



Mid-Ohio Regional
Planning Commission

Midwest Connect: Hyperloop One Global Challenge Proposal

October 28, 2016

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Mid-Ohio Regional
Planning Commission

October 28, 2016

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Dear Hyperloop One Team,

The Mid-Ohio Regional Planning Commission (MORPC) is pleased to submit this proposal for the Midwest Connect corridor to the Hyperloop Global Challenge. The prospect of high-speed, cost-effective intercity freight and passenger service is exciting, and we believe the Midwest—especially its boom cities of Chicago and Columbus—are a perfect place to start a U.S. national Hyperloop network.

The proposed Midwest Connect corridor will connect four states and three major cities of the Midwest, the epicenter of the U.S. transportation network. One end is anchored by Chicago, the third largest metropolitan area in the U.S. and the single largest rail hub in the country. The route continues through Indiana, known as the 'Crossroads of America' because it sees the highest number of highway pass-thrus nationally. Up next is Ohio, dubbed as the 'Heart of It All' because of its central location and 500 mile proximity to more than half of the U.S. population. Ohio's route centers on Columbus, the recently-designated 'Smart City' for transportation and a region expected to gain up to a million residents in the next 30 years. Pittsburgh, the emerging Silicon Valley of the East because of its growing technology scene and educational assets, anchors the other end.

Despite the prominence of these cities, there are no direct highway or passenger rail connections across the corridor. Driving from Chicago to Pittsburgh requires a detour through Greater Indianapolis or Cleveland. Hopping a train from Pittsburgh back to Chicago requires a connection and a layover. Freight rail between Pittsburgh and Columbus was abandoned long ago, leaving only trucks as a direct transport mode. A Hyperloop connection would not be creating a redundant surface connection, it would be forging a new connection.

Significant freight and passenger travel occurs within the catchment area of the proposed corridor. Using only the three anchor cities as origin and destination points, passenger flows exceeded 1.5 million in 2015. In the same year, more than \$16.7 billion in freight was transported.

We thank Hyperloop One for the opportunity to submit this proposal and look forward to further developing this proposal with additional public and private partners across the Midwest. Please feel free to contact me directly at 614.233.4102 or wmurdock@morpc.org if you have any questions.

Kind Regards,

A handwritten signature in blue ink that reads "William Murdock". The signature is fluid and cursive, with the first name being the most prominent.

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Mid-Ohio Regional Planning Commission

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INTRODUCTION

The Mid-Ohio Regional Planning Commission (MORPC) serves as the federal Metropolitan Planning Organization (MPO) for Central Ohio., Composed of 64 local governments and regional organization members, MORPC provides a unified voice for Central Ohio. Our members are representative of the rural, urban and suburban communities that comprise our region.

We are dedicated to attracting the best and the brightest, transforming existing communities, and promoting sustainability through new technologies to ensure competitiveness in the global marketplace.

This proposal aligns with our region’s embrace of the new age in transportation technology. The City of Columbus recently launched the Smart Columbus project, a result of the 2016 Smart Cities Challenge award Columbus received from the U.S. Department of Transportation. The Columbus Partnership, a membership-based CEO organization of more

than 60 CEOs from leading businesses and institutions, has partnered with the City of Columbus by providing an additional \$90 million to the Smart Columbus project. This has resulted in a \$140 million initiative to incentivize new technologies in transportation.

Furthermore, MORPC is part of the Columbus to Chicago passenger rail project. All cities with proposed stops and MPOs along the corridor are active partners on this project. These established relationships will be the foundation of the Midwest Connect Hyperloop corridor project.

This submission was prepared with the acknowledgement and support of the Columbus to Chicago Passenger Rail corridor partners and our MORPC members, including the City of Columbus and the Columbus Partnership.

