



Comments on East-West Passenger Rail Study Alternatives Analysis

PREPARED BY

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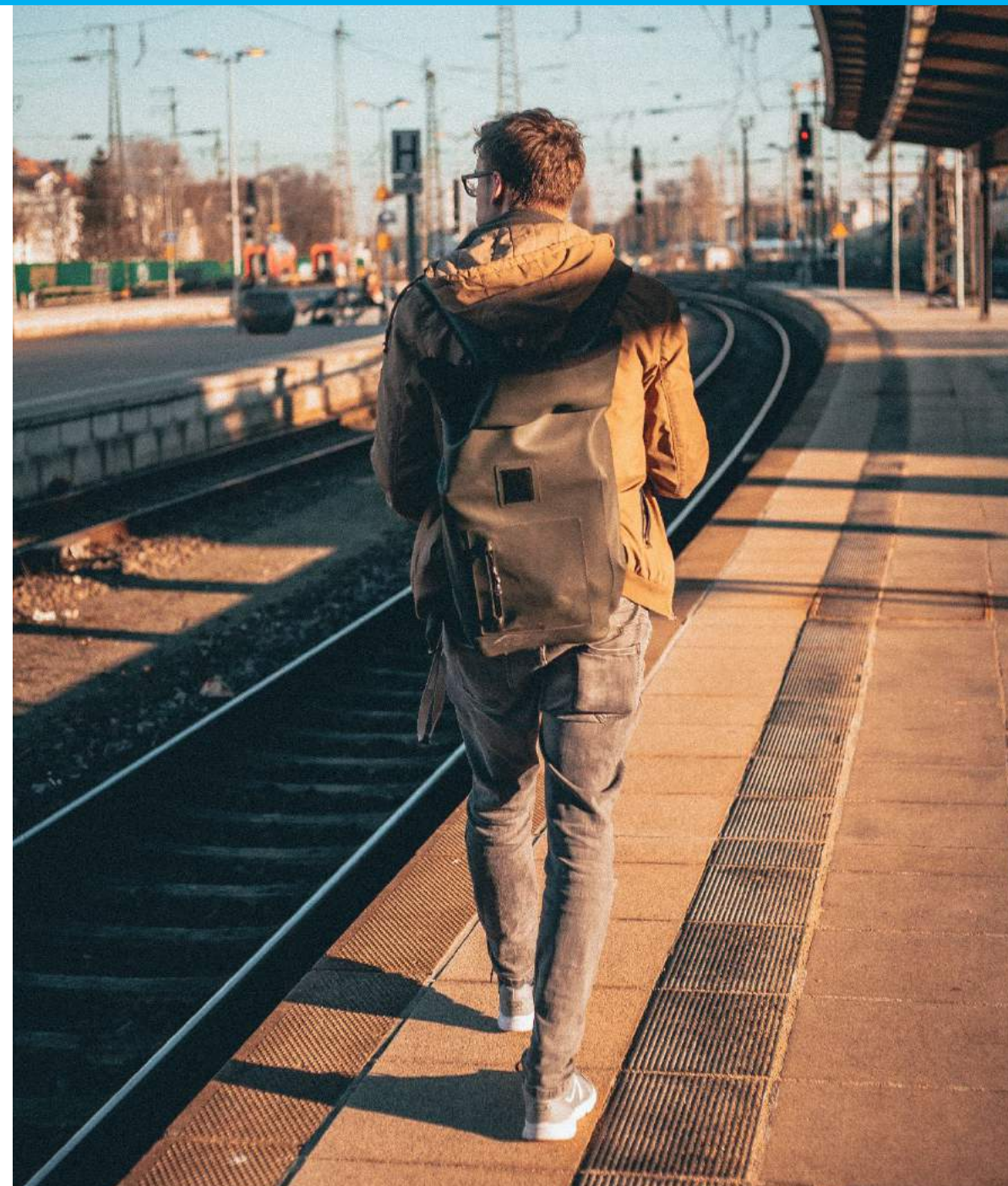
STUDY CONCERNS

- Analysis focuses on western Massachusetts. This is a statewide project.
- Travel demand has not been fully explored.
- Statewide goals and priorities of other Secretariats (EOHED, EOEEA) and often MassDOT not considered.
- Ridership numbers low and cost estimates high and all require more explanation, clarity and re-analysis.



