



HIGH SPEED RAIL EMPIRE CORRIDOR PROGRAM



*A Guide for the Tier 1
Draft Environmental
Impact Statement
Public Hearings*

www.dot.ny.gov/empire-corridor

OPPORTUNITY FOR HIGH SPEED RAIL IN NEW YORK STATE

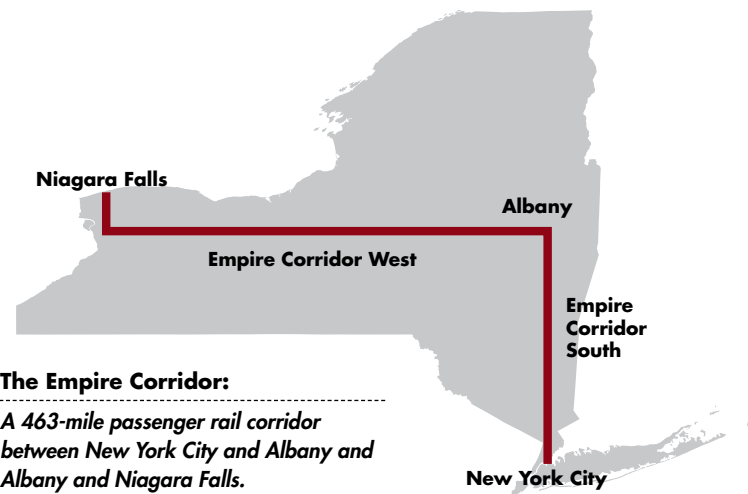
The New York State Department of Transportation (NYSDOT) and the Federal Railroad Administration have released the High Speed Rail Empire Corridor Tier 1 Draft Environmental Impact Statement (DEIS), a detailed environmental analysis of improvements to passenger rail service along the Empire Corridor to make connections between cities faster, more frequent, and more reliable. The 463-mile Empire Corridor runs north and south between Albany and New York City, and east and west between Albany and Niagara Falls.

The High Speed Rail Empire Corridor Program is a tiered environmental review process. The current phase, Tier 1, is a broad-level conceptual assessment that evaluates the operating characteristics, physical and service level improvements, and potential environmental impacts of prospective alternatives.

High Speed Rail Empire Corridor Program Performance Objectives:

- Improve system-wide on-time performance to at least 90 percent
- Reduce travel time along all segments of the Empire Corridor
- Increase the frequency of service (number of daily round trips) along Empire Corridor West beyond the existing four daily round trips
- Attract additional passengers
- Reduce automobile trips, thereby reducing highway congestion
- Minimize interference with freight rail operations

The next step in the process will be selecting a preferred alternative that will be identified in the Final EIS. If any alternative except the Base Alternative is chosen as the preferred alternative, a Tier 2 environmental analysis will develop and expand individual project models and evaluate their site-specific impacts.



The Empire Corridor:

A 463-mile passenger rail corridor between New York City and Albany and Albany and Niagara Falls.

Why High Speed Rail?

The Empire Corridor has been designated as one of 11 high speed rail corridors nationwide, and it has been a vital rail transportation route of national significance for almost 200 years. Currently, 80 percent of New York State's 19.4 million residents live within 30 miles of the Empire Corridor.

For many decades, the railroad was operated as a four-track speedway between Albany and Buffalo, carrying passenger and freight trains along express and local tracks. The Niagara Branch, extending north from Buffalo into Canada at Niagara Falls, was operated as a two-track shared-use corridor. Today, these lines operate as a two-track and single-track railroad, respectively.

Despite these constraints and service limitations, ridership is growing, and it was determined that there is a need for high speed rail. The High Speed Rail Empire Corridor Program will introduce higher passenger train speeds on the Empire Corridor and improve reliability, travel times, service frequency, and passenger amenities.

To review the complete DEIS, visit:

www.dot.ny.gov/empire-corridor

FIVE ALTERNATIVES UNDER REVIEW

At the start of the environmental review, 10 project alternatives were considered for factors including environmental impacts, costs, the ability to generate ridership, improvement to travel time, and increase on-time performance. Five were eliminated because they did not meet program goals and had significant environmental impacts (see p.7). Five feasible alternatives are now under review.

The environmental review process requires a “No Build” alternative. In this DEIS, the no build option is called the “Base Alternative.” It is important to remember that “No Build” does not mean nothing will happen – the Base Alternative includes eight system-wide projects that have already been approved for construction or are underway. The combined cost of these eight projects is \$290 million.

