

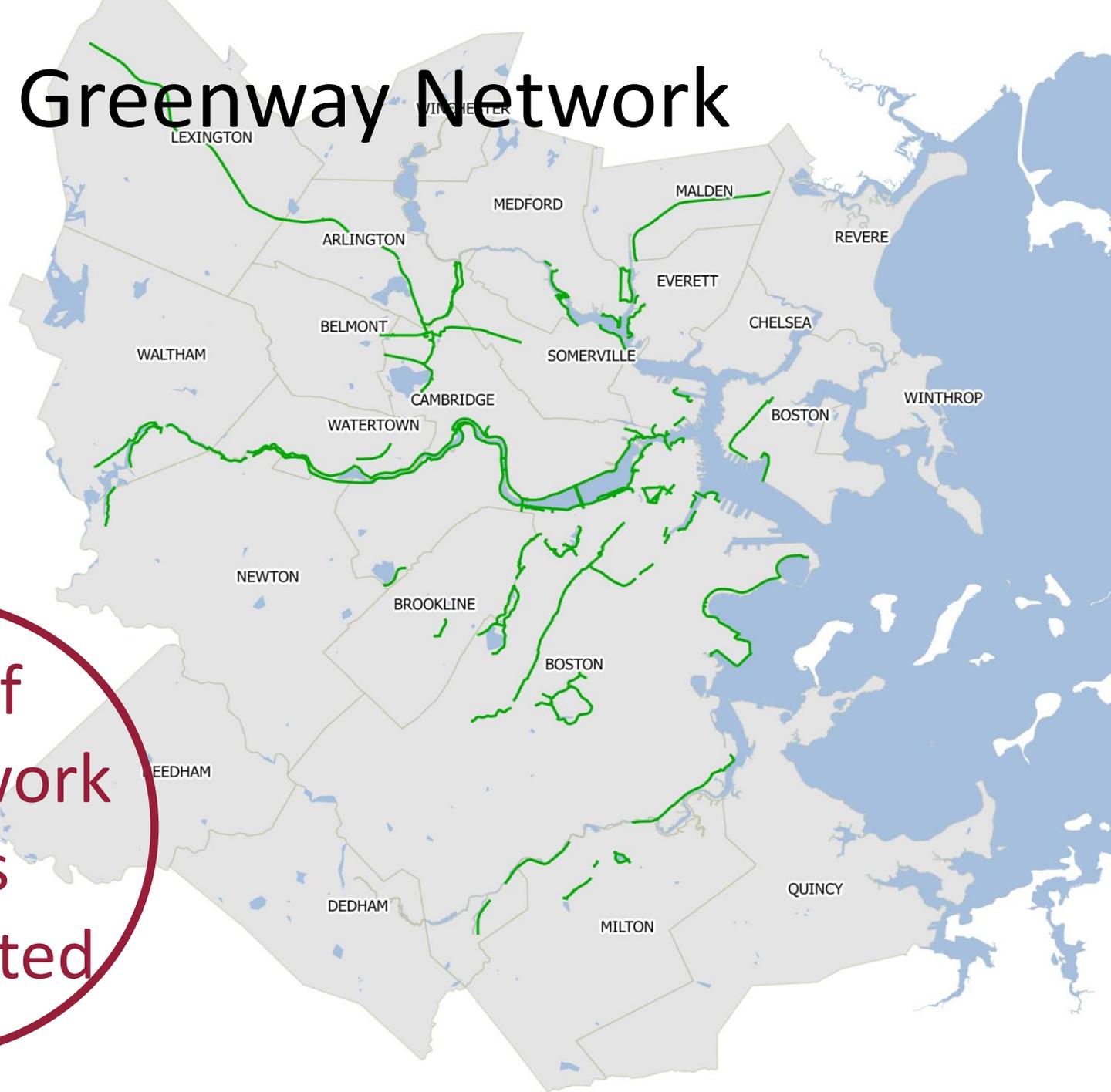
Rutherford Ave / Sullivan Square:
Feasible to Meet Traffic Demand,
Achieve Walkability, and
Preserve a Linear Park

