

# The Longfellow Bridge - an Opportunity



**Charles River Conservancy  
LivableStreets Alliance**

**Conservation Law Foundation  
Institute for Human Centered Design  
WalkBoston**

**Esplanade Association  
MassBike**

# Current MassDOT plan

- Replaces bridge deck to 1907 dimensions
- Provides no increase in safety clearance for Red Line (does not meet MBTA clearance standards)
- Increases bike lanes slightly (+1-2 feet)
- Increases sidewalk widths (by 3 feet in some locations)
- Maintains 2-3 traffic lanes in each direction
- During construction, reduces auto traffic to 1 lane in each direction for portions of the 4-6 year period



1907 view

## Why we should modify the plan for the bridge deck

- Safety clearance should be provided for MBTA workers and emergency passenger evacuation
- Transit passenger volumes are growing - nearly 100,000 per day across the bridge
- Pedestrian and cyclist use of the Charles River Basin and the bridge is growing
- Motor vehicle traffic on the bridge decreased from 2000 - 2009
- Decline in motor vehicle traffic began before 2007-8 recession
- Traffic decline may reflect some diversion to the 14-lane Zakim Bridge where 6 new bridge lanes were added less than 1 mile away

A Better Plan: a multi-modal, sustainable transportation future.

The Longfellow Bridge should take its place among wonderful transit, pedestrian and bike friendly bridges around the world.



**Tower Bridge, London**



**Brooklyn Bridge, NY**

## A Better Plan:

Safety for transit passengers and MBTA employees is upgraded by a 2.5 foot emergency evacuation space along the tracks.



Longfellow Bridge (does not meet MBTA standards)