TO BE ADDRESSED

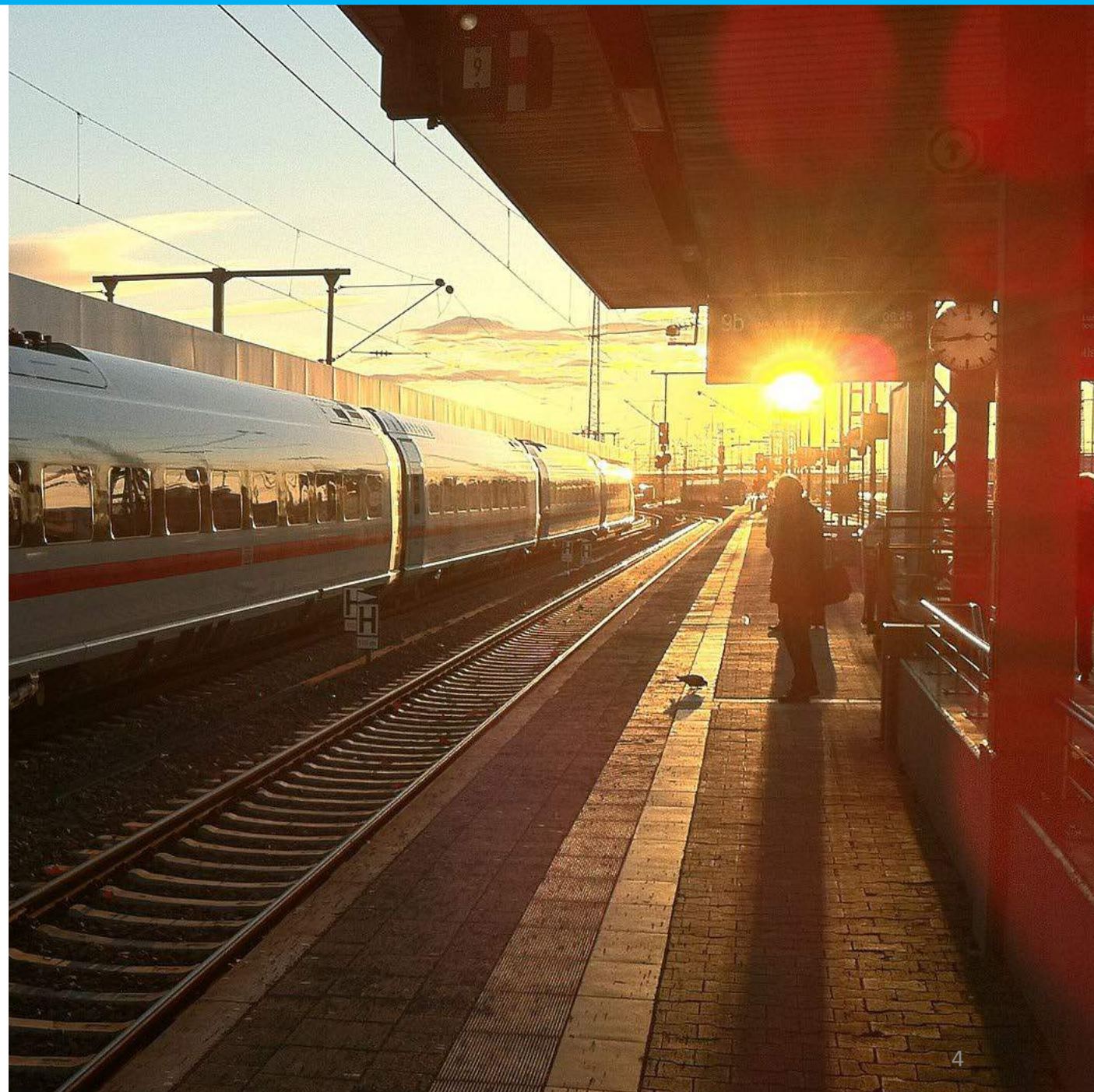
- Ridership Projections
 - Station Radius
 - Commuter data
 - Induced Ridership
- Station Proxies
- Components to Add to Alternatives Analysis
 - Revenue Projections
 - Emission and VMT Reductions
 - Reaching state and federal policy goals
- Cost Assumptions
- Short Listing Alternatives