Peter G Furth

Amelia Chen

Yuhao Gu

Existing Greenway Network

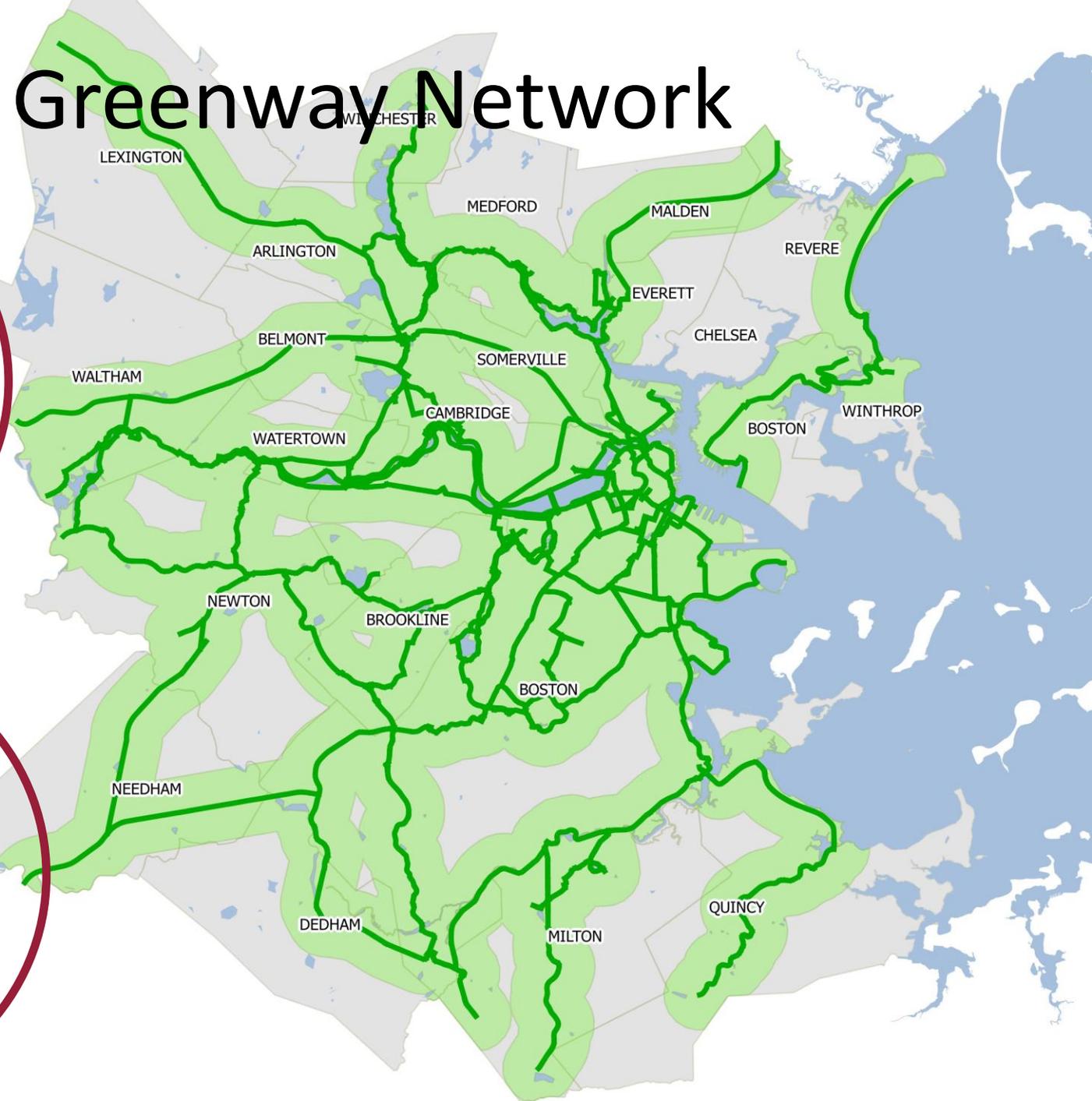


2% of
home-work
pairs
connected

Potential Greenway Network

71% of
population
within 1 km

40% of
home-work
pairs
connected



Where to Find the Space?