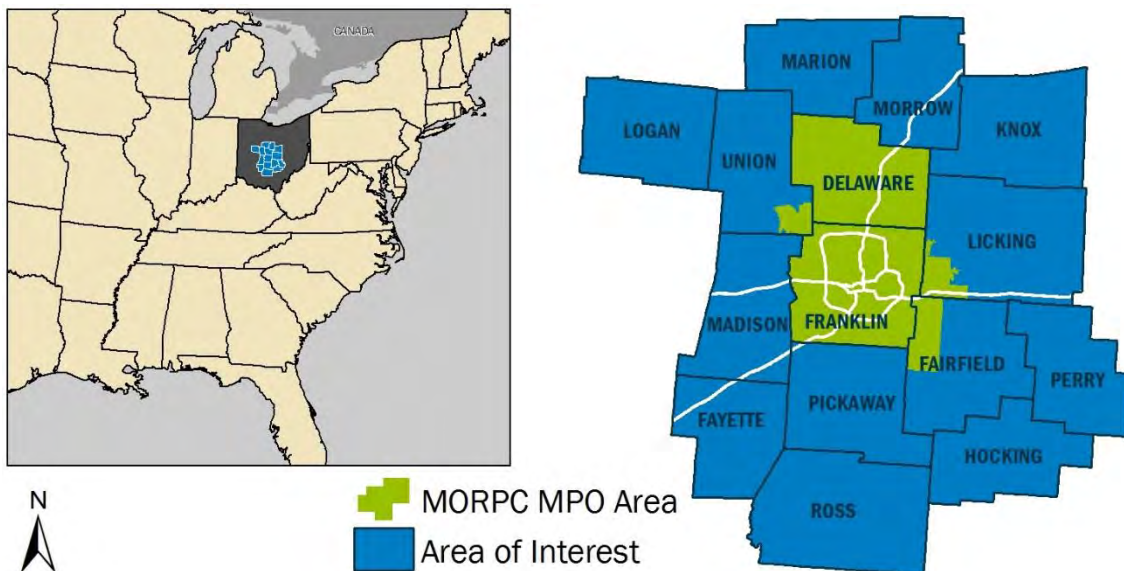


FIGURE
1

Mid-Ohio Regional Planning Commission – Metropolitan Planning Organization (MPO) Area & Area of Interest

ABOUT THE CORRIDOR

Overview

The proposed Midwest Connect corridor will connect four states and three major cities of the Midwest, the epicenter of the U.S. transportation network. One end is anchored by Chicago, the third largest metropolitan area in the U.S. and the single largest rail hub in the country. The route continues through Indiana, known as the 'Crossroads of America' because it sees the highest number of highway pass-thrus nationally. Up next is Ohio, dubbed as the 'Heart of It All' because of its central location and 500 mile proximity to more than half of the U.S. population. Ohio's route centers on Columbus, the country's 15th largest city and a region expected to gain up to a million residents in the next 30 years. Pittsburgh, the emerging Silicon Valley of the East because of its growing technology scene and educational assets, anchors the other end.

Despite the prominence of the cities, there are no direct highway or passenger rail connections across the corridor. An active rail corridor moves freight between Chicago and Columbus, but a direct rail connection towards Pittsburgh has long been inactive. The rail corridor between Chicago and Columbus is owned by CSX and Norfolk

Southern, while the inactive rail corridor between Columbus and Pittsburgh is already owned and controlled by the State of Ohio.

Freight Significance. According to 2015 freight data, the value of cargo exchanged among Chicago, Columbus, and Pittsburgh amounted to nearly \$17 billion. Projections for cargo flow increases show that this value will increase to \$31 billion by the year 2040, a 45% increase between 2015 and 2040.

Passenger Rail Potential. In 2012, MORPC partnered with the City of Fort Wayne, Indiana and the Northeast Indiana Passenger Rail Association (NIPRA) to fund a Feasibility Study and Business Plan for high speed rail operations between Columbus and Chicago with stops in Fort Wayne and other communities along the way. The Columbus to Chicago passenger rail project is ongoing, and a Memorandum of Agreement was created in 2014 among all cities with proposed stops, and Metropolitan Planning Organizations along the corridor (see Appendix IV).

Figure 2 below shows the proposed corridor, along with potential stops among the three anchor cities.

