

WELCOME



OPEN HOUSE

Tuesday,
Oct. 23, 2018

**LIMA MUNICIPAL
CENTER
Lima, OH**

Open House:
5:30–7:30 p.m.

Presentation:
5:30–5:50 p.m.

Wednesday,
Oct. 24, 2018

**ALLEN COUNTY
PUBLIC LIBRARY
Ft. Wayne, IN**

Open House:
11:30 a.m.–1:30 p.m.

Presentation:
11:30–11:50 a.m.

Wednesday,
Oct. 24, 2018

**WARSAW
CITY HALL
Warsaw, IN**

Open House:
5–7 p.m.

Presentation:
5–5:20 p.m.

Thursday,
Oct. 25, 2018

**VALPARAISO
CHAMBER OF
COMMERCE
Valparaiso, IN**

Open House:
11:30 a.m.–1:30 p.m.

Presentation:
11:30–11:50 a.m.

**The Northern Indiana
Passenger Rail Association
is wrapping up preliminary
work towards implementing
passenger rail service
between Chicago, Illinois;
Ft. Wayne, Indiana; and
Lima, Ohio.**

At today's open house:

- Review results of early planning and engineering work on passenger rail service alternatives, ridership, revenues, infrastructure needs, and costs.
- Learn about the next steps to further advance the project.
- Talk with project staff and ask questions.
- Provide written comments.

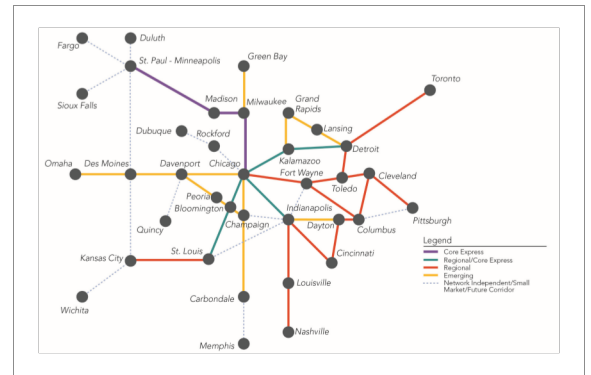
PROJECT DESCRIPTION



The Northern Indiana Passenger Rail Association (NIPRA), in partnership with local communities and stakeholders, propose new passenger rail service from Chicago, Illinois; through the cities of Gary, Valparaiso, Plymouth, Warsaw, and Fort Wayne, Indiana; and on to Lima, Ohio.

The project lays the foundation for potential future passenger rail connections in Ohio, including connections to Columbus, other metropolitan Ohio communities, and beyond.

The Chicago-Ft. Wayne-Lima Corridor is part of Midwest rail planning efforts including the Midwest Regional Rail Initiative and Federal Railroad Administration's update, the Midwest Regional Rail Plan.



▲ Draft Midwest Passenger Rail Network (Source: Federal Railroad Administration)



PURPOSE of PRE-NEPA WORK



NIPRA will seek federal funds to implement passenger rail service.

NIPRA is finishing early environmental, or Pre-NEPA (National Environmental Policy Act) planning and engineering activities.

NIPRA's Pre-NEPA work will be applied toward detailed environmental review, service development planning, and preliminary engineering required under NEPA to position the project for potential future federal funding.

COMPLETED ACTIVITIES:



- Purpose and Need statement
- Formal analysis of preferred route for passenger rail service
- Preliminary ridership, revenue, and operating costs
- Passenger rail service alternatives analysis
- Conceptual engineering and capital costs

PROJECT PURPOSE and NEED



WHAT IS THE NEED FOR THE PROJECT?

EXISTING TRANSPORTATION ALTERNATIVES DO NOT MEET CORRIDOR TRAVEL NEEDS

Communities in the project corridor have limited transportation options, which means most business and personal travelers rely on autos.

POPULATION AND EMPLOYMENT GROWTH WILL INCREASE TRAVEL DEMAND AND PLACE GREATER PRESSURE ON EXISTING TRANSPORTATION MODES

Continued reliance on auto travel will contribute to unreliable travel times.

HIGHWAY SYSTEM CONGESTION AND RELIABILITY CONCERNS

Highway congestion into Chicago, lack of direct freeway access in the project corridor, and inclement weather cause unreliable travel times.

