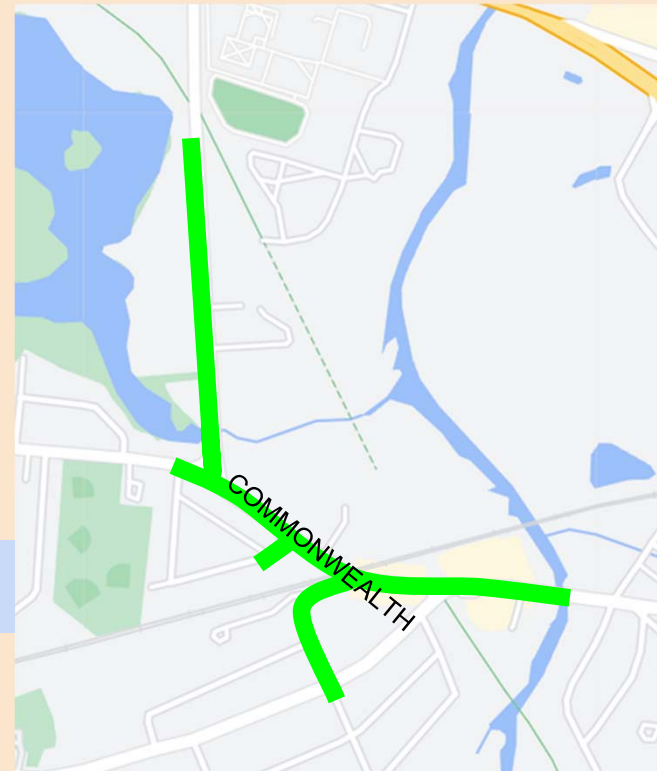
West Concord Junction Pedestrian and Bike Safety Walkabout

October 15, 2021

It was very well-attended!

Members of WCAC, Select Board, Bruce Freeman Rail Trail Advisory Committee, Disability Commission, Junction Village Open Space Task Force, West Concord Cultural District Committee, local cyclists and the community.

Walkabout Route



Identifying key areas for improvement.

1. Crosswalks
2. Sidewalks
3. Bike Accommodations
4. Signage (Gateways, Maintenance, and Posted Speeds)
5. Reducing Speeds

Make the pedestrian experience coherent and safe



1. Areas For Improvement: Crosswalks

Many crosswalks have faded. Some busy crossings lack crosswalks altogether.



Commonwealth Ave



**Commonwealth heading to brick sidewalk
+ Laws Brook Road)**

How Do We Improve Our Crosswalks?

Make them purposeful.

Our crosswalks should enhance pedestrian safety in high-traffic pedestrian zones.

Make them unmistakable.

Crosswalks should send a highly visible signal to drivers that they are in a pedestrian zone

Make them useful.

Our crosswalks should connect people to key destinations.



Crosswalk near Concord Museum

Crosswalk with Fading Paint

This example is already half gone.

Where crosswalks need to be refreshed, is there an opportunity to experiment with color or other creative ways of making them more distinctive?



**Location: Commonwealth
Ave**

Key Missing Crosswalk

This intersection is particularly hazardous for people in wheelchairs.
Commonwealth to Kenneth Dunn Square



Commonwealth heading to brick sidewalk + Laws Brook Road + Rideout Park (Kenneth Dunn Square)

Fragmented Crosswalks

No coherent, consistent crosswalk design and construction standards throughout the Junction; both drivers and pedestrians lack cues that pedestrians are important



Location: Heading West on Commonwealth Ave, Nashoba Bakery Parking lot on right

Crosswalks: Where Should We Focus?

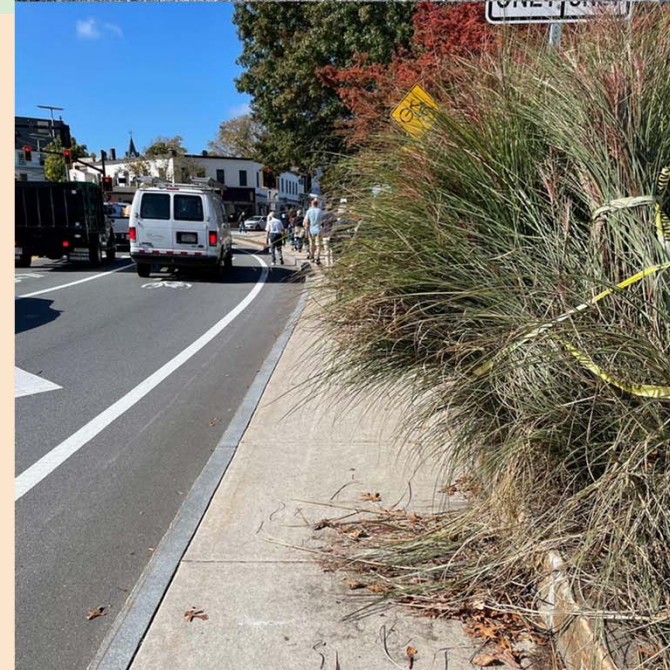
- 1. Commonwealth Avenue, Laws Brook Rd to Main Street
- 2. Kenneth Dunn Square
- 3. Church Street - (expected to be done in 2022 Complete Streets project)
- 4. Main Street, between the Assabet River and Commonwealth Ave
- 5. Main Street, between BFRT + Old 99 Restaurant



Areas For Improvement: Sidewalks

Issues observed:

- > Poor sidewalk condition
- > Inadequate space to walk/unsafe design
- > Overly wide curb cuts
- > Missing sidewalks



How Do We Improve Our Sidewalks?

Make sidewalks safe for all.

Sidewalks should be in good repair so that destinations within the Junction can be safely reached by all - including those in wheelchairs, using canes, or pushing strollers. Sidewalks should be comfortable to use without fear of passing traffic.

Fill gaps in the sidewalk network.

We should fix places “where the sidewalk ends.”

Make sidewalks attractive. Make walking a coherent experience.

Consider using color, brick or brick-like sidewalks, like in Concord Center and West Acton. Where appropriate, consider using a more permeable surface, like stone dust.



Location: Church St., traveling from Commonwealth Ave. to Main St.

Poor Sidewalk Condition

Pavement heaving and inconsistent. Poor curb. Overgrown bushes push pedestrians/wheelchair users to street edge.

Church Street winds down a hill, has a blind curve and cars tend to drive fast here; hazardous for both bikers, pedestrians and the many children in area.

Location: Church Street



Poor Sidewalk Condition

Difficult for pedestrians.
A tripping hazard.

Note: Poor paving condition leads to standing water, creating breeding grounds for mosquitos which can transmit serious diseases like West Nile Virus and Eastern Equine Encephalitis to humans.



**Location: Main Street at Assabet River
Bridge**

Poor Sidewalk Condition

Sloping, undefined grade, with numerous obstacles creates uncertainty, blurring the line between road and sidewalk.

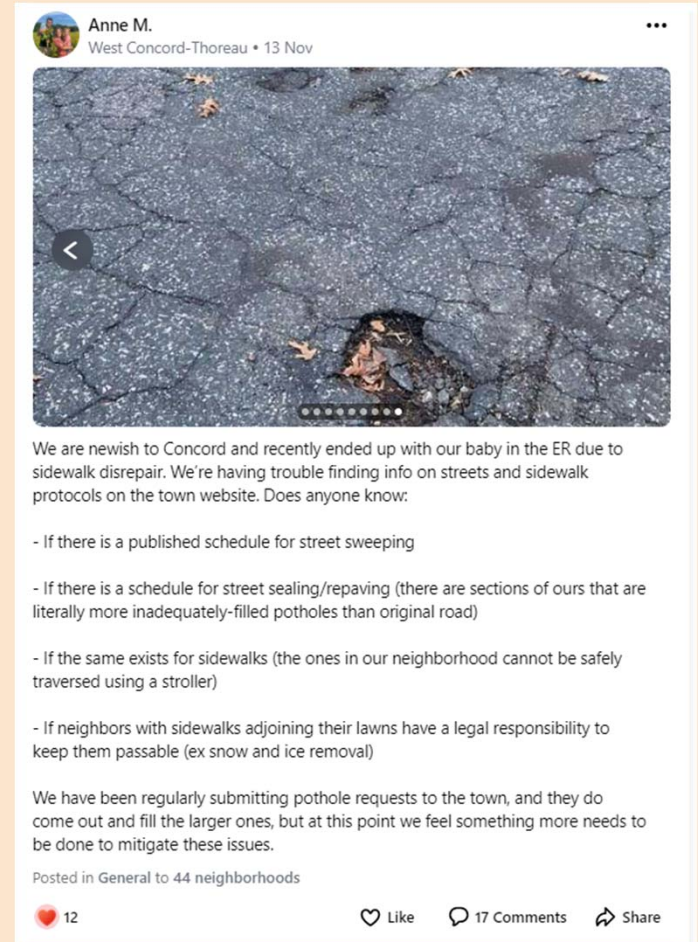
Location: Commonwealth Avenue at Laws Brook Road




Sidewalks should get repair attention like roads do

[Nextdoor post](#) about hazards of walking in West Concord - Nov. 2021

Child went to emergency room



Anne M.
West Concord-Thoreau • 13 Nov



We are newish to Concord and recently ended up with our baby in the ER due to sidewalk disrepair. We're having trouble finding info on streets and sidewalk protocols on the town website. Does anyone know:

- If there is a published schedule for street sweeping
- If there is a schedule for street sealing/repaving (there are sections of ours that are literally more inadequately-filled potholes than original road)
- If the same exists for sidewalks (the ones in our neighborhood cannot be safely traversed using a stroller)
- If neighbors with sidewalks adjoining their lawns have a legal responsibility to keep them passable (ex snow and ice removal)

We have been regularly submitting pothole requests to the town, and they do come out and fill the larger ones, but at this point we feel something more needs to be done to mitigate these issues.