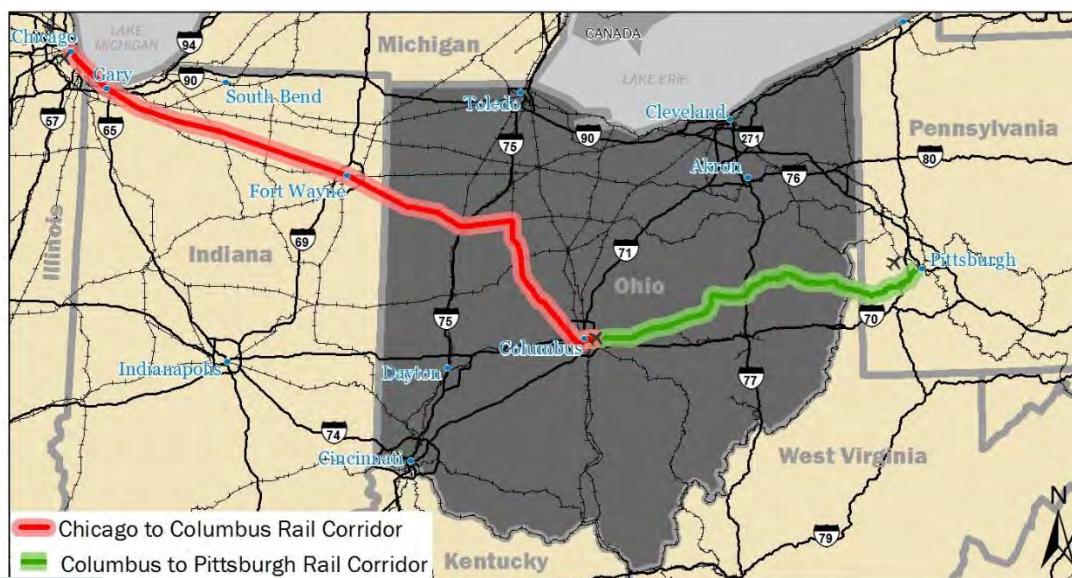


FIGURE
2

Midwest Connect Proposed Corridor

Major Traffic Generators

Population centers: The proposed corridor would serve the Chicago, Columbus and Pittsburgh areas, as well as communities where there is potential for stops/stations: Gary, Valparaiso, Plymouth, Warsaw, and Fort Wayne in Indiana; Lima, Kenton, Marysville, and Newark in Ohio. This proposal focuses on the three anchor cities of Chicago, Columbus and Pittsburgh. The potential stations listed above will be further examined as the project develops, along with other possible stations as deemed viable by the project team.

Transportation Hubs: The corridor connects two international airports in Chicago (O'Hare and Chicago Midway), two international airports in Columbus (Rickenbacker Cargo Airport and John Glenn), and two airports in Pittsburgh (Pittsburgh International and Northeast Pittsburgh Airport).

The corridor is also home to a host of intermodal freight rail terminals and depots. In addition to Pittsburgh and Chicago's many freight intermodal yards, Central Ohio is home to four rail intermodal yards, including Marysville Honda, CSX Buckeye yard, Norfolk Southern's Rickenbacker intermodal yard, and the Marion Intermodal.

While Central Ohio does not currently have passenger rail service, Chicago is a major Amtrak hub, connecting eight corridors that span the nation. Pittsburgh is also a passenger rail hub albeit a smaller one, and connects corridors to the west with Amtrak's Northeast passenger rail corridor.

Businesses: Chicago is a major business headquarters location with 32 Fortune 500 Companies including Boeing, Walgreens, United Airlines, Allstate Insurance, Sears Holdings, McDonald's Corporation, Exelon, Motorola, Discover Financial Services, U.S. Foods, Navistar International, Abbot Laboratories, and Jones Lang LaSalle. In addition to the many prominent companies headquartered in Chicago, major businesses along the Indiana corridor portion include NiSource Inc., Parkview Health Systems, Steel Dynamics, Zimmer Biomet, Lutheran Health

Network, General Motors, BFGoodrich, BAE Systems Platform Solutions, and Frontier Communications.

Businesses served by the corridor in Ohio include Marathon Petroleum, Honda of America, Scotts Miracle-Gro, Veyance Technologies, Nestle PTC, Parker Hannifin, Nationwide Insurance and many others with a global focus, such as Ford Motor Company, L Brands, Amazon, Procter & Gamble, Dana, General Dynamics, Husky Energy, Ashland Chemicals, PCS Nitrogen, Innovene, Linde, American Trim, and Metokote.

Major businesses in the Pittsburgh area include Alcoa, Allegheny Technologies, American Eagle Outfitters, Bayer, Kraft Heinz, Calgon Carbon Corporation, PPG Industries, U.S. Airways and the U.S. Steel Corporation, to name a few.

Professional Services: Professional services within the corridor communities include hospital and medical services, legal and accounting, architects and designers, and financial advisors. These point-of-service type industries rely on the strong economic base of the rest of the region.

Colleges and Universities: The corridor serves a total of 181 higher education institutions that are located within 25 miles of the potential stops as shown in Figure 2. This includes Ohio State University, the second largest college campus in the U.S., as well as the numerous private and public colleges located in Chicago and Pittsburgh.

Sporting Events: Pittsburgh is home to six professional sports teams, Columbus has two professional teams, and Chicago has seven professional teams that attract regular attendance. Additionally, college teams attract major attendance. The Ohio State Buckeyes can attract 100,000 people to Columbus on game days, drawing from alumni all across the Midwest.

Appendix II provides more details on major traffic generators along the corridor.

Corridor Right-of-Way, Distances and Nodal Point Connections

As mentioned previously, the Midwest Connect Hyperloop corridor follows the same right-of-way as the existing rail corridor (see Figure 2).

As the project develops, new right-of-way options may need to be examined in corridor segments where the existing rail alignment is not conducive for Hyperloop movements. For example, a sharp turn exists in the rail line north of the City of Kenton.

Interstate drive miles among Chicago, Columbus and Pittsburgh are:

- Chicago to Columbus via I-65 and I-70: 350 miles
- Columbus to Pittsburgh via I-70 and I-79: 175 miles
- Pittsburgh to Chicago via I-76, I-80 and I-90: 460 miles



FIGURE
3

Fortune 500 Companies (larger circles indicate higher rank)
Source: Fortune 2016



Columbus, Ohio

Image by Randall L. Schieber (<http://www.sciotomile.com/parks/bicentennial-park/bicentennial-park/>)

STRATEGIC TRANSFORMATION POTENTIAL

What Happens When...