Each of the four remaining alternatives include the eight projects in the Base Alternative, as well as \$550 million of capital projects on the Empire Corridor South that were previously identified as critical improvements by NYSDOT and railroad stakeholders: Amtrak, Metro-North Railroad, CSX Transportation, and Canadian Pacific Railway. Alternatives 90A, 90B, 110, and 125 are differentiated by improvements on the Empire Corridor West (Albany to Niagara Falls),

where there is significant need to improve service and travel times.

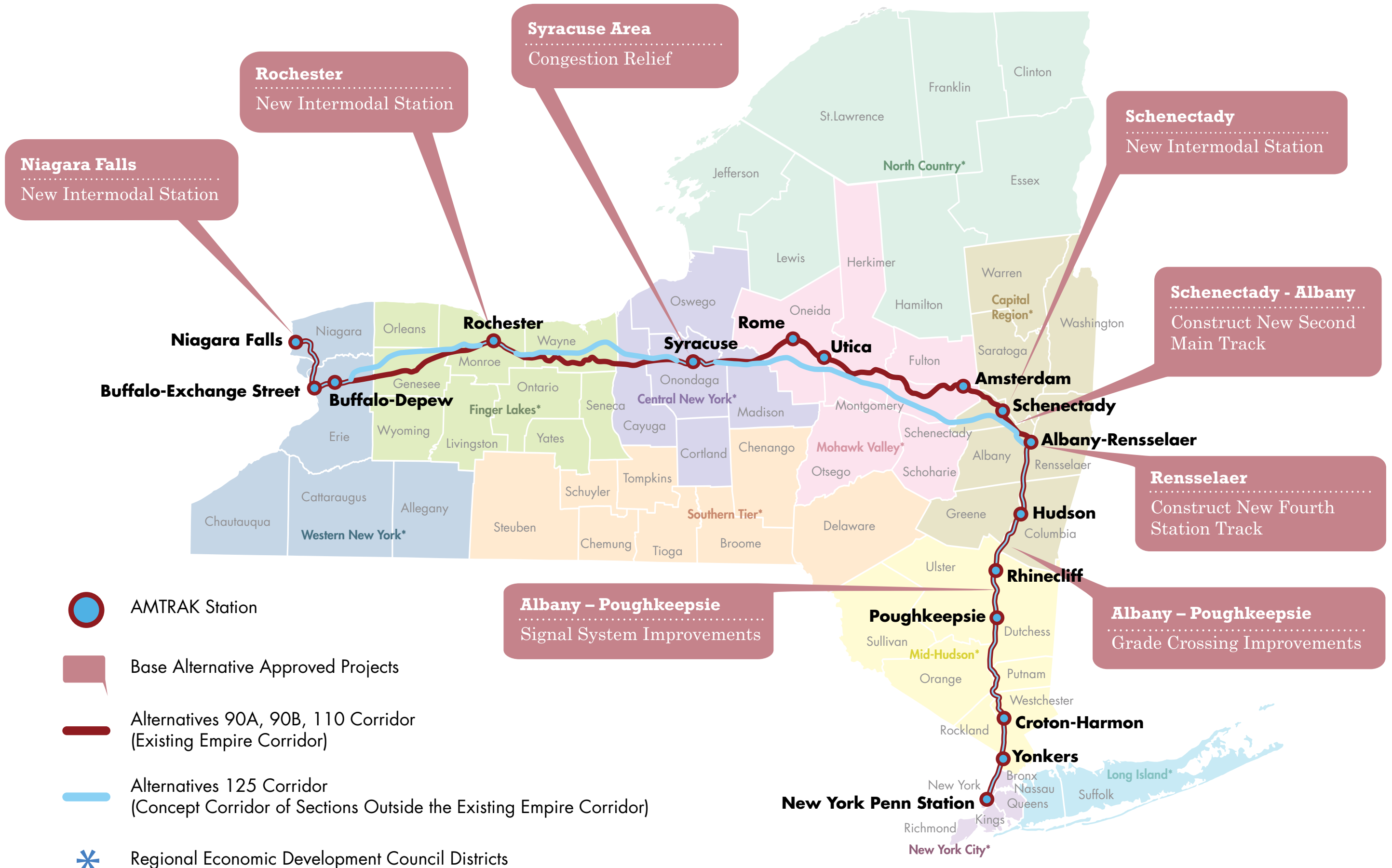
The features of each alternative are:

- **Base Alternative** – Improvements to the existing right-of-way, new and redeveloped train stations, high-level boarding platforms, and 20 miles of new track, signals, and track improvements, such as grade crossings to enhance safety, security, and convenience.
- **Alternative 90A** – New train sets, locomotives and coaches, and 20 more capacity and station improvement projects in the existing right-of-way.
- **Alternative 90B** – All Alternative 90A features plus station improvements and construction of more than 300 miles of track dedicated to passenger rail.
- **Alternative 110** – All Alternative 90A features and 325 miles of new dedicated passenger rail track.
- **Alternative 125** – Entirely new 247-mile corridor connecting Albany and Buffalo, requiring construction of a separate right-of-way for passenger rail service and sections of elevated track to bring passengers to stations or freight to customers and freight yards. New service would stop in Albany, Syracuse, Rochester, and Buffalo, where travelers could change to local trains.

Alternative Improvements and Current Service Summary

Alternative	Projected Annual Ridership (2035)	Trip Time New York City to Niagara Falls	Cost Estimate (2015 dollars)	Daily Trains		Speed (Miles Per Hour)	On-Time Performance
				Albany/ Niagara Falls	Albany/ NYC		
Base	1.6 million	9 hr 6 min	\$290 million	4	13	51 avg /79 max	83%
90A	2.3 million	8 hr 8 min	\$1.66 billion	8	16	57 avg /90 max	92.4%
90B	2.6 million	7 hr 36 min	\$5.58 billion	8	17	61 avg /90 max	95.4%
110	2.8 million	7 hr 22 min	\$6.25 billion	8	17	63 avg /110 max	94.9%
125	4.3 million	6 hr 2 min (Express) 8 hr 40 min (Regional)	\$14.71 billion	19	24	77 avg /125 max	100% (Express) 83% (Regional)
Current	1.4 million (2011)	9 hr 27 min (2011)	N/A	4	13 (2008)	50 avg /79 max (2008)	77% (2008)

THE EMPIRE CORRIDOR



Cost Comparison Summary 2015 Dollars

Description	Base Alternative	Alternative 90A	Alternative 90B	Alternative 110	Alternative 125
Capital Costs	\$290 million	\$1.66 billion	\$5.58 billion	\$6.25 billion	\$14.71 billion
Annual Operations and Maintenance (O&M) Costs	\$103 million	\$156 million	\$171 million	\$173 million	\$304 million
Annual Revenue	\$77 million	\$119 million	\$139 million	\$149 million	\$245 million
Total Deficit	\$26 million	\$37 million	\$32 million	\$24 million	\$59 million
Percent O&M Costs covered by Revenue	75%	76%	81%	86%	81%
Annual Cost/Rider	\$64.38	\$67.83	\$65.77	\$61.79	\$70.70
Annual Subsidy per Rider	\$16	\$16	\$12	\$9	\$14

ANALYSIS OF POTENTIAL IMPACTS

The DEIS assessed effects on the societal, cultural, and natural environment by reviewing overlays of the potential corridors using aerial photography and Geographic Information System mapping.

The Base Alternative would have the least impact on the environment. Alternative 90A would have low to moderate impact, and Alternatives 90B and 110, which maximize use of the existing right-of way

(owned by freight railroad CSX Transportation), would have moderate impact, greater where new, segregated passenger rail would extend beyond the right-of-way. Alternative 125, which requires construction of a separate right-of-way for passenger rail, would have the greatest potential for environmental impact – affecting up to 3,000 acres of mostly undeveloped land. If selected for Tier 2 analysis, future design will include location studies to minimize impact.

Environmental Impact Summary

Alternative/ Impact Area	Base	90A	90B	110	125
Land Use	L	L	M	M	H
Community	L	L	L	M	H
Historic	L	M	H	H	M'
Parks	L	L	L	M	H
Visual	L	L	M	M	H
Farmland	L	L	M	M	H
Waterbodies	L	M	M	M	H
Floodplains	L	L	M	M	H
Wetlands	L	L	M	M	H
Wildlife	L	L	M	M	H
Air Quality	L	B	B	B	B
Energy/ Greenhouse Gas	L	B-L	B-L	B-M	B-H
Noise/Vibration	L	M	M	M	H

Impact Levels Key

- L** Potential for adverse effect is lowest among the alternatives
- M** Potential for adverse effect is moderate among the alternatives
- H** Potential for adverse effect is highest among the alternatives
- B** Long-term beneficial impact
- 1** The undeveloped nature of the 125 Study Area may contribute to the lack of documented historic resources.