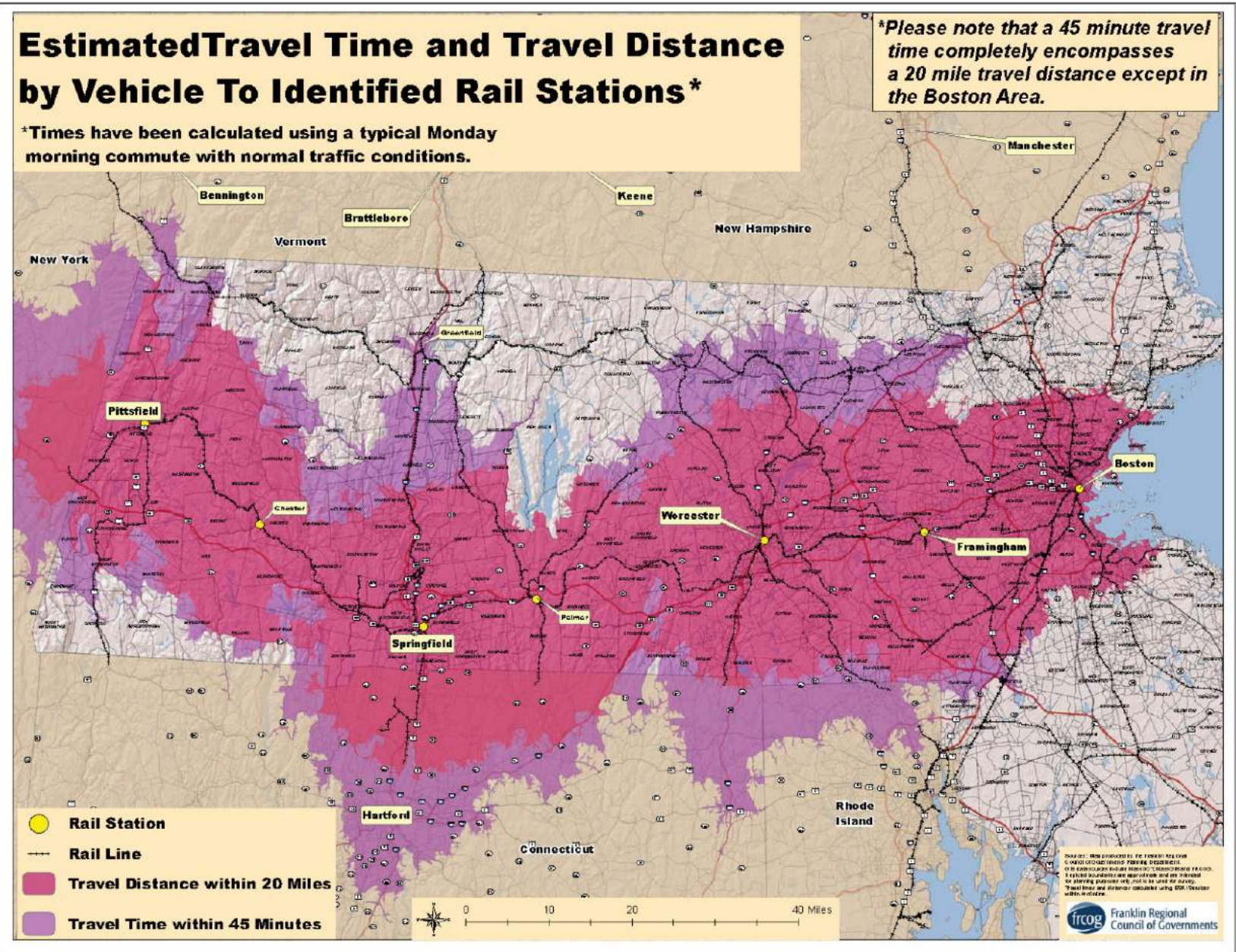
RIDERSHIP PROJECTIONS

Station Radii

- 20-mile radius around stations is too simplistic and does not reflect driving patterns and driver behavior, especially in western half of the state.
- We recommend using a 45-minute drive time for everything west of Worcester.