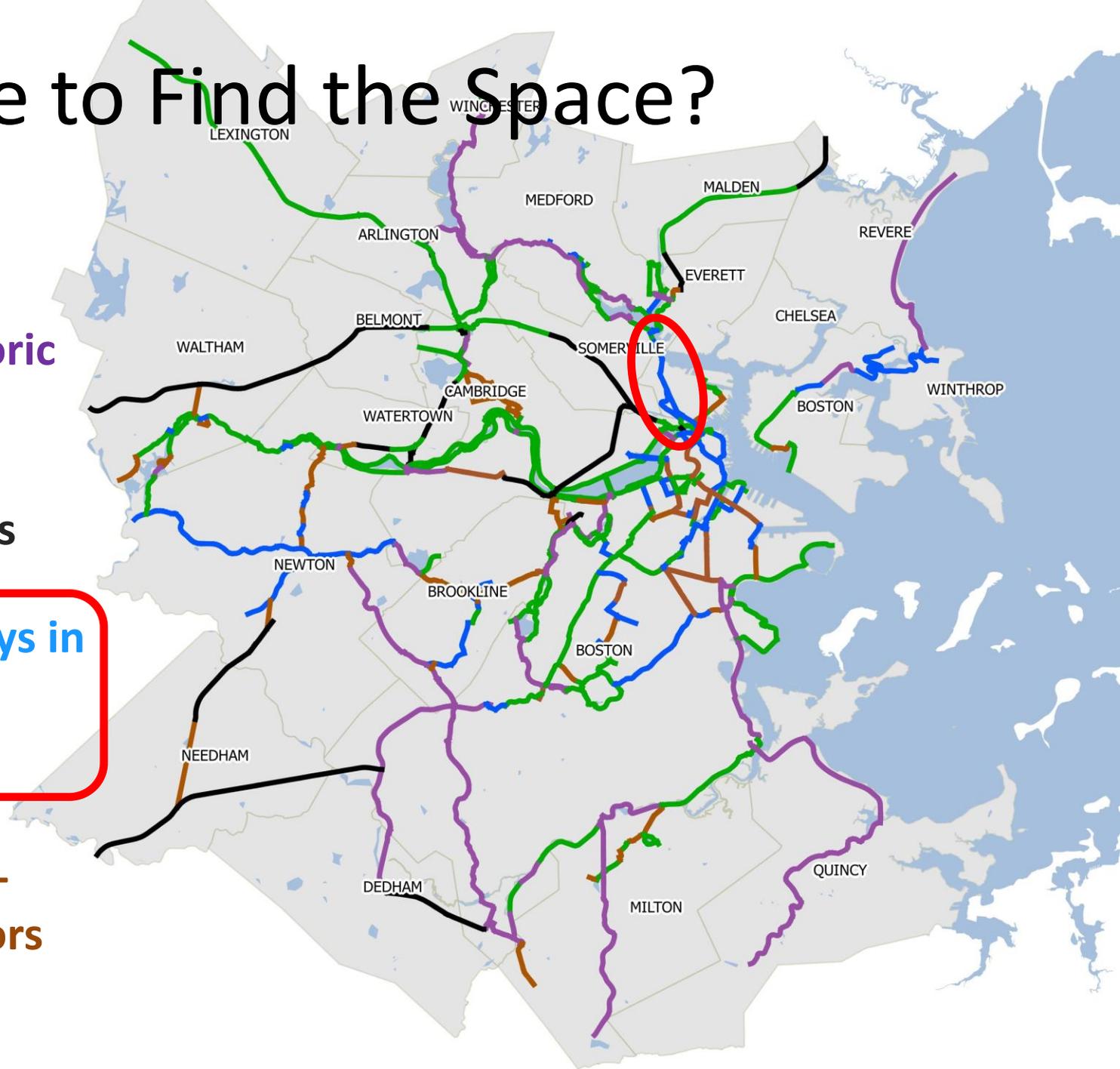
Existing

Paths on Historic
Parkways

New Rail-Trails

New greenways in
road and park
rights-of-way

Low-stress on-
road connectors



Rutherford Ave

Existing, 115 - 135 ft wide
(10 to 12 lanes' width)