Alternative/Impact Area Key

- **Land Use:** the assembly and acquisition of public and private lands
- **Community and Public Facility:** the potential to affect community/publicly used facilities (including cemeteries, privately owned golf courses/golf clubs, and school ball fields)
- **Historic and Archaeological Resource:** direct and indirect impact potential to historic, cultural, archaeological and/or architectural resources along the corridor
- **Parks and Recreational Facilities:** the potential effects on parks and recreational facilities

- **Visual:** the potential for adverse visual impacts to largely open undeveloped and moderately developed areas
- **Farmlands:** the potential to have a disruptive impact on farmland, potentially bisecting and isolating sections of prime farmlands and “farmlands of statewide significance”
- **Water Bodies/Rivers:** the potential for impacts on surface water resources
- **Wetlands:** the potential for impact on wetlands
- **Air Quality:** the potential benefit to air quality in some regions of the corridor, while it has the potential to adversely affect air quality in others
- **Energy and Greenhouse Gases:** the greater the quantity of energy and materials needed for construction, the greater the potential to adversely affect net energy and greenhouse gases; more efficient, higher speed trains can have beneficial effects
- **Noise/Vibration:** the potential for noise impacts in areas where no railroads currently operate

Effectiveness of Alternatives in Meeting Performance Objectives

Performance Objectives	Base	90A	90B	110	125
On-time Performance of at Least 90%	✗	★	★	★	★
Reduce Travel Time	○	+	+	+	★
Increase Service Frequency	✗	+	+	+	★
Attract Ridership	○	★	★	★	★
Reduce Automobile Trips	○	+	+	+	★
Minimize Impact on Freight Rail Service	○	○	+	+	○

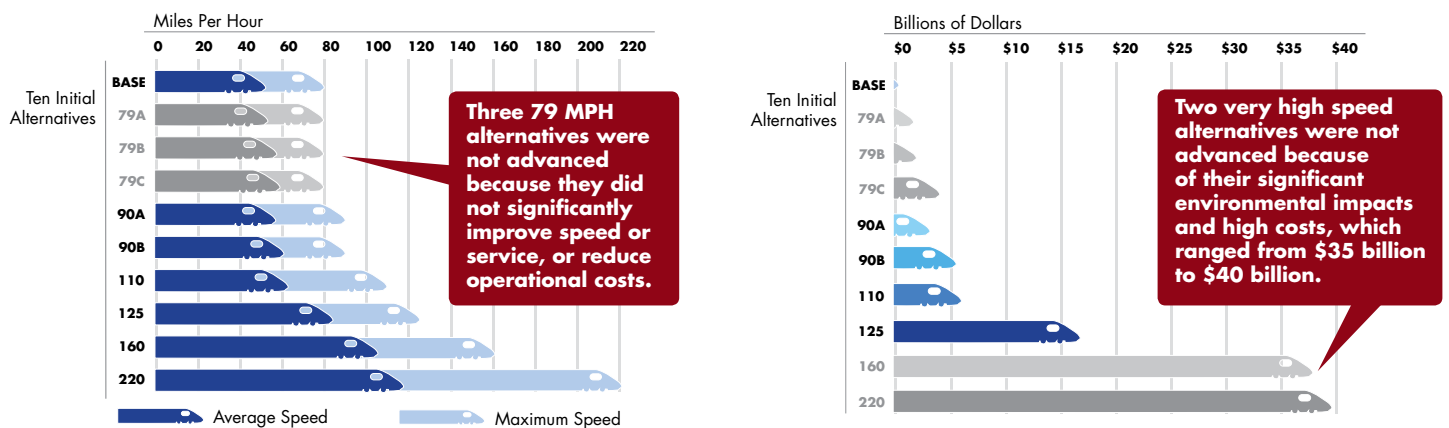
- ★ Strongly supports program performance objectives
- ⊕ Supports program performance objectives
- Neutral regarding program performance objectives
- ✗ Contrary to program performance objectives

- **Base Alternative:** Does not support improving system-wide on-time performance, attracting ridership, reducing travel times, increasing service frequency, and reducing automobile trips.
- **Alternative 90A:** Strongly supports improving system-wide on-time performance and attracting ridership. Supports reducing travel times, increasing service frequency, and reducing automobile trips.
- **Alternatives 90B and 110** would create a passenger rail corridor by providing exclusive third and fourth tracks for use by passenger trains. Strongly supports improving system-wide on-time performance and attracting ridership. Supports reducing travel times, increasing service frequency, and reducing automobile trips.
- Benefits from **Alternatives 90A, 90B, and 110** are realized from phased construction and increase steadily as track, signal, yard, and grade-crossing improvements are implemented.
- **Alternative 125:** Strongly supports improving system-wide on-time performance, reducing travel times, increasing service frequency, attracting ridership, and reducing automobile trips. Extremely high capital and annual operating costs would require higher public subsidies, with the greatest potential for environmental and community impacts.