Posted in General to 44 neighborhoods

12 Like 17 Comments Share

Gaps in Sidewalk Network

A blind corner, hidden by tall bushes, where the sidewalk ends. Exiting cars are completely hidden, creating an extremely dangerous environment for bikers and pedestrians.

NOTE: Maple Court Road is in very poor condition. This does slow the cars.

Poor paving condition leads to standing standing water, creating breeding grounds for mosquito



**Location: Maple Court Road
heading onto Bradford Street**

Unsafe Sidewalk Design

Width of road, wide turning radius, and end of parallel parking encourages high speeds

Said one participant:

"That triangle intersection of Laws Brook and Comm. Ave. is really dangerous for bikes. I've had a lot of close calls in all directions on that."

Location: Commonwealth Avenue at Laws Brook Road



Unsafe Sidewalk Design

Narrow, impeded sidewalk with no curb provides little barrier between pedestrians and fast-moving cars and trucks (effective speeds of 35+ MPH)



Location: Commonwealth Avenue, by BFRT crossing

Overly Wide Curb Cuts

The curb cut extends along half the frontage of 152 Commonwealth into 166 Commonwealth.

The more-than-double driveway encourages cars and trucks to enter and exit both driveways at excessive speeds and at any angle, forcing pedestrians to negotiate a wide expanse without being able to predict where cars will travel.

Location: 152 & 166 Commonwealth Ave



Overly Wide Curb Cuts

The sidewalk in front of the fire station also has a wide curb cut with narrow sidewalks and no crosswalk



Location: Main Street Fire Station

Sidewalks: Where Should We Focus?

- 1. Church Street
- 2. Main Street
- 3. Bradford Street at Maple Court
- 4. Commonwealth Ave west of Beharell
- 5. Commonwealth Avenue, Warner's Pond stretch

Can we do a walking tour with you?



Areas For Improvement: Biking Accommodations

How Do We Improve Bikeability?

Transportation Advisory Committee, WCAC and Public Works should partner to develop a plan for adding bike accommodations - or at a minimum sharrows and “bikes may use full lane” signage - on Commonwealth Ave,, Main St. and Church St.

BFRT connectivity scheduled for Summer 2022 will bring additional crowds of bikers and pedestrians to West Concord Junction; we'd like them to explore the Junction rather than just passing by. Let's work together to encourage this by having bike racks available, making it safe to get on and off the trail, and improving the pedestrian experience.

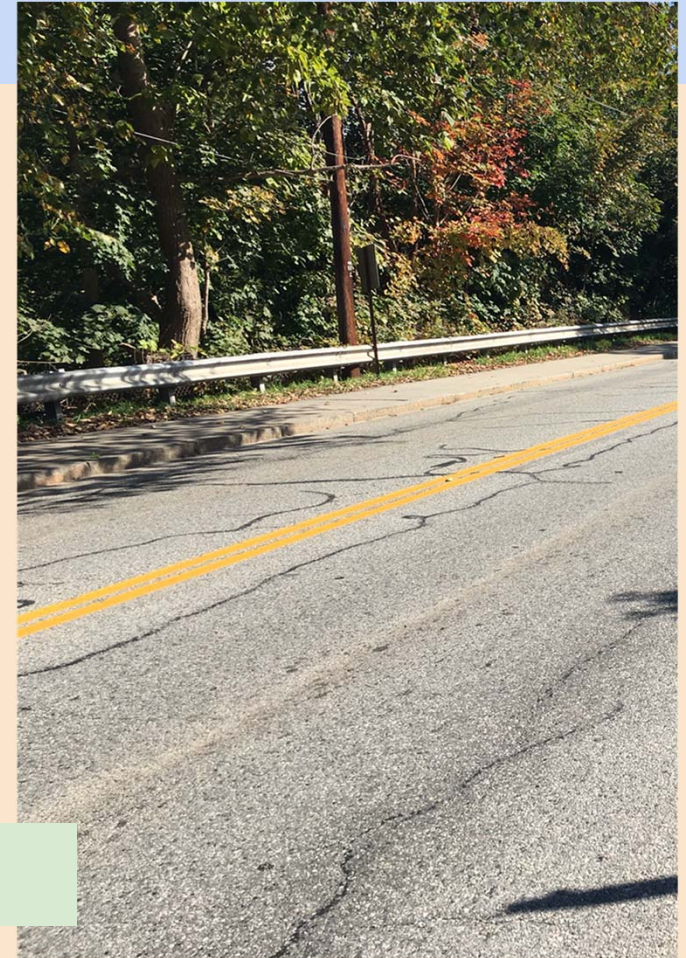


An Unpredictable, Unsafe Main Street

No sharrows or share the road signage in either direction along Main Street between the Junction and Route 2, or approaching the Main Street Assabet River bridge.

Poor pavement conditions on the Assabet River Bridge are a bike safety concern.

Cars do not anticipate bikes along Main Street, creating very unsafe conditions.



Location: Main Street

An Unpredictable, Unsafe Main Street

Bike lane suddenly ends on Main Street heading east, less than 1/10 mile from the rail trail. Merging with car traffic is abrupt and dangerous.

Additionally, the posted 30 MPH speed limit is highly hazardous — a pedestrian/cyclist is twice as likely to die hit by a car going 30 MPH than 20 MPH.

Location: Main Street



"The Assabet River Bridge is a disaster for both pedestrians and cyclists.

The sidewalk is too narrow, and the road surface for bikes is borderline lethal.

There's no way for cyclists to stay right, you really have to take the full lane and that pisses drivers off.

That bridge should be widened as should the sidewalk.

You can't pass a person coming from the opposite direction with a



Bikes must use full lane on Commonwealth Ave

Bicyclists give up a bike lane to accommodate parking spaces but motorists and bicyclists need more advance warning approaching this area that bikes will need a full lane



Location: Commonwealth Ave near Woods Hill Table and former Ninety Nine building

Bike Accommodations: Where Should We Focus?

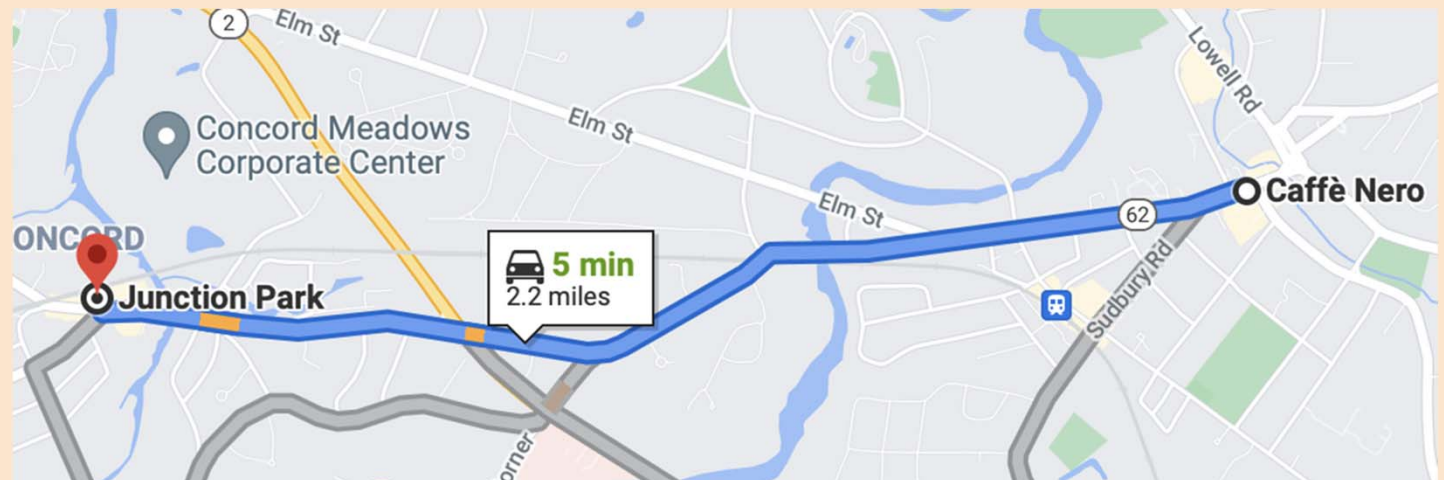
- 1. Main St. at Assabet River Bridge
- 2. Junction Park
- 3. Commonwealth Ave near Woods Hill table with parked cars & no bike lane



Long Term Goal: Create Connections for Bikes (And Everyone Else)

Concord has **2 cultural districts** - we should be able to safely walk and bike between them.