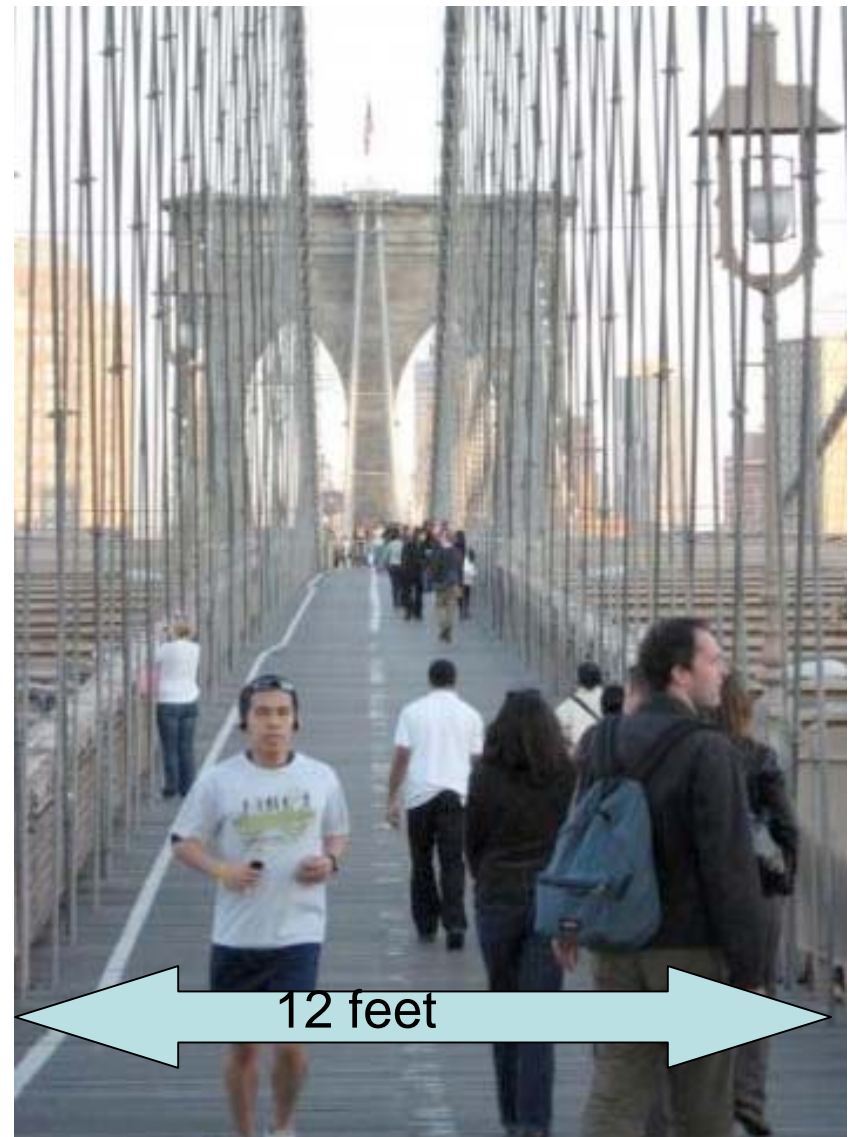


Wellington Bridge (meets MBTA standards)

A Better Plan: Wide sidewalks, at least 12 feet of unobstructed width, are needed to accommodate runners, walkers, wheelchairs, strollers, tourists, slow walkers, people with canes or guide dogs.



**MassDOT Proposal for the Longfellow Bridge**



**Brooklyn Bridge, NY**

## A Better Plan:

An integrated lighting and crash barrier can be elegant and space-saving.



St. Paul, MN Freedom Bridge

## A Better Plan:

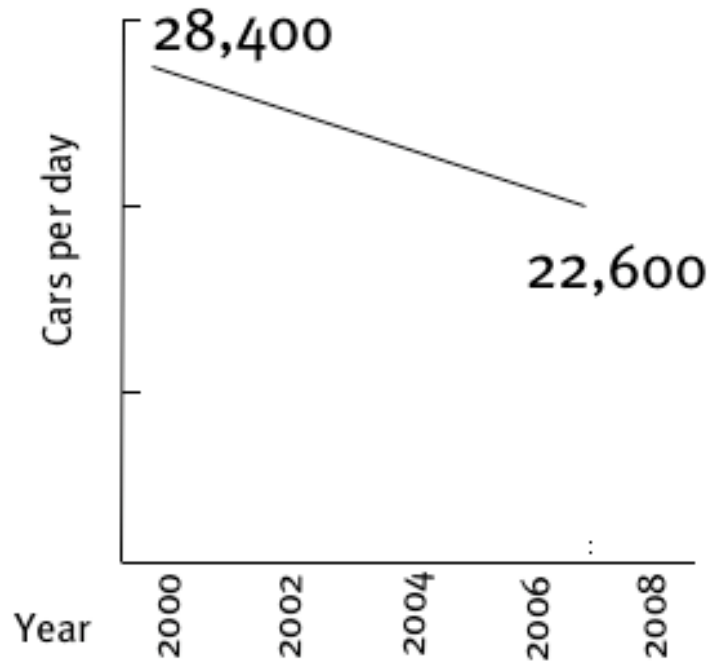
Bicycle lanes at least 6 feet wide with a 3-foot painted buffer strip to separate bikes from the travel lane and protect bicyclists.