MORE TRANSPORTATION CHOICES ARE NEEDED TO SUPPORT THE REGION'S ECONOMIC COMPETITIVENESS AND FACILITATE ITS ECONOMIC DEVELOPMENT GOALS

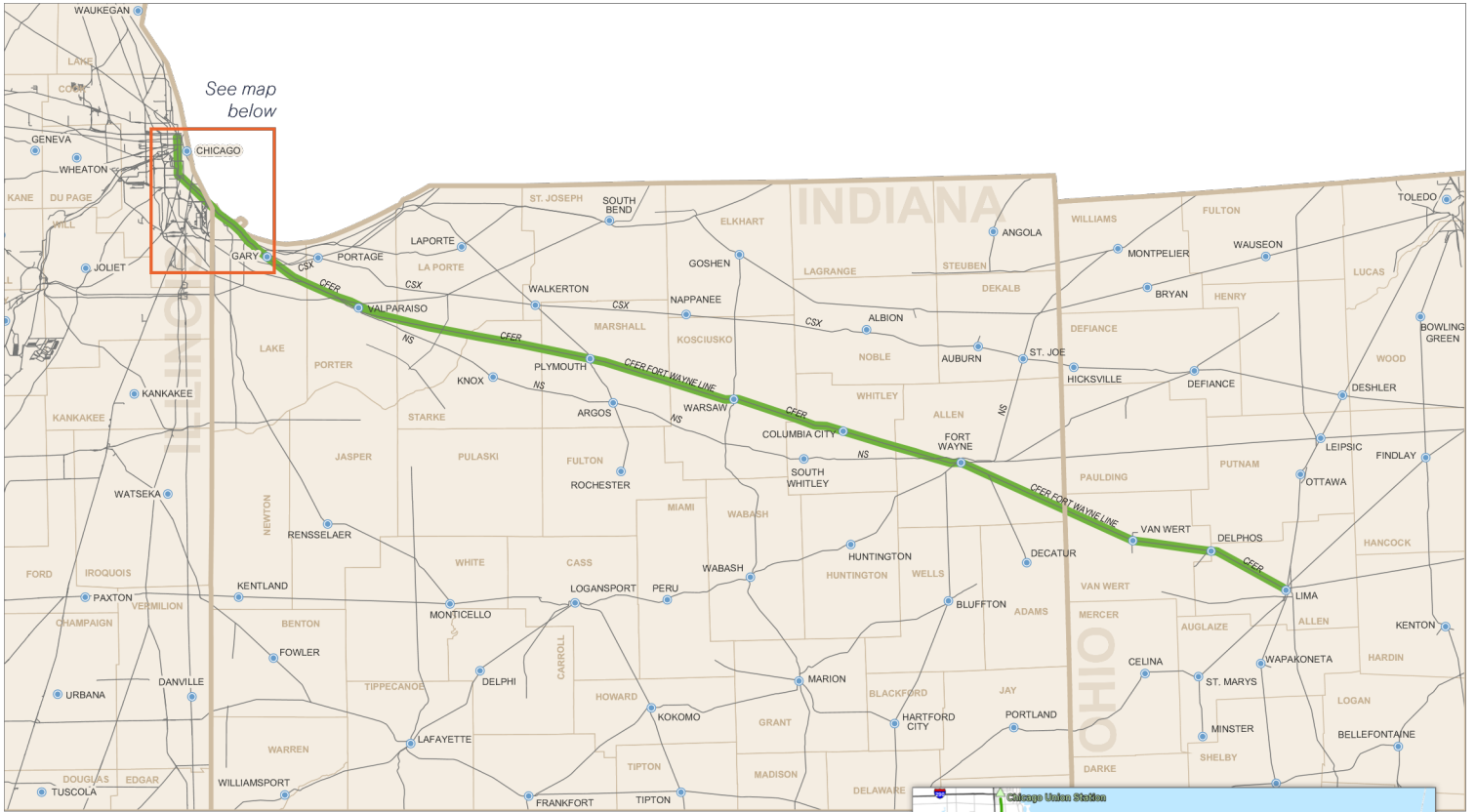
The corridor is home to significant industries and higher education facilities. Current travel challenges impact economic competitiveness and the ability to attract and keep people and workers in the region.

PROJECT PURPOSE

New passenger rail service connecting communities between Chicago-Ft. Wayne and Lima, Ohio would:

- Support economic competitiveness with reliable transportation alternatives.
- Provide convenient travel access in station city centers.
- Provide attractive travel times competitive with autos.
- Maintain cost-effectiveness by maximizing use of existing rail infrastructure.