Current conditions are unsafe for cyclists, pedestrians, kids and wheelchair users — hurting us all, and increasing our local carbon footprint.



Areas For Improvement: Signage



Rockport
CULTURAL
DISTRICT



How Do We Improve Our Signage?

Create a Gateway

Gateways should indicate entry into a walkable, low-speed cultural district zone with many pedestrians/ cyclists...done right it encourages people to visit - even when not planning to.

Spread the Word

Members of local business groups, including Debra's, have also recommended a West Concord or Cultural District sign at Rotary or Route 2 (Northampton?)

Lower speed limits

West Concord Junction is a thickly settled residential neighborhood and retail center. 20-25 mph speed limits are more appropriate than 30-35 mph.

Improve Placement

People don't see the current 20 MPH sign in West Concord Junction because of its placement; suggest putting it heading west prior to Assabet River crossing, also by Rideout.

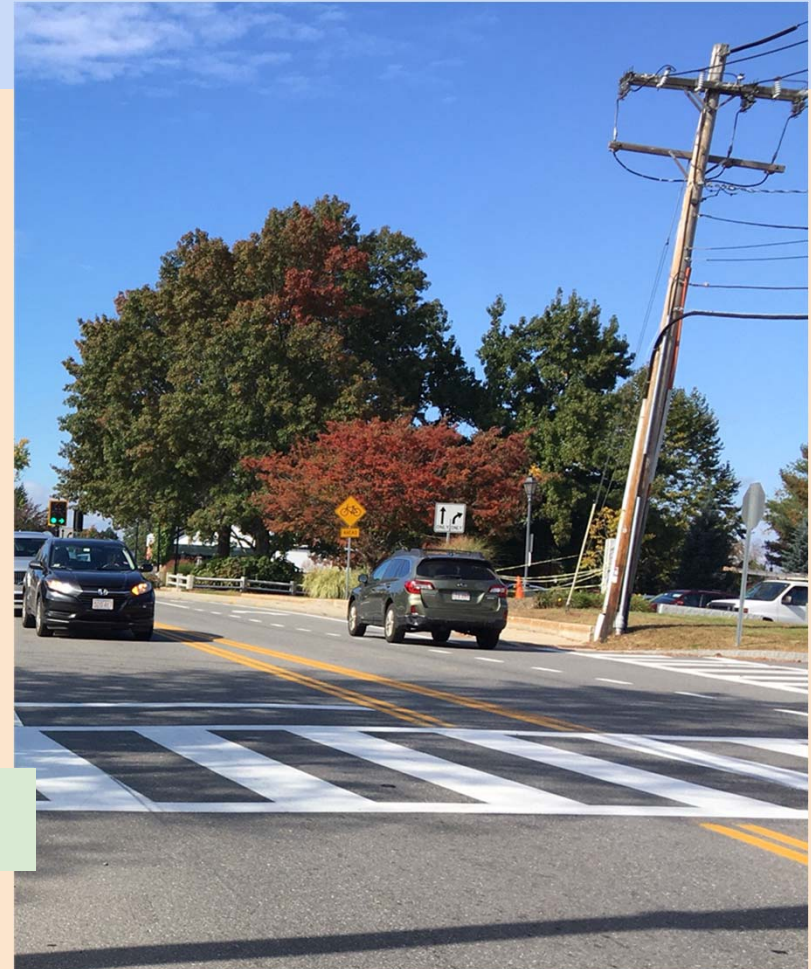


Lack of Warning Signage

Traveling west from Rt. 2 on Main St., no signifier of increased pedestrian/bike traffic ahead in the West Concord Junction Cultural District.

No indication of upcoming rail trail crossing.

Location: Main Street



Lack of Warning Signage

Heading north toward Rt. 2, less than 1/10 of a mile from new Bruce Freeman Rail Trail crossing by MCI, there's no sign that bikes and pedestrians are coming.



Location: Commonwealth Avenue

Lack of Gateway Signage

Traveling west on Rt. 2 at edge of West Concord Junction, no signifier on Main Street to indicate that the Cultural District is ahead.

Signage should be re-evaluated given BFRT



Location: Main Street approaching Commonwealth Ave.

Confusing + Unenforceable Speed Signage

Two speed zones on Main St. in front of West Concord Shopping Plaza:

25 MPH heading east.

30 MPH heading west.

This is confusing for drivers and can lead to excessive speed when traveling through a busy business district.

The speed limit changes 5 times on Main Street from Rte 2 to the old 99, in 7/10 of a mile; this is 'unenforceable', a Cambridge planner says. It's also dangerous.

Location: Main Street



Unsafe Speed Signage

Speed set at 30 MPH, less than 1/10 of a mile from new BF Rail trail crossing.

A pedestrian is twice as likely to die hit by a car going 30 MPH than 20 MPH.



**Location: Commonwealth Avenue heading north
towards Rt. 2**

Poor Signage Condition

Some signage is in poor condition or askew.

Is RR signage controlled by the MBTA/Keolis?



Location: Main Street

Signage: Where Should We Focus?

- 1. Gateway, speed limit and BFRT signage
- 2. Gateway, speed limit and BFRT signage
- 3. Gateway, speed limit and BFRT signage
- 4. Gateway, speed limit and BFRT signage



Next Steps



Can we partner with you to improve the pedestrian experience in West Concord Junction?

Area	Suggested improvement
Crosswalks	Improve crosswalks - and add missing crosswalks - throughout the Junction, working with WCAC.
Sidewalks	Improve sidewalk conditions - and fill gap in sidewalk network on Bradford Street. Areas of focus should include Church Street, Bradford Street, and Main Street near the Assabet River Bridge, working with WCAC.
Bike Accommodations	Public Works, Transportation Advisory Committee + WCAC develop a plan for adding bike accommodations - or at a minimum sharrows and “bikes may use full lane” signage - on Commonwealth, Main and Church.
Signage (Gateways, Maintenance, Posted Speeds)	The Town, in partnership with the West Concord Cultural District Committee + WCAC, should undertake a review of signage, particularly at gateways, and develop a plan for improvements. Consider placement on Rte 2.
Speed Can we create a plan for scope and timing of improvements? Can we work together to create a process for design review before and after completion of improvements?	Speeds on Commonwealth Ave and Main Street approaching / exiting the Junction should be limited to 25 MPH max; Speeds in Junction at 20 MPH, need reposting so visible; the 20 MPH signs are not visible now.

Ideas for other improvements

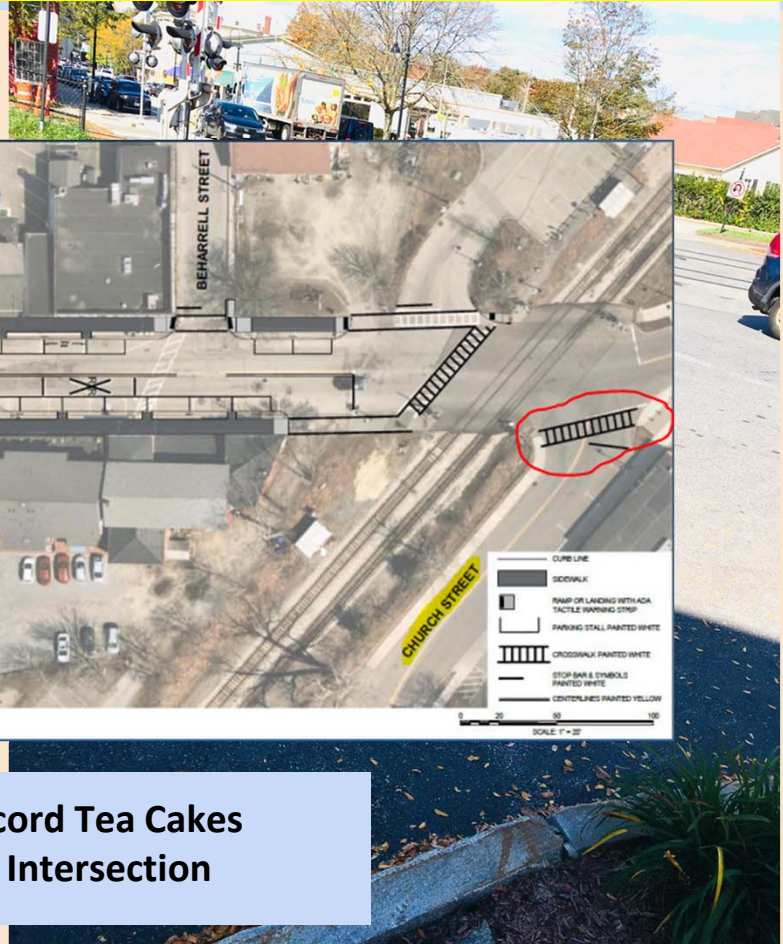
Missing Crosswalk

Propose removing this slide b/c it seems like the Complete Streets plan will install a crosswalk in this location

With no safe place to cross, this intersection is a high hazard for pedestrians and cyclists.

NOTE: This may be on the boards to happen in 2022 [I don't believe this is part of the Commonwealth Ave complete streets project] (let's check!)

I think there's a crosswalk planned by Complete Streets across Church St parallel to Comm



Location: West Concord Tea Cakes and Church Street Intersection

Better understanding current conditions.



Examples of Better Crosswalks

How Do We Improve Our Crosswalks?