Proposed, 2010



The Harm of an Unnecessary Underpass



Linear park, 45+ feet wide:
Trees – bike path – trees – grass – walking path

Buffer to neighborhood (noise, particulate air pollution)

Underpass section
Only ~20' of buffer – allows 14' shared path and not much else

Underpass precludes this intersection
(critical to development of parking lot parcels)

Ramp-to-Ramp Section
No park here, either

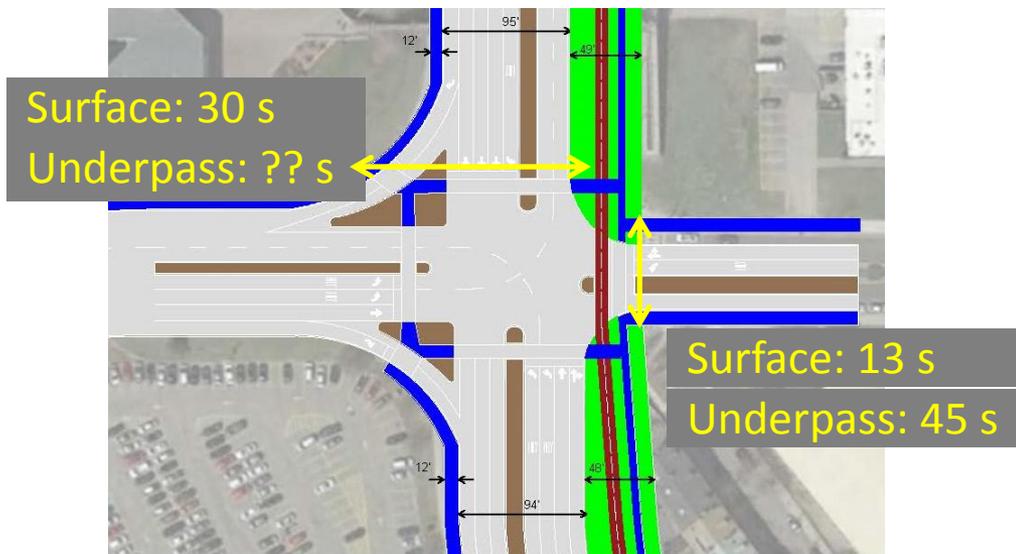
A Surface Option is Feasible

Amelia (Yanran) Chen, Graduate student
Transportation analyst

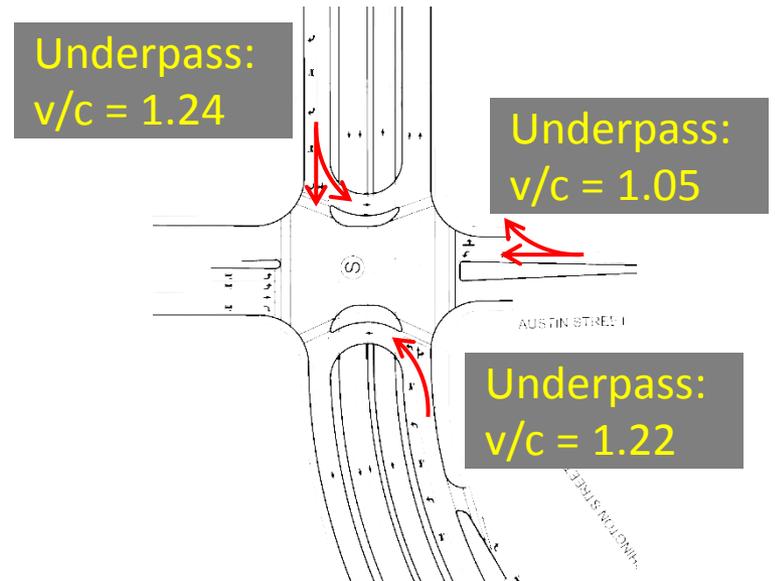
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The Surface Option is Better for Pedestrians, Better for Traffic