NORTHERN INDIANA PASSENGER RAIL ROUTE



The Northern Indiana passenger rail service would operate on an existing railroad, the "Ft. Wayne Line," between Gary, Indiana, and Lima, Ohio. The route is owned by CSX Railroad. The Chicago, Ft. Wayne & Eastern Railroad (owned by Genesee & Wyoming railroad) leases the corridor from CSX. Norfolk Southern railroad also operates in the corridor.

The service would use a route in the "South of the Lake" corridor between Chicago Union Station and Gary. A preferred route in the "South of the Lake" corridor will be selected in the ongoing Chicago-Detroit/Pontiac Passenger Rail Corridor Program. The route in the "South of the Lake" corridor would accommodate the Northern Indiana passenger rail service.



SERVICE ALTERNATIVES ANALYSIS and SCREENING

NIPRA identified an initial range of passenger rail service alternatives and used screening criteria to evaluate how well each alternative performed among each other. The screening analysis identifies a reasonable range of alternatives that will be fully evaluated and refined in a future service development plan and environmental and engineering analysis.

SCREENING CRITERIA

FORECASTED RIDERSHIP –

Measures how attractive each service alternative is to the traveling public.

FREQUENCY –

The number of daily roundtrips per alternative. Frequent train service enables passengers to more freely travel within their own timeline.

TRAVEL TIME –

Intercity passenger rail service becomes more attractive as it becomes competitive with the travel time of other transportation modes, especially autos.

INFRASTRUCTURE CAPITAL NEEDS –

A high-level cost estimate based on the relative infrastructure investment compared to a “base case” cost of two daily roundtrips at 79 mph.

OPERATING and MAINTENANCE COSTS –

Preliminary operating and maintenance (O&M) costs are the expenses related to the maintenance and administration of operating passenger rail service on a daily basis.

FORECASTED ANNUAL REVENUE –

Includes passenger ticket revenue as well as revenue from food and beverage sales.

EQUIPMENT NEEDS –

Equipment needs are based on frequency, corridor length, and scheduled departures. Additional equipment is typically needed as frequencies increase, which results in increased capital expenditure.

EQUIPMENT UTILIZATION –

A measure of average daily revenue hours per trainset. Investment in additional equipment may be justified when equipment is efficiently utilized and gaining significant revenue.

OPERATING RATIO and SURPLUS or DEFICIT –

A measure comparing revenues of each alternative to its O&M costs. The operating ratio is an overall measure of the service’s operating efficiency. Costs not covered by service revenues would need to be covered by other funding resources, such as from state and/or local entities.

INITIAL RANGE of SERVICE ALTERNATIVES EVALUATED

FREQUENCY Daily Roundtrips (DRT)	79 MPH	110 MPH
2	X	
4	X	X
6	X	X



Photo courtesy of Amtrak

RESULTS of SERVICE ALTERNATIVES SCREENING

NIPRA identified three service alternatives as the most reasonable and cost-effective to further develop infrastructure needs and costs.

RANK
Performance of alternatives
against each other

High - Mid - Low

RIDERSHIP ESTIMATE

Annual Riders (2035)

FREQUENCY

Number of Daily Round Trips (DRT)

TRAVEL TIME

Chicago to Lima, OH (Hours:Minutes)