Make them purposeful.

Our crosswalks should enhance pedestrian safety in high-traffic pedestrian zones.

Make them unmistakable.

Crosswalks should send a highly visible signal to drivers that they are in a pedestrian zone

Make them useful.

Our crosswalks should connect people to key destinations.

Increase Coherence of Walking experience.



Better Crosswalks

More communities are putting in brick, or brick-like crosswalks...to elevate pedestrian experience - makes crosswalk easier to see + slow cars. Elevates pedestrian experience.

New crosswalk:

Concord Center

We have **no** crosswalks like this in West Concord!

These signal walkability. They are around the renovated Concord Museum.



Better Cross WALKS

New crosswalk:

Concord Center

This one goes to Concord Academy (the private school)

We have no high-quality crosswalks like this in West Concord.



Better Cross WALKS

New crosswalk:

Concord Center

This one goes to
Concord Academy
(the private school)

It enhances the area.



Better Cross WALKS

More communities are putting in brick, or brick-like crosswalks...to elevate pedestrian experience - makes them easier to see - slows cars.

New crosswalk:

West Acton

This goes to a new retail/restaurant center.



Better Cross WALKS

Grafton, MA

In town center:



Better Crosswalks

More communities are putting in brick, or brick-like crosswalks...to elevate pedestrian experience - makes crosswalk easier to see + slow cars. **Elevates pedestrian experience.**

New crosswalk:

Concord Center

These signal walkability. They are around the renovated Concord Museum.



Better Crosswalks

West Acton

A local businessman, who works in both West Acton and West Concord, reports this new crosswalk actively slows car traffic down in Acton.



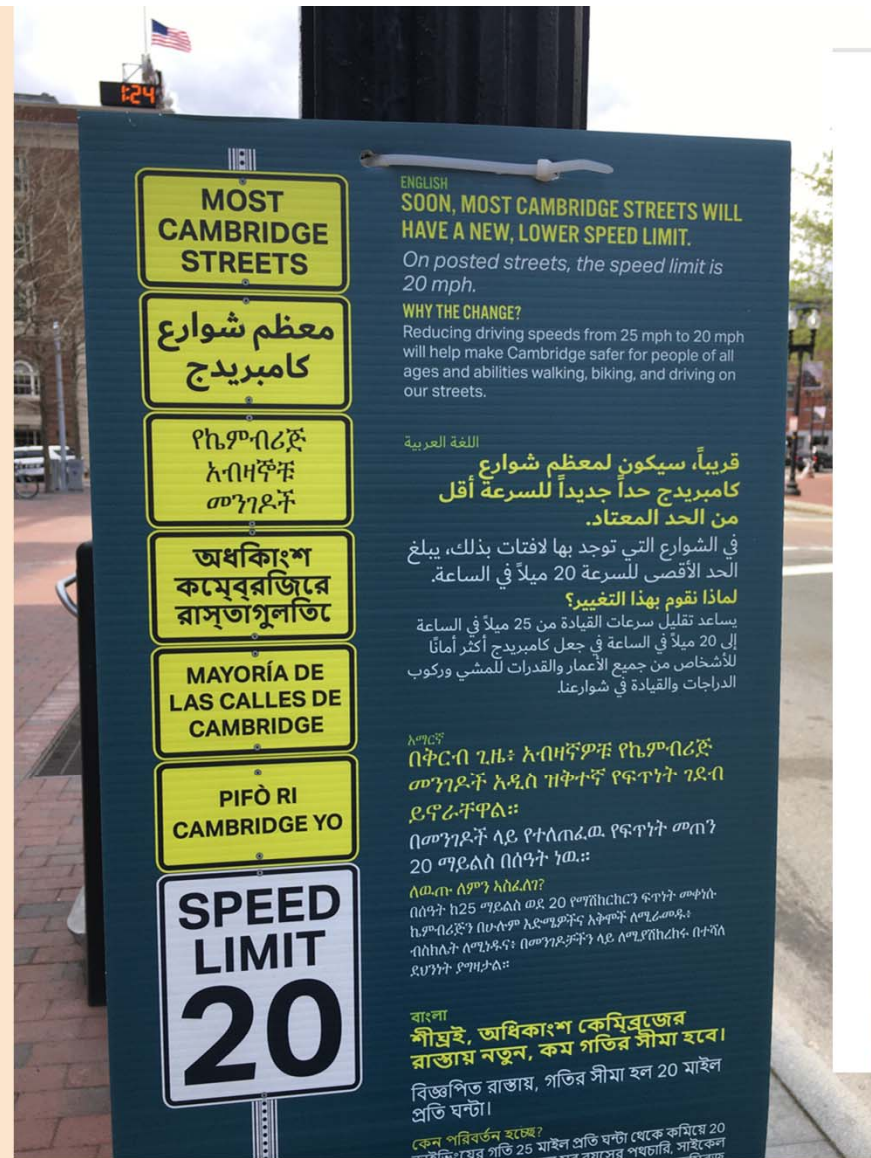
Vehicle Speed

Public EDUCATION -

We need a public education process about bike/pedestrian + general road safety like the City of Cambridge initiated last summer.

People have no idea the **Junction Cultural District speed is 20 MPH**; we need an education process that informs them.

See next slide:



Cambridge to Reduce Speed Limit to 20 MPH On Most City Streets

New speed limit signs will start going up around the city in mid-November.

By Christian MilNeil | Oct 29, 2019 | 0 COMMENTS



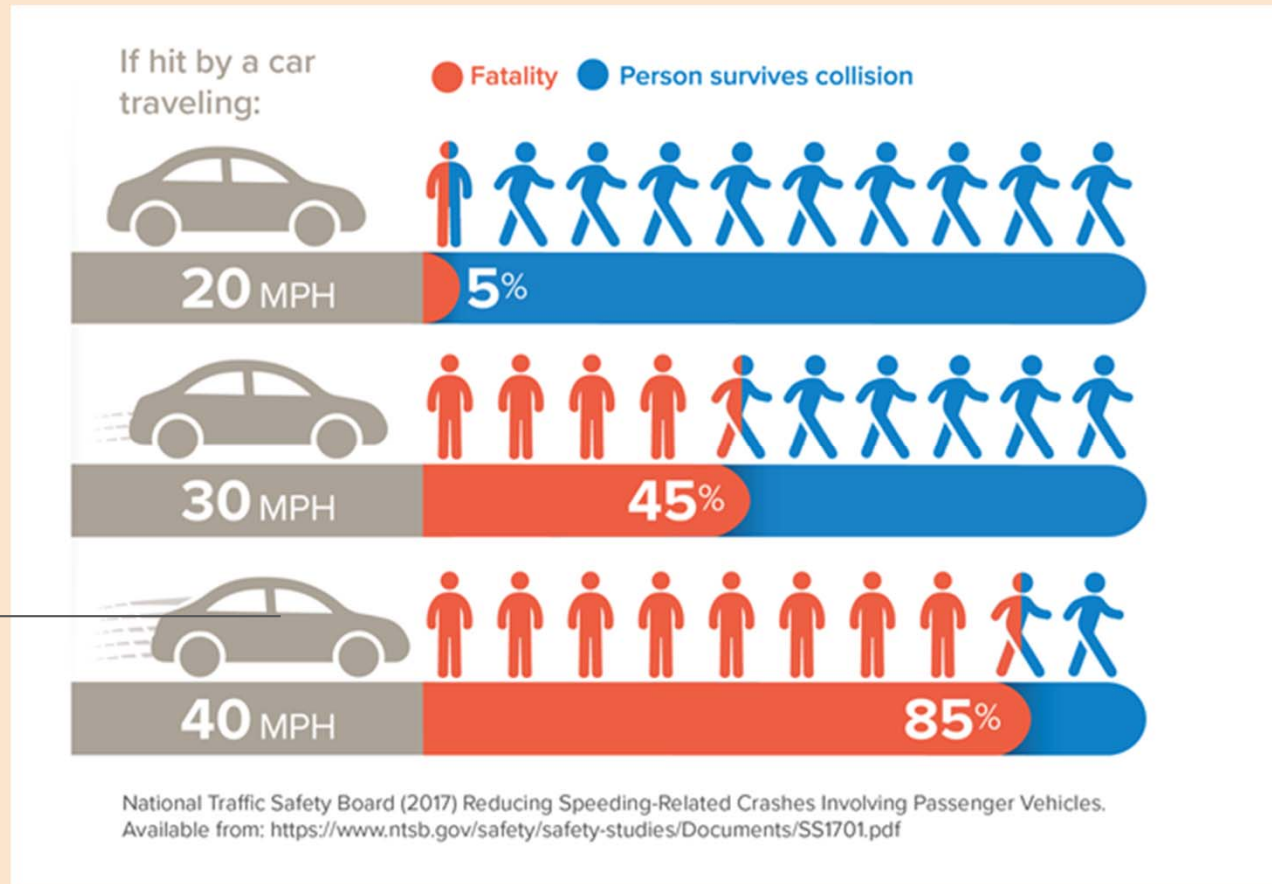
Bicyclists on the Somerville Community Path cross Massachusetts Avenue in North Cambridge in May 2019.



This winter, the City of Cambridge will start installing new signs across the city to reduce the speed limit on most city-owned streets to 20 mph.