RIDERSHIP PROJECTIONS Station Radius

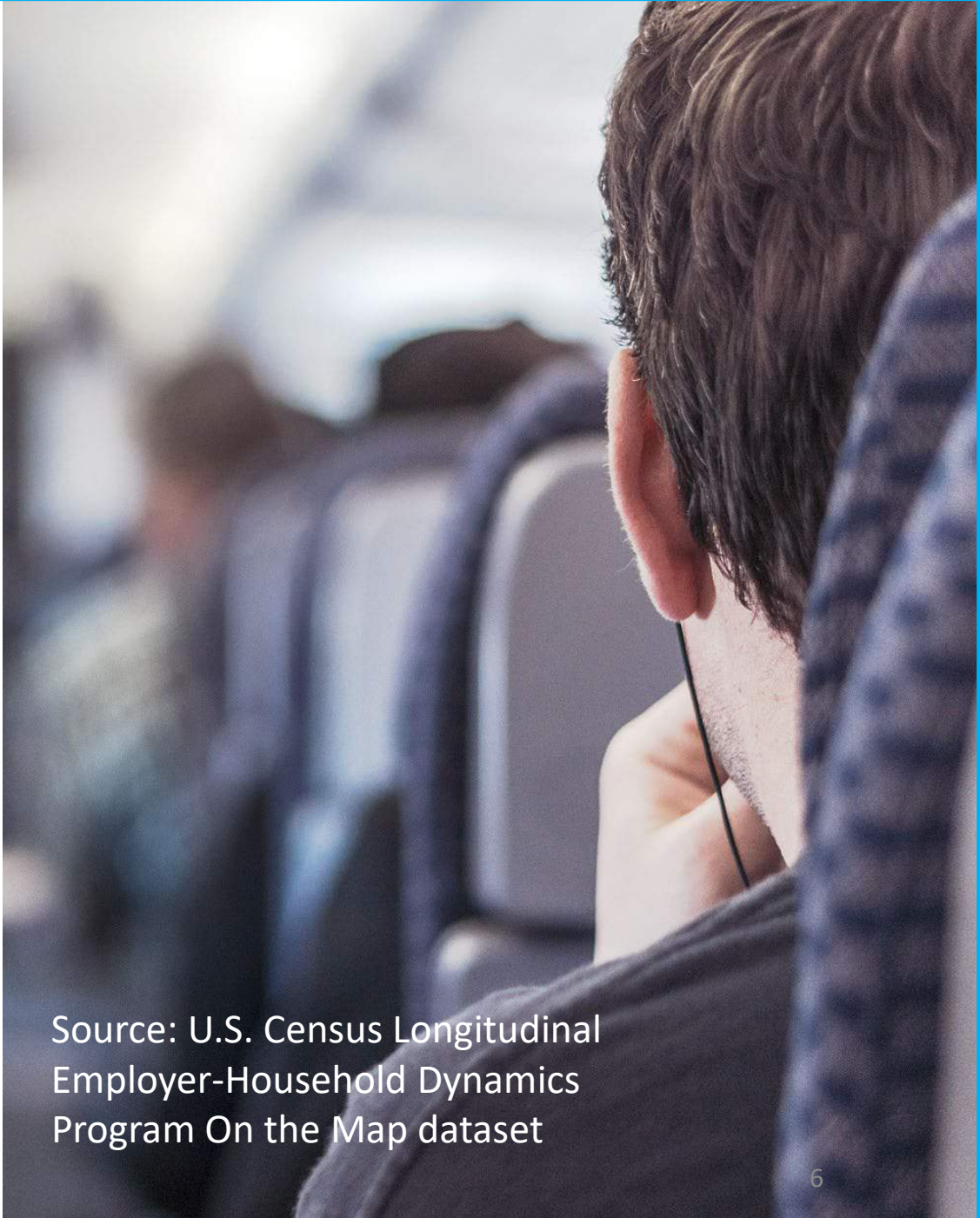


RIDERSHIP PROJECTIONS

Commuter Data

Based on 2017 Census data, workers that commute to Worcester, Boston and Cambridge are:

Worker Count	Area of Residence
2,058	Berkshire County, MA
1,849	Franklin County, MA
8,663	Hampden County, MA
3,351	Hampshire County, MA
1,886	Hartford County, CT
17,807	SUM



Source: U.S. Census Longitudinal Employer-Household Dynamics Program On the Map dataset

RIDERSHIP PROJECTIONS

Commuter Data

WSA seems to have only considered commuters traveling from western MA to Boston but workers traveling to and from the cities directly served by the proposed service also include:

Worker Count	Area of Residence	Commute To
2,070	Boston	Palmer, Springfield or Pittsfield
320	Pittsfield	Springfield or Palmer
623	Springfield	Pittsfield or Palmer
411	Palmer	Springfield or Pittsfield
3,424	SUM	

Source: U.S. Census Longitudinal Employer-Household Dynamics Program On the Map dataset