EQUIPMENT UTILIZATION

Annual Daily Revenue Hours per Train Consist

EQUIPMENT NEEDS

TOTAL TRAIN CONSISTS

LOCOMOTIVES

SINGLE-LEVEL COACH CAR

BUSINESS/CAFE CAR

ANNUAL REVENUE

Ticket Sales and Concessions

"ANNUAL" OPERATING and MAINTENANCE COSTS

OPERATING SURPLUS/DEFICIT

FUNDING GAP

OPERATING RATIO

	2 DRT 79 MPH	4 DRT 79 MPH	6 DRT 79 MPH	4 DRT 110 MPH	6 DRT 110 MPH
Annual Riders (2035)	387,000 5	571,000 4	677,000 3	765,000 2	917,000 1
Number of Daily Round Trips (DRT)	2 3	4 2	6 1	4 2	6 1
Chicago to Lima, OH (Hours:Minutes)	3:27 2	3:27 2	3:27 2	2:35 1	2:35 1
Annual Daily Revenue Hours per Train Consist	6:54 4	9:12 2	10:21 1	6:53 5	7:45 3
	1	2	3	4	5
TOTAL TRAIN CONSISTS	2	3	4	3	4
LOCOMOTIVES	2	3	4	6	8
SINGLE-LEVEL COACH CAR	8	9	12	12	16
BUSINESS/CAFE CAR	2	3	4	3	4
Ticket Sales and Concessions	\$13,800,000 5	\$20,900,000 4	\$24,896,000 3	\$28,107,000 2	\$33,519,000 1
"ANNUAL" OPERATING and MAINTENANCE COSTS	\$17,384,000 1	\$28,943,000 2	\$41,073,000 4	\$35,437,000 3	\$50,263,000 5
	2	3	5	1	4
FUNDING GAP	\$(3,584,000)	\$(8,043,000)	\$(16,177,000)	\$(7,330,000)	\$(16,744,000)
OPERATING RATIO	0.79	0.72	0.61	0.79	0.67
	2 DRT 79 MPH	4 DRT 79 MPH		4 DRT 110 MPH	

NIPRA will evaluate these service alternatives in further detail in future environmental and engineering studies.



HOW is PASSENGER RAIL RIDERSHIP DEVELOPED?



Ridership projections are developed using a well-tested model and methodology that has been accepted by the Federal Railroad Administration. The ridership forecast model uses factors from existing and reliable data sources including:

- Travel market data
- Existing and future socioeconomic data
- Trends in fuel price, vehicle efficiency, and highway congestion



Photos courtesy of Amtrak

The data is used to estimate demand in the Northern Indiana travel market and how travel is split among auto, bus, air, and passenger rail modes.

The model used for ridership projections in the Chicago-Ft. Wayne-Lima corridor is the same used for other corridors in the United States. Some examples of “before and after” ridership results are summarized below.







SERVICE	PROJECTED RIDERSHIP (YEAR)	ACTUAL RIDERSHIP (YEAR)
Downeaster (Boston, MA–Portland, MN)	495,000 (2008 w/full service)	473,000 (2008 w/out full service)*
		500,081 (2016 w/out full service)*
Heartland Flyer (Oklahoma City–Ft. Worth, TX)	62,000 (1997)	Lowest: 55,000 (2001)
		Highest: 71,129 (1999)
		Recent: 66,105 (2016)
Washington D.C.–Lynchburg, VA	112,920 (2010)	120,000 (2010)
		184,868 (2016)
Washington D.C.–Norfolk, VA	120,000 (2015)	146,605 (2016)

* Full service means the service specified in the original projections (e.g., 2:15 not 2:25) for train time. Today service has more train frequencies, but travel time has not achieved two hour/15 minute travel time.

Source: *Transportation Economics & Management Systems, Inc.*

INFRASTRUCTURE NEEDS

Initial needs for track and signal infrastructure are based on available data on freight traffic and existing infrastructure in the Gary-Ft. Wayne-Lima corridor.¹

		2 DRT (79 MPH)	4 DRT (79 MPH)	4 DRT (110 MPH)
 Track Improvements	REHAB	188 miles	190 miles	194 miles
	NEW	37 miles	50 miles	63 miles (110 mph) 30 miles (79 mph)
 Bridges	REHAB	66 single track	63 single track	36 single track
	NEW	19 double track	22 double track	49 single & double track
 Special Trackwork	UPGRADE TURNOUTS/ SWITCHES	31	31	33
	NEW TURNOUTS/ SWITCHES	54	67	61
	DIAMONDS	6	6	6
 Grade Crossings	UPGRADE WARNING DEVICES	168	168	168
	CROSSING RECONSTRUCTION	39	51	140
 Signals & Communications	Entire corridor updated with modern signal and communication equipment.			
 Cost²		\$898.1M	\$978.5M	\$1,228.5M

¹ Infrastructure needs between Gary and Chicago are included in studies prepared for the Chicago-Detroit Tier 1 Draft Environmental Impact Statement.

² Costs assume 20% for contingency and professional services.

COMPARISON of INFRASTRUCTURE COST to OTHER PASSENGER RAIL SERVICE ESTIMATES

YEAR	SERVICE ALTERNATIVE	COST/MILE (million)
GDOT ATLANTA-CHARLOTTE		
2014	79-110 MPH Shared Used	\$8,454
IowaDOT CHICAGO-OMAHA		
2012	79-110 MPH Shared Used	\$5,617
NIPRA		
2018	79-110 MPH Shared Used	\$5,596*

* Construction cost/mile for the 4 DRT/110 MPH service alternative is based on an 181.4 mile corridor and is comparable to the other services noted above.