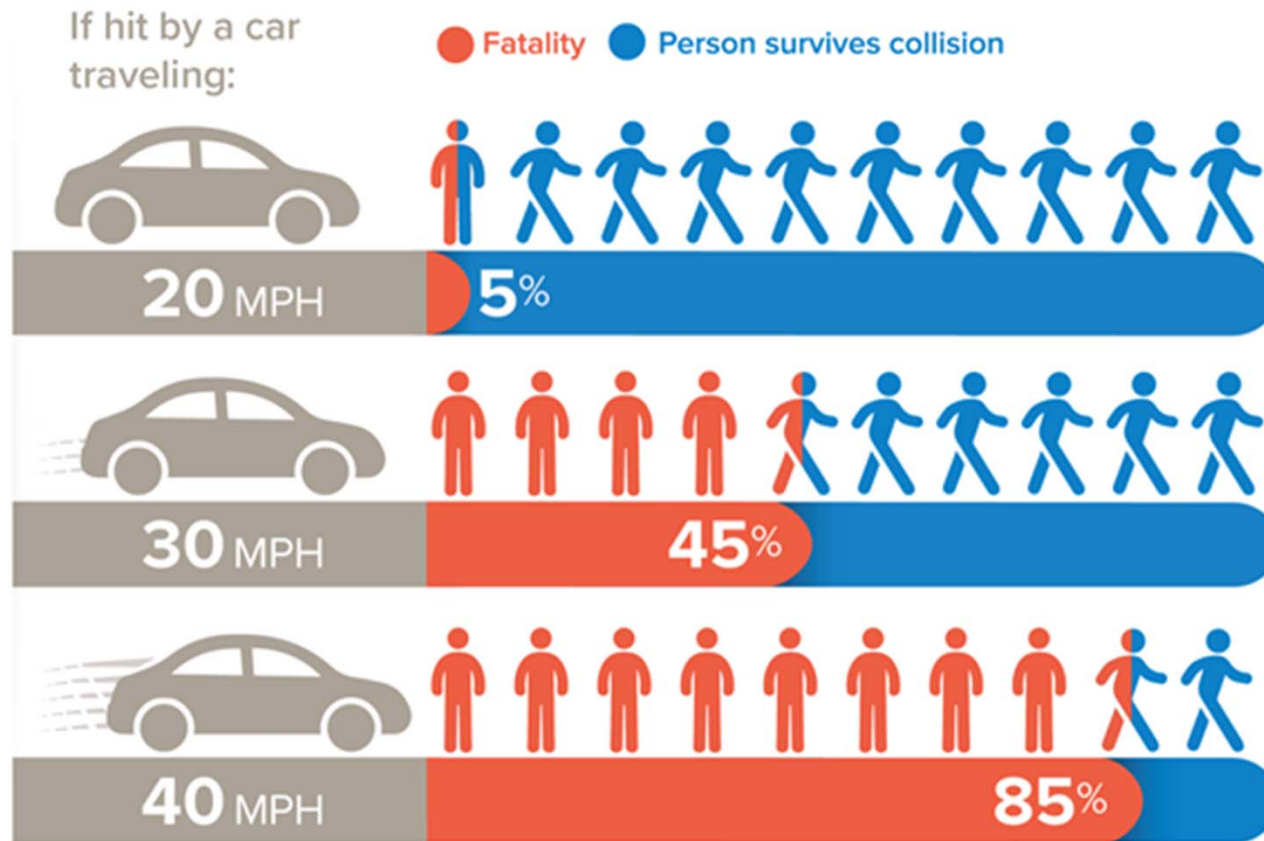
Background SCIENCE of SAFETY information:

At current speeds, pedestrian fatality is almost assured in WConcord Junction



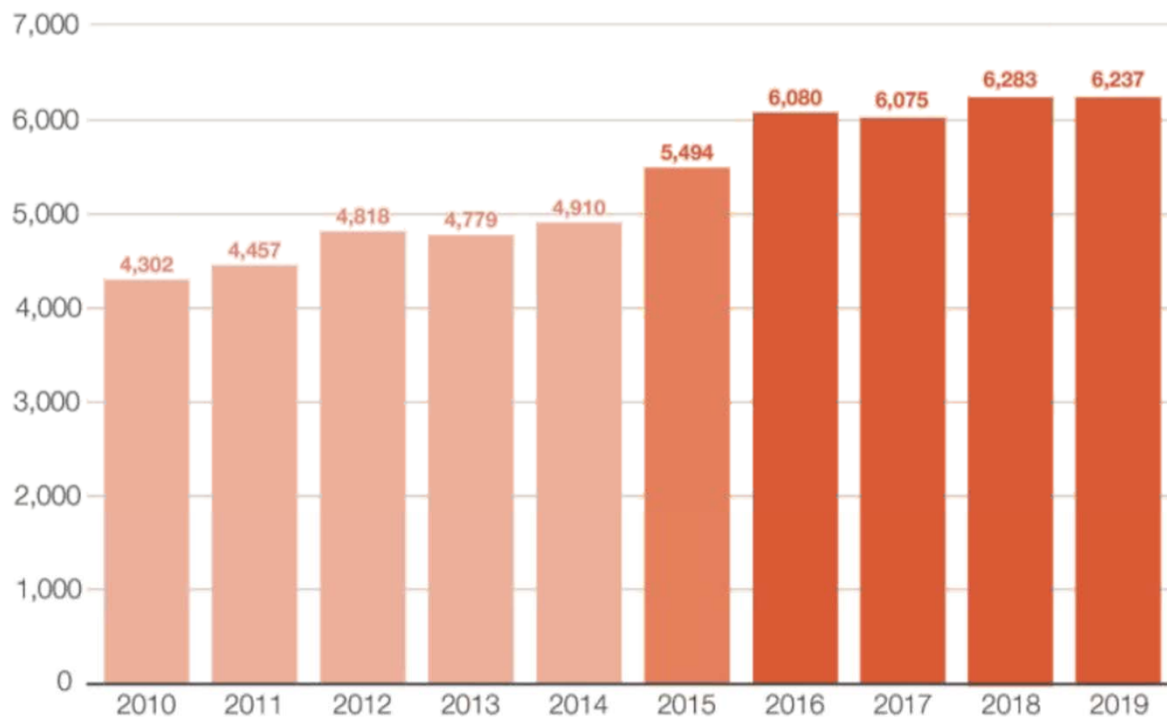
Average speed
way above 25mph

You Cannot Have Speed + SAFETY



National Traffic Safety Board (2017) Reducing Speeding-Related Crashes Involving Passenger Vehicles. Available from: <https://www.nts.gov/safety/safety-studies/Documents/SS1701.pdf>

In U.S. 2010-2019: historic increase in fatalities



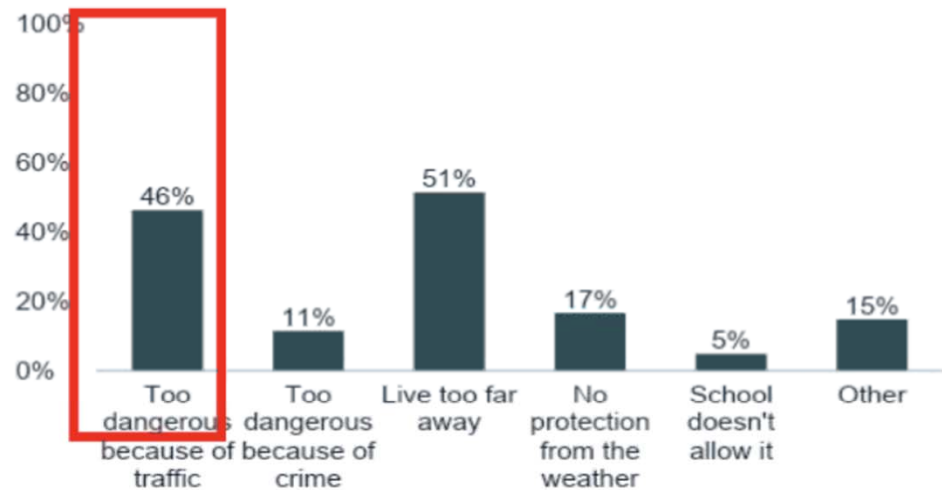
- **45 percent** increase in people struck and killed while walking.
- **53,435** people were hit and killed by drivers.
- More than **17 people** killed per day in 2019.
- **It is trending worse almost everywhere:** Since our 2019 report **49/50** states and **84/100** metro areas got worse.