Pedestrian Delay



Underpass Option, v/c ratios that exceed 1.0

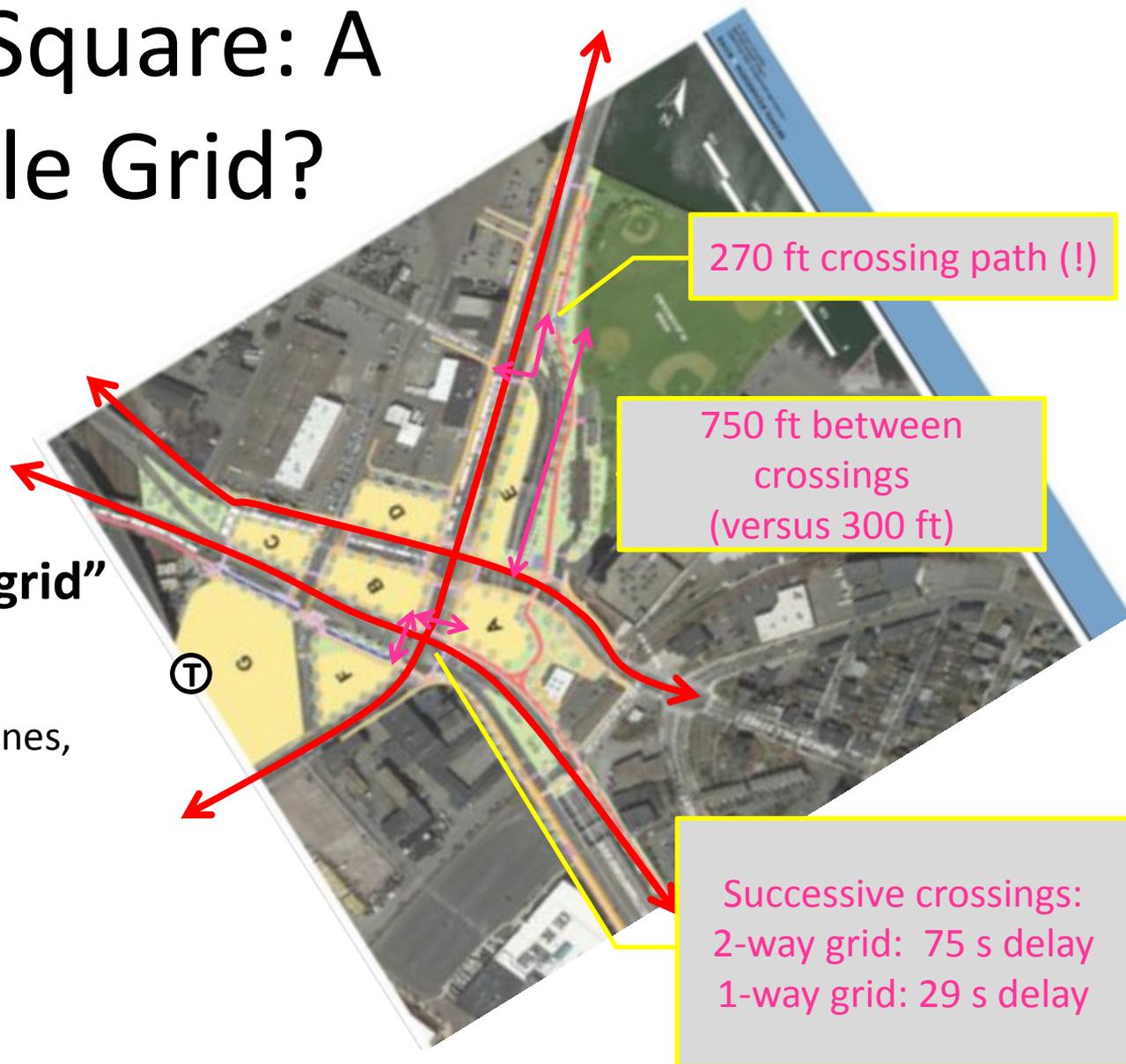


Surface Option: all v/c's below 1.0

Sullivan Square: A Walkable Grid?

“Concentrated 2-way grid”

- Wide Roads
- Long Crossings (6 to 7 lanes, with no median island)
- Long Signal Cycle
 - Pedestrian delay > 45 s



One-Way Grid Layout



One-Way Pairs
Bridge at West St
Larger Deck

One-Way Grid Simulation

Yuhao Gu, Graduate student

Transportation analyst