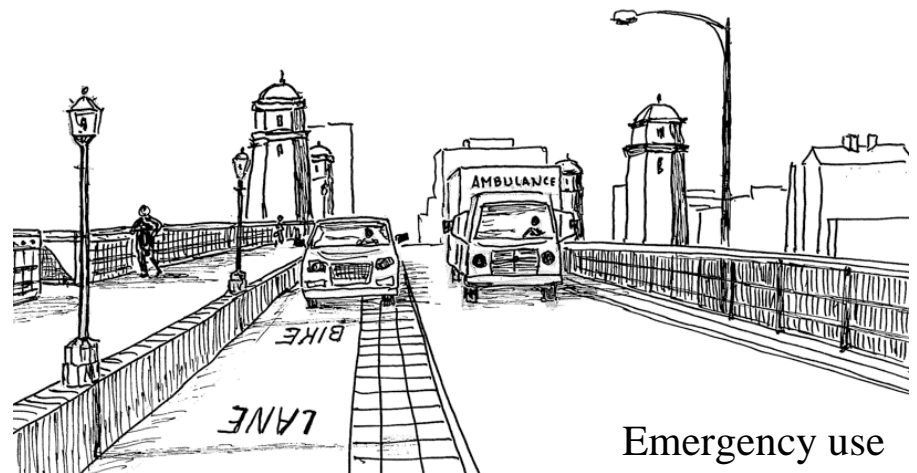
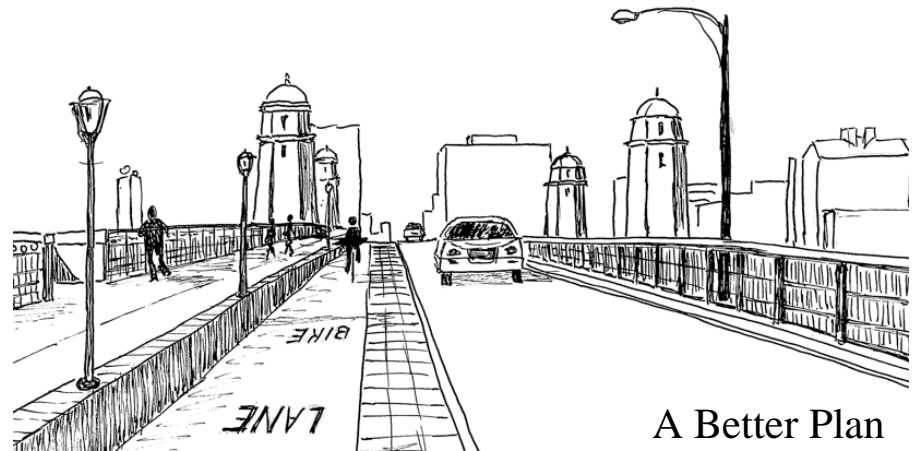
## A Better Plan:

One vehicular travel lane in each direction is sufficient to serve existing and future traffic. Volumes have been declining for the last ten years.



# A Better Plan:

Flexibility provides a bypass lane for emergency vehicles.  
Other traffic can pull over into the bike lane/buffer strip.



# Comparison 1: Mid-Span, 90% of the Bridge (1,700 feet where the Bridge crosses the Charles River, Storrow Drive and part of Memorial Drive)

Elements of bridge deck	MADOT Design	A Better Plan
Transit safetyway		2.5' added for safety
Offset/left shoulder	2'	1'
Travel lane	11'	0
Travel lane	11'	11'
Bicycle lane	4' (no buffer)	9' (6' BL+ 3' buffer)
Crash barrier	1.5'	2.5'
Sidewalk	7.5'	13'
TOTAL	39'	39'



An Opportunity to be....



Midspan now

World class



Midspan future

## Comparison 2: The Two Pinch Points Between the MBTA station and the Boston-side towers.

Elements of bridge deck	MADOT Design (narrowest point, just prior to approach)	A Better Plan (narrowest point, just prior to approach)
Offset/ left shoulder	2'	1'
Travel lane	11'	0
Travel lane	11'	10'
Bicycle lane	5' (no buffer)	8.5' (6' BL+ 2/ 5' buffer)
Crash barrier	1.5'	2'
Sidewalk	5'	10'
TOTALwith 4' deck widening	35.5'	
TOTALwithout 4' deck widening		31.5'



# Comparison 3: Bridge Approach to Charles Circle

Elements of bridge deck	MADOT design	A Better Plan
Offset/ left shoulder	0	0
Travel lane	11'	10'
Travel lane	11'	10'
Travel lane	11'	0
Bike lane	4' (No buffer)	5' (No buffer)
Crash barrier	0	0
Sidewalk	5'	10'
TOTAL	42' requires widening the deck and moving a portion of the historic wall	
TOTAL		35' fits in the existing structure



# **Alliance for the Longfellow Bridge**

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**Brochure prepared by WalkBoston**