Traffic Prevents Children from Walking to School



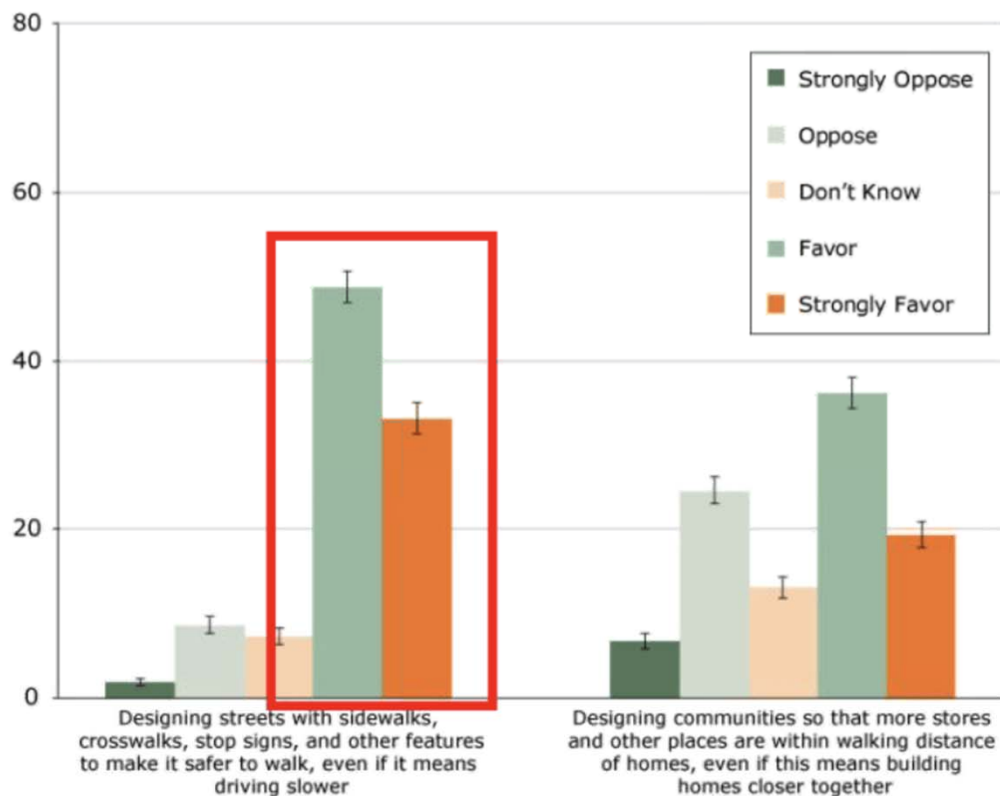
Prevalence of Reported Barriers for a Child to Walk to School



Omura, J.D., Hyde, E.T., Watson, K.B., Sliwa, S.A., Fulton, J.E. and Carlson, S.A., 2019. [Prevalence of children walking to school and related barriers—United States, 2017](#). *Preventive medicine*, 118, pp.191-195.



People Want Safer Streets



82.2% of adults reported favoring (48.9%) or strongly favoring (33.3%) safer street design even if driving is slower.

Carlson SA, Omura JD, Watson KB, Fulton JE. [Creating Walkable Communities: Understanding Trade-Offs](#). *Prev Chronic Dis* 2018;15:180123

Prioritizing Public SAFETY in Cambridge, MA

In a [press release](#) announcing the move, the City cited the new speed limits as a “key part” of its Vision Zero strategy to eliminate crashes that cause serious or fatal injuries. [Crash data from the AAA Foundation for Traffic Safety](#) show that a person is more than twice as likely to die if they’re struck by a vehicle traveling 30 mph versus 20 mph.

Lexington implements 25 MPH in 2017:

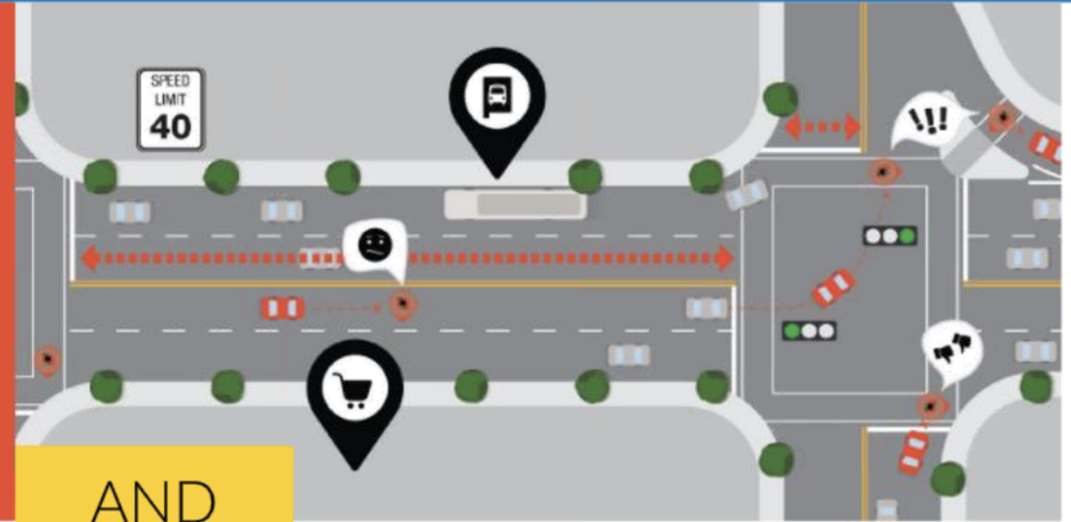
<https://lexington.wickedlocal.com/news/20170802/lexington-implements-25-mph-speed-limit>

Bedford implements 25 MPH in 2018:

<https://www.thebedfordcitizen.org/2018/02/bedford-speed-limit-25-mph-thickly-settled-neighborhoods/>

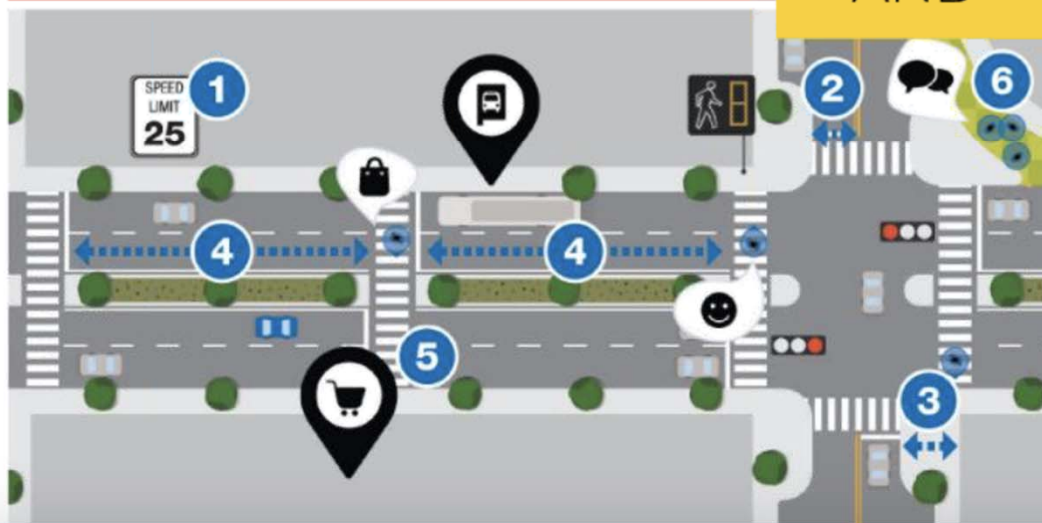
It's impossible to prioritize both...