RAILROAD INFRASTRUCTURE DEFINITIONS



MAIN TRACK

Segment of train tracks considered the primary route used for moving trains among destinations.



DIAMOND CROSSING



A railroad junction of special track work allowing two tracks to cross each other at-grade.



SIDING



Set of tracks right next to main tracks that are used for the following: trains passing in the opposite direction; train layovers; temporary “parking” for train cars, engines or and maintenance equipment; and crew changes.



TURNOUT/SWITCH

Equipment and special tracks that change the direction of a train and move it onto a different track.



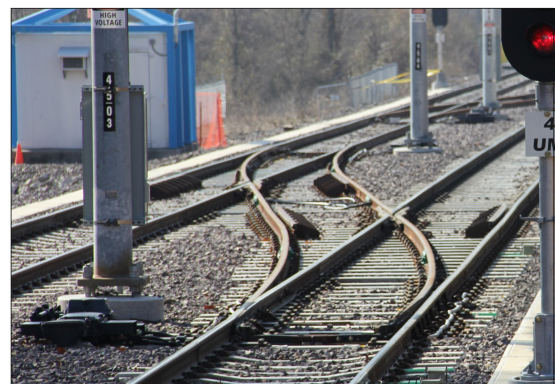
RAILROAD SIGNAL



Device located next to train tracks that tells to the locomotive engineer how to move the train within the corridor.



UNIVERSAL CROSSOVER



Series of turnouts/switches (see explanation above) that move a train traveling in either direction onto the tracks right next to it.

TRAIN STATIONS



Station includes:

- Waiting area
- Restrooms
- Ticketing
- Luggage
- Built-up wheelchair accessibility
- Bicycle storage

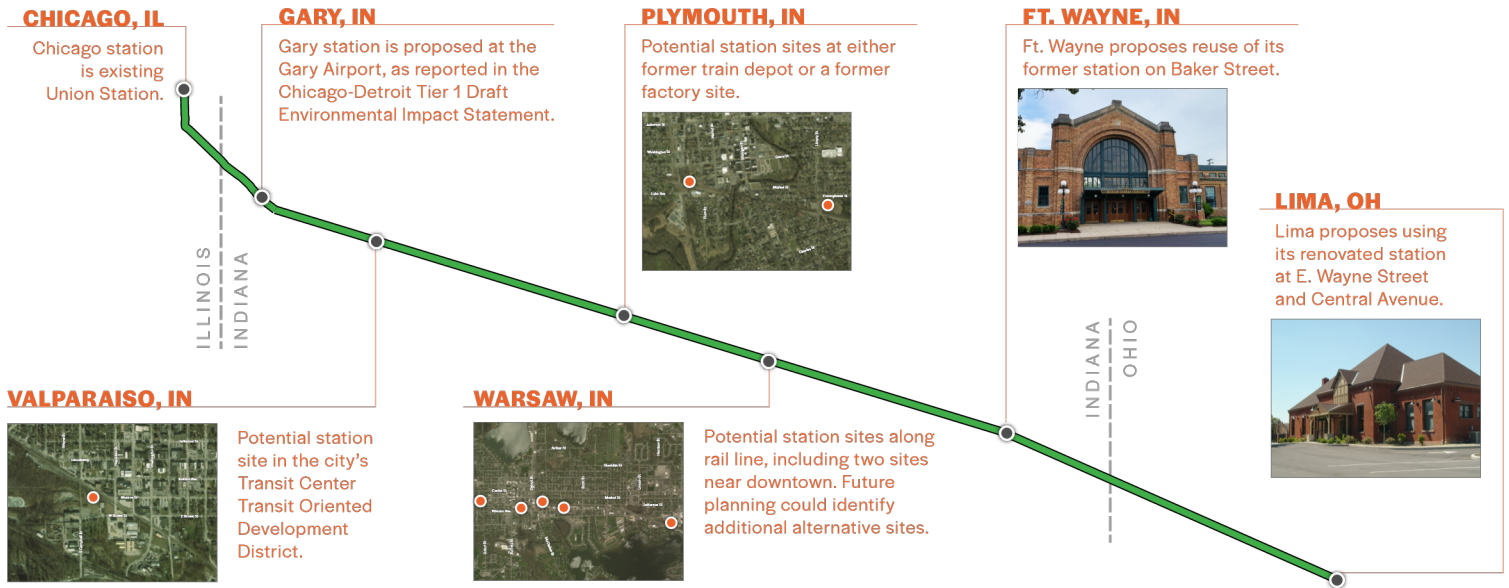


TRAIN STATION LAYOUT

A typical station would include a waiting area, automated ticketing kiosks, and restrooms. Additional elements include bicycle storage, site lighting, trash receptacles, and security.