The Five Eliminated Alternatives

The scoping process began in October 2010. The overall goal of scoping was to gather public input on the performance objectives that would be used to determine the alternatives for further analysis in the DEIS. The public scoping process produced 10 potential alternatives and contributed public input to the scope and goals of the High Speed Rail Empire Corridor Program. Of the 10 alternatives, five were found not to meet program goals (three did not improve speed, service, or operational expenses; two very high speed alternatives were too costly and had significant environmental impacts). The following comparison charts show details on how the five alternatives were eliminated:

Speed and Cost Comparisons of the Initial 10 Alternatives



A PUBLIC PROCESS: PUBLIC ENGAGEMENT AND HIGH SPEED RAIL

NYS DOT and the Federal Railroad Administration have strongly encouraged public participation and comment since the start of this process in October 2010. The Empire Project Advisory Committee (EPAC) was formed and met several times to solicit input from stakeholder representatives. The program team received over 10,000 unique website visits and more than 100 distinct ideas from attendees at public scoping meetings and via online comment forms, resulting in 10 initial alternatives, which have since been analyzed to determine if they meet project goals.

Your Voice Counts

Here's how to make sure your ideas are recorded as part of the environmental review process:

- In oral testimony or privately to a stenographer, or in writing at public hearings
- By email: empirecorridor@dot.ny.gov
- By mail: David Chan, Project Manager, NYS DOT, 50 Wolf Road, Albany, NY 12232
- Via the Public Comment page on our website: www.dot.ny.gov/empire-corridor/contact

Comments are due by Monday, March, 24, 2014

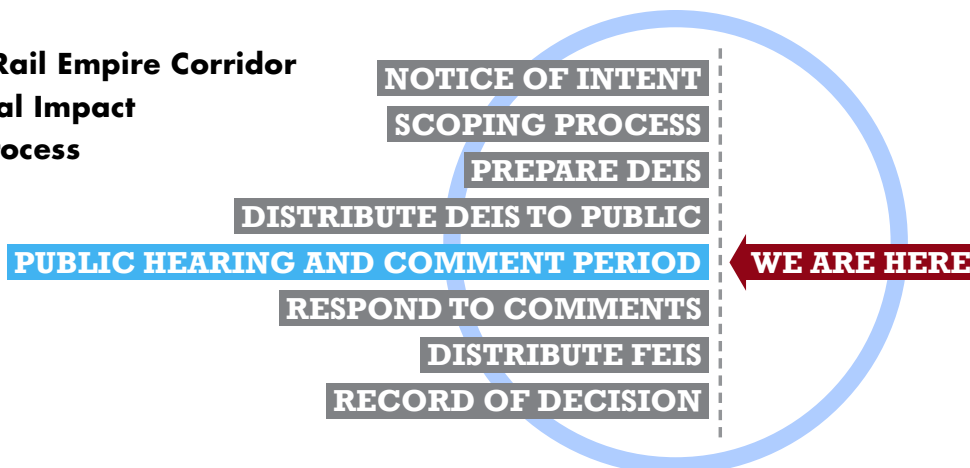
The Draft EIS is available on the web at www.dot.ny.gov/empire-corridor, and at the local libraries listed on the website.

Public Hearing Schedule

For all locations: Open House 4:00 - 8:00 PM, Public Hearing 6:00 - 8:00 PM, Presentation at 6:00 PM.

- **Albany – Tuesday, March 4**, Nanofab South Building at the SUNY College of Nanoscale Science and Engineering, 255 Fuller Road, Albany, NY
- **Syracuse – Wednesday, March 5**, NBT Bank Stadium, 1 Tex Simone Drive, Syracuse, NY
- **Buffalo – Thursday, March 6**, The Buffalo Transportation Pierce Arrow Museum, 263 Michigan Avenue, Buffalo, NY
- **Rochester – Friday, March 7**, The Strong, One Manhattan Square, Rochester, NY
- **Utica – Tuesday, March 11**, Utica Train Station, 321 Main Street, Utica, NY
- **Poughkeepsie – Wednesday, March 12**, Cunneen-Hackett Arts Center, 12 Vassar Street, Poughkeepsie, NY

High Speed Rail Empire Corridor Environmental Impact Statement Process



New York State



New York State
Department of
Transportation



Federal Railroad
Administration