RIDERSHIP PROJECTIONS

Commuter Data

Total possible commuters:

From western counties to metro Worcester and Boston	17,807
To and from other directly served cities	3,424
TOTAL	21,231

Assuming only 10% of these workers commute regularly by train:

10% of 21,231 commuters	2,131 daily commuter riders
X workdays per year	260
TOTAL	554,060 annual commuter riders

RIDERSHIP PROJECTIONS

Induced Ridership

- WSP did not include induced ridership in its projections.
- Induced ridership is any increase in travel resulting from improved travel conditions.
- Reducing travel time can result in:
 - Households relocating to more outlying areas
 - Employees changing their work locations
 - Employers moving their businesses to more outlying areas
 - Developers more interested in outlying areas
- While induced ridership generally refers to mode and trip decisions based on travel time changes, other factors will influence induced ridership.

INDUCED RIDERSHIP

Gas Prices

- Gas prices impact trip decisions. Gas prices may increase either because of TCI, legislative action or global conflict.
- Amtrak uses gas price increase as a tracking tool for ridership increase.
- Rail ridership projections should assess impacts of potential gas price increases.

- Illustrating this point, FRTA ridership increased 19.2% when gas prices increased during the Great Recession.

FRTA RIDERSHIP 2007-2009

Route	Annual Ridership FY 2007	Annual Ridership FY 2008	Annual Ridership FY 2009	Percent Change from FY 2007 to FY 2009
West	4,989	5,600	5,887	+ 18.0%
North	1,102	568	360	- 67.3%
Valley	16,389	19,359	21,459	+ 30.9%
G-Link	31,930	31,954	37,688	+ 18.0%
Greenfield Division	62,419	69,104	73,883	+18.4%
Total	116,829	126,585	139,277	+ 19.2%

INDUCED RIDERSHIP

Eastern MA Housing Crisis & Western MA Priorities

- The statewide median price for a house is over \$419,254 and Governor Baker considers the housing shortage around Boston to be a crisis.
- Median price for a house in the four counties of western Massachusetts is \$225,000.
- East-West Rail service will shift MA citizens west and out of the greater Boston area.
- Western MA citizens (and many Eastern MA citizens) want greener transportation alternatives and options other than the single occupant vehicle and will prioritize use of this service.

RIDERSHIP PROJECTIONS

Comparing to NNEIRI

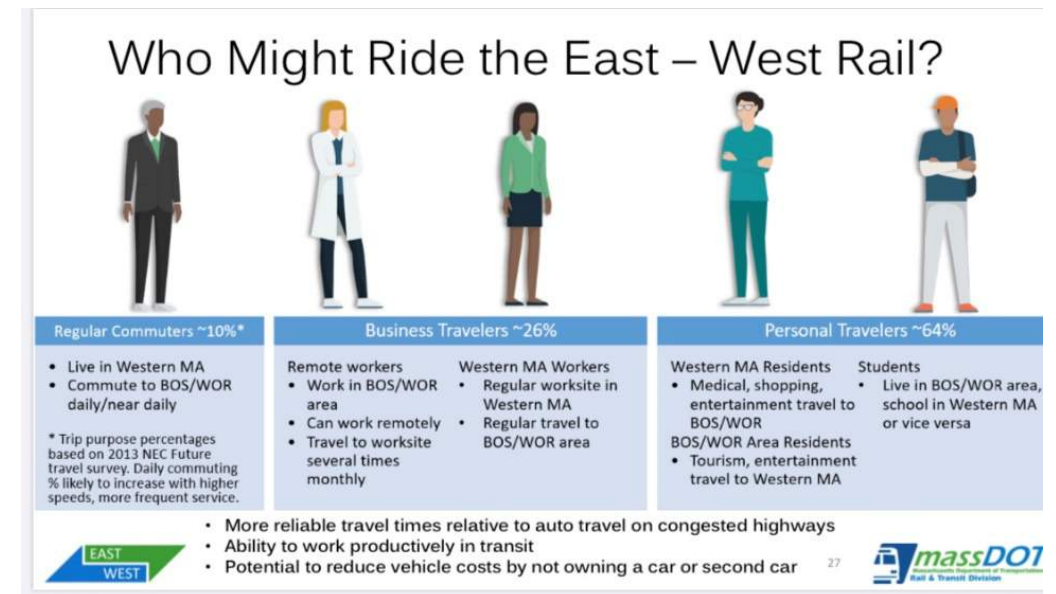
- The 2016 Northern New England Intercity Rail Initiative (NNEIRI) study analyzed intercity passenger rail between Boston, Springfield and Montreal.
- NNEIRI assumed **259,400** annual boarding riders at stations between Boston and Springfield.