◀ Passenger rail station in Sturtevant, Wisconsin

POTENTIAL STATION LOCATIONS



CHICAGO, IL

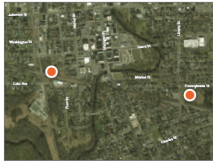
Chicago station is existing Union Station.

GARY, IN

Gary station is proposed at the Gary Airport, as reported in the Chicago-Detroit Tier 1 Draft Environmental Impact Statement.


PLYMOUTH, IN

Potential station sites at either former train depot or a former factory site.




FT. WAYNE, IN

Ft. Wayne proposes reuse of its former station on Baker Street.



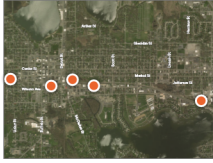
VALPARAISO, IN

Potential station site in the city's Transit Center Transit Oriented Development District.




WARSAW, IN

Potential station sites along rail line, including two sites near downtown. Future planning could identify additional alternative sites.



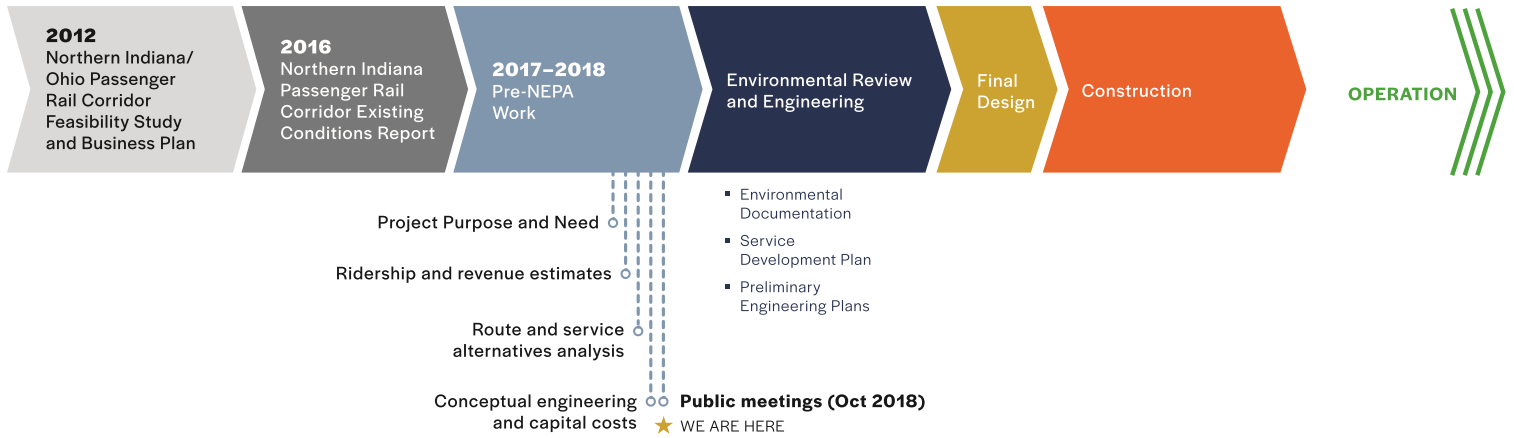
LIMA, OH

Lima proposes using its renovated station at E. Wayne Street and Central Avenue.



Each station community would be responsible for station site development. Further station site selection and design will be conducted during future project phases.

PROJECT TIMELINE



NEXT STEPS

The information from this Pre-NEPA phase of work will directly support the required environmental, planning and engineering reviews for the Chicago-Ft. Wayne-Lima passenger rail service. If funding is received in a timely manner, the proposed passenger rail service could start between 2026 and 2030.



FREIGHT BENEFITS



Infrastructure improvements made for passenger rail service in the Chicago-Ft. Wayne-Lima corridor will also benefit existing freight railroad operations on the corridor:

- Improves safety at public rail grade crossings
- Reduces risk and maintenance of existing infrastructure along the corridor
- Increases reliability of freight movements throughout the corridor
- Creates more reliable route and travel times for freight products and goods to multiple destinations along the corridor
- Attracts additional business and capital investment along the corridor for the transportation of products to markets