Speed

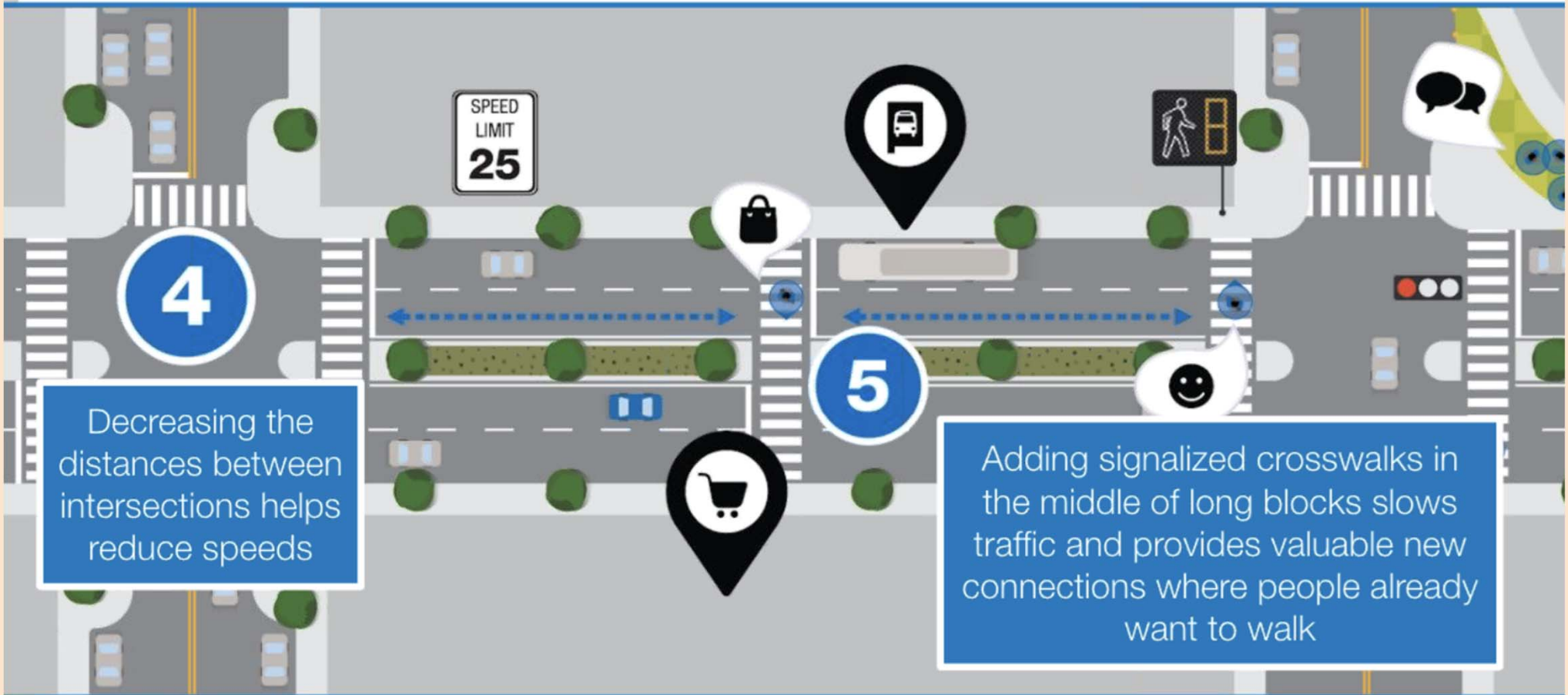


AND

Safety

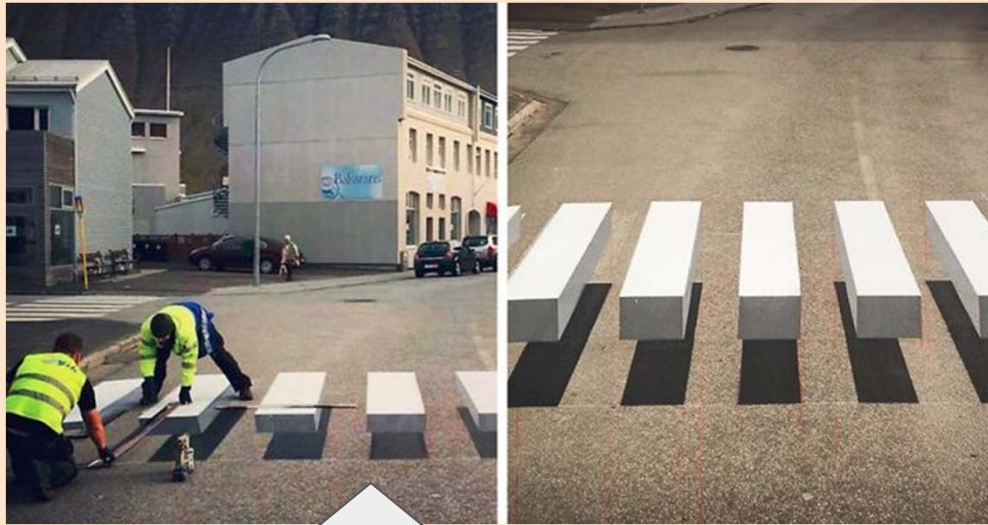


~~Speed~~ or safety



4
Decreasing the distances between intersections helps reduce speeds

5
Adding signalized crosswalks in the middle of long blocks slows traffic and provides valuable new connections where people already want to walk



Clever Signifier: suggests cars slow down without need to make a physical speed bump

One in three towns in UK to get default 20mph speed limit

Towns and cities across the UK are replacing 30mph speed limits with 20mph ones, enforcement



by: [Tristan Shale-Hester](#) 27 Jul 2020



A third of all towns are to implement default 20mph zones, with [speed limits](#) in urban areas across the UK being lowered, backed up by strong enforcement action from the police.

Lowering Speed Limits is happening internationally.

We need streets safe for all.

Sidewalks

Poor Sidewalk Condition

Narrow sidewalk for a wheelchair. And pedestrians.
Too close to cars.



Location: Main Street at Assabet River Bridge

Unsafe Sidewalk Design

Unsafe bridge railing design (protruding out) pushes pedestrians closer to cars, making the bridge exceptionally hazardous for all users.



**Location: Main Street at Assabet River
Bridge**

Unsafe Sidewalk Design



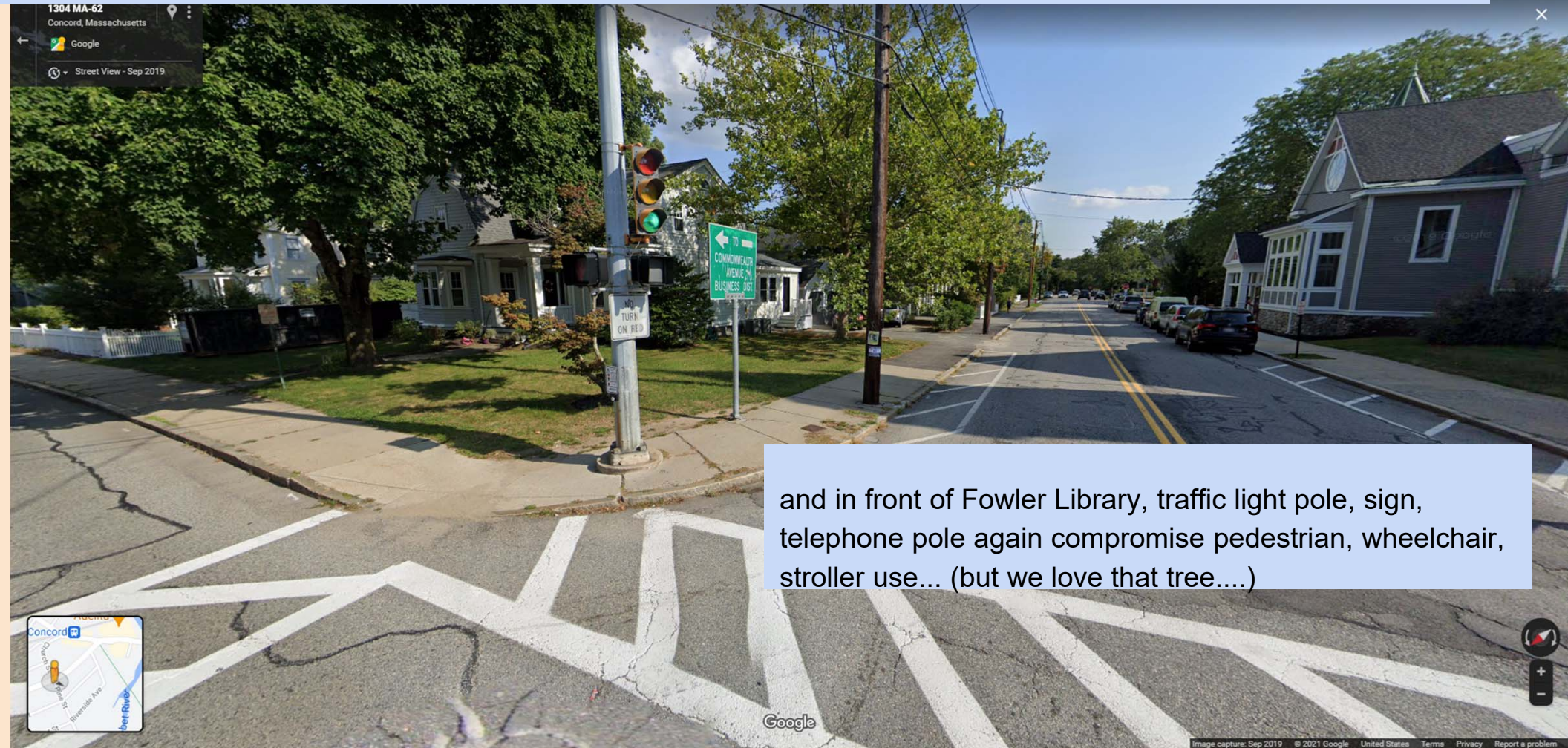
In front of TD BANK,, CPW electric boxes, poles and other 'stuff' in the middle of sidewalks

Unsafe Sidewalk Design



Other corner of Main and Pine St with traffic light pole in the sidewalk; note sharp corners on base of light + utility box at right.

Unsafe Sidewalk Design



and in front of Fowler Library, traffic light pole, sign, telephone pole again compromise pedestrian, wheelchair, stroller use... (but we love that tree....)



Google



Another view of sidewalk issues in front of Fowler Library; it compromises peoples safe access to building; another area of concern w similar pole issues is Baker Ave; Concord Greens residents have long complained about that

Overly Wide Curb Cuts

The wide eastern driveway onto Main Street from the West Concord Shopping Plaza encourages cars and trucks to zoom in and out without noticing pedestrians.