RIDERSHIP

WSP Assumptions and Omissions

- Regular Commuters assumed to only live in western MA
- Regular Commuters are only 10% of total ridership; quick math shows that could be as high as 550,000 annual riders
- Business Travelers assumed to only live in western MA
 - 12-15 people from Boston and Worcester are in this meeting, which exceeds total daily Boston and Worcester boardings of Alternative 1
- Induced ridership not included
- WSP says it used NNEIRI methodology but all alternatives have lower ridership than that study
- There is not enough transparency in WSP's work to understand assumptions used and the numbers need to be re-analyzed



STATION PAIR PROXIES

Station Pair Proxies Used – Hartford to Springfield and Hartford to Wallingford

- Boston is a completely different economic metropolitan area in size and scale than Hartford and Wallingford
- Boston population = 685,000; Hartford population = 123,000; Wallingford population = 45,000
- The Hartford line pairs used are not fully operational (double tracking not complete) so ridership is not yet at full capacity

Other More Comparable Station Pair Proxies

- Downeaster – Portland and its surrounding rural communities comparable to Springfield
 - Portland population = 66,000. Service just hit a record high of 574,000 annual passengers
 - Also similar in distance. Portland to Boston = 107 miles; Springfield to Boston = 92 miles
- Boston/Providence commuter service – Providence similar and scale and size to Springfield
 - Providence population = 180,000; Springfield population = 154,000 plus Chicopee and Holyoke = 249,000
- Shore Line East – commuter service serving southern CT
- Amtrak's Hudson line – serving communities north of NYC

To allow for an educated, reasonable and equitable assessment of alternatives, and the overall statewide value of east-west rail, the alternatives analysis must include:

- Revenue projections
 - *NEEIRI estimated \$18m annually for the Inland Route*
- VMT and emissions reduction
 - *The NEEIRI study estimates a VMT reduction of 2,543,477 between Boston and Springfield*
 - *40% of GHG emissions in MA come from the transportation sector*
- Impact on MassDOT priorities and policies:
 - Global Warming Solutions Act
 - Regional GHG Tracking
 - EO 579: Commission on the Future of Transportation in the Commonwealth
 - Transportation and Climate Initiative (TCI)
 - Transit Oriented Development (TOD)

COST ASSUMPTIONS

- It is very unclear how costs were derived.
- *The 2016 NNEIRI study estimated the capital costs for the Inland Route, which continues into CT at \$554-660 million (\$602-717 million in 2020 dollars)*
- Capital costs for alternatives 1 through 6 range in price from \$2 billion to \$25 billion (2.7 to 34.9 times higher than NNEIRI).
 - Bus service between Springfield and Pittsfield is \$71 million
- Does WSP know that the track signal system between Albany and Boston is already equipped for passenger service up to 110 mph?
- We request more information and transparency in how costs were derived and a re-look at cost estimates.

PRIORITIES TO SHORT LIST ALTERNATIVES

- This is a statewide project with statewide value. It is not a western MA project.
 - *The Boston Globe* agrees: <https://www.bostonglobe.com/2020/02/21/opinion/east-west-rail-must-be-part-states-future/>
- All parts of the state should be treated equitably.
- This is a rail project. No bus service to Pittsfield.
- This project helps the MA goals of:
 - Reducing emissions and greenhouse gases
 - Relieving traffic congestion in and around Boston
 - Helps to resolve the eastern MA housing crisis
 - Helps to reverse population loss in western MA
- This project supports the priorities of other secretariats.
 - EOHED's Partnerships for Growth
 - EOEEA's MVP program and other climate resiliency efforts

SUMMARY

Without a better analysis and more transparency, we can't shortlist options other than to say:

- No bus service to Pittsfield
- Alternative 5 should be revised to include rail to Pittsfield

We want:

- Station radii changed
- Reevaluate ridership numbers and include induced riders
- Comparable station pairs that reflect the size and scale of metropolitan Boston
- Reexamination and transparency of costs and revenue generation
- Analyze and assess VMT and emissions reduction

If the study needs to be extended in order to be more thorough, that's ok.