Location: West Concord Shopping Plaza

Wheelchair access

Make roadways safe for all users throughout the CD Junction



We have unsafe road beds

Commonwealth Ave Rail line pedestrian crossing is not designed for wheelchair users - a tripping hazard

Future Focus

COMMENTS

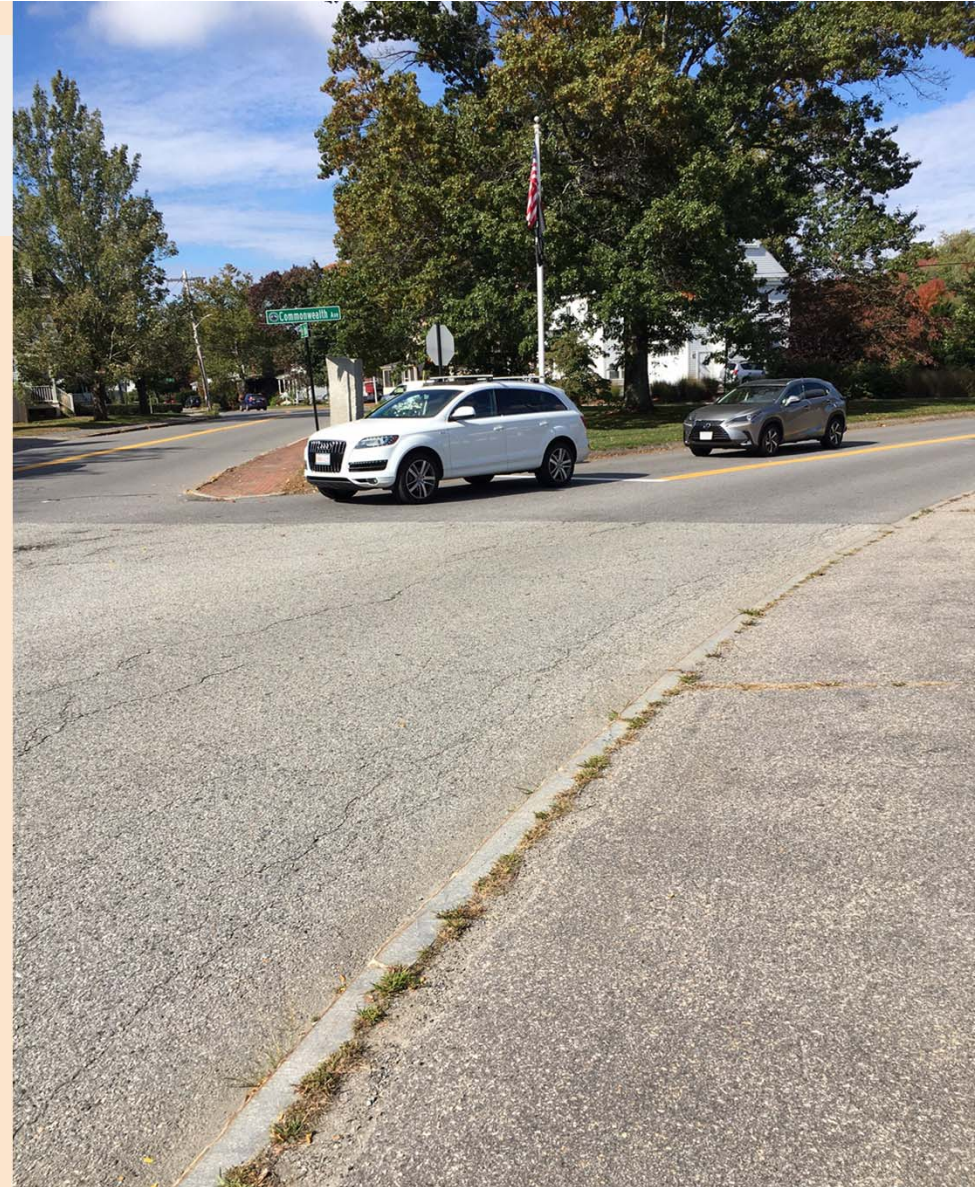
Signage: In the commuter rail lot, despite all the conflicting stakeholders who are standing in the way of real change, could we at least get signage clarifying that the Town-administered parking spaces are free to all after commuting hours? Say, after 5pm or 6pm? The lot fills up in the morning (or used to before Covid), but spots would usually start to free up in the late afternoon due to a few people coming home "early" ,and then lots of spots would free up after 5pm or 5:30. Changing the rules would make parking available to evening diners while still leaving a few spots for people traveling into the city for the evening. For all I know it wouldn't even require changing the rules -- there's no information that I've ever found on how or whether those spots are controlled in the evening or overnight.

It shouldn't be at the top of the list with so many worse problems, but note that Baker Ave has a pole of some sort in the middle of the sidewalk. (Or did the last time I looked, a year ago.)

Future Focus: Kenneth Dunn Square

The Town should fund and execute a project to address unsafe conditions at Commonwealth & Laws Brook Road - an important gateway to the Junction that is:

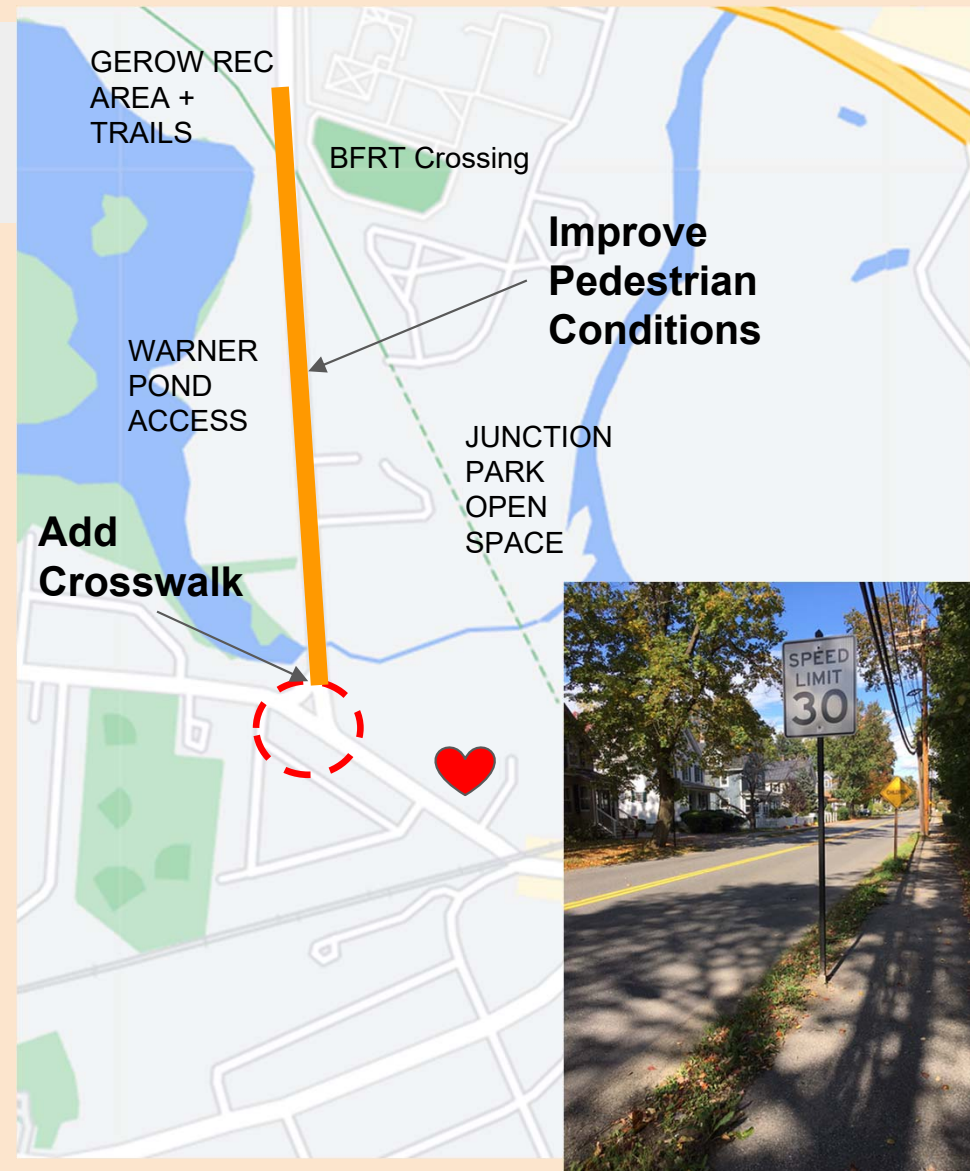
- > completely unserved by **crosswalks**
- > completely without **bike accommodations**
- > challenging-to-impossible to navigate by someone in a **wheelchair or pushing a stroller**
- > subject to cars and trucks making wide, **high-speed turns**
- > equipped with narrow, uncurbed **sidewalks** that are in poor condition



Future Focus: Commonwealth Avenue, N/S

The Town should undertake a study to address unsafe pedestrian conditions on this gateway stretch of Commonwealth Ave. Issues include:

- > **speeds:** Effective speeds of 35+ MPH; fast-moving cars and trucks
- > **unprotected sidewalks:** Narrow sidewalks with no curbs and little to no verge
- > **impeded sidewalks:** Signage and parked cars further narrow sidewalk width
- > **No bike accommodations** despite use by cyclists
- > **Poor lighting:** Every other utility pole lacks lights, leaving broad swaths of darkness



Future Focus: Main Street Assabet River Bridge

The Town should continue urging the state to address conditions on the Assabet River Bridge, which provides insufficient accommodations for pedestrians, cyclists, and those navigating via wheelchairs. **Sharrows and “bike may use full lane” signage should be provided as soon as feasible.**

We can DO IT!

West Concord is a
'Sea of Creativity'

Pedestrian-friendly-safe
communities are highly
desirable; the more we make
West Concord one, the better
off we all will be!