...Hyperloop service enables travel hours to become travel minutes? The travel speeds achievable through Hyperloop will dramatically change the way regional economies interact in a similar way as the railroad, the automobile, and the airplane revolutionized how people and goods travel across regions.

Today, traveling among Chicago, Columbus and Pittsburgh involves either a day's drive, or up to half a day in the air. Hyperloop will allow for faster, more frequent freight movements and critical cargo shipments traditionally moved by plane (such as seafood, flowers, and sensitive equipment) will be transferred at greater speeds.

People will be able to take more frequent trips among communities along the corridor. Imagine family members living several hours away from one another being able to see each other weekly because the multi-hour trip has been reduced to minutes. Imagine a college student able to join her family for the holidays when she could not previously leave her studies long enough to make the commute. Imagine good friends, separated by an employment decision, reunited regularly because their new home cities invested in Hyperloop. Travel connects us to the people and places that matter to us, and reducing the time of travel will bring societal benefits one cannot measure in a ledger book.

...Hyperloop makes trips to remote cities shorter than trips to the suburbs by traditional modes? One of the biggest challenges facing American communities is retaining and attracting job-generating businesses that employ a skilled labor force. Hyperloop will allow communities like Lima, Kenton, and Marysville in Ohio and Fort Wayne, Warsaw, and Plymouth in Indiana to have more access to jobs outside these small cities. Commuting between Lima and Columbus for work will be a possibility, and businesses will be able to access a larger area to expand their business while also drawing from a larger number of potential employees.

Small cities along the corridor will also have better access to medical care. Residents of cities like Kenton and Lima have to travel to bigger metropolitan areas to receive specialized health care. The transport of sensitive, time-critical equipment and medical supplies will be facilitated by a Hyperloop corridor, and improve the quality of health care in remote cities where today, comprehensive health care access is limited.

...We can capture the value of new development to contribute to the capital cost of a Hyperloop network? The potential for public-private partnerships in the development of the Midwest Connect Hyperloop corridor is strong.

In Columbus alone, the partnership among the region's major companies and local governments is best exemplified by the recent collaboration among the Columbus Partnership, the City of Columbus, Battelle Memorial Institute, and MORPC that led to the successful bid for the Smart Cities Challenge. The same model of public-private collaboration will be pursued with developers along the corridor, and creative tools will be explored when and where appropriate.

Hyperloop has the potential to create major new nodes of development. Central Ohio and many communities across the Midwest have experience leveraging financing tools to ensure that revenues from new development support the supporting infrastructure. Examples of these financing tools include direct impact fees, tax increment financing, payments in lieu of taxes abated, new community authorities, special assessments, and special districts like business improvement districts or energy districts.

MORPC works closely with economic development agencies and chambers of commerce, and we understand the importance of working with economic developers to create a comprehensive strategy for the development of the corridor. As the project unfolds, economic developers, commercial investors, and business leaders will be a critical contributing stakeholder.

What Happens When... (Continued)

...Prime waterfront land currently covered by ports is liberated by a Hyperloop container-shifter link to an inland container distribution hub? We envision Hyperloop as a mode choice to complement existing modes. While traditional transportation modes will not become fully obsolete, land use changes resulting from the impacts of a Hyperloop corridor will include the down-scaling of port-related land uses along waterfronts.

Chicago is the only city in the corridor with significant prime waterfront land, and as freight-related land uses on the waterfront decrease, redevelopment of the waterfront into more aesthetic and higher revenue-generating uses will occur. Existing bottlenecks in the Chicago rail system will be alleviated, enabling industries to transport their goods in less time while providing a mode choice.

The shift from freight land uses on the Chicago waterfront ports to inland ports could result in more businesses resettling along inland communities along the Hyperloop corridor. Existing inland ports such as the Rickenbacker Airport in Central Ohio have spent many years implementing improvements to handle increasing volumes of freight via rail, air and truck. With a Hyperloop corridor, this and other inland ports along the corridor will experience growth and add capacity as economic development occurs.

...Just-in-Time deliveries can be made within minutes along your corridor? How do your supply chains in the vicinity of the corridor evolve and benefit from Hyperloop? As foreign trade agreements, advancements in freight transportation technologies, and the globalization of goods and cultural habits have evolved, we have grown accustomed to having access to global products that were once only available at a regional level. Sustaining access to these commodities is growing increasingly difficult as the world faces fuel resource and price uncertainties (not to mention environmental concerns associated with fossil fuel consumption). Hyperloop technology will not only reduce time and costs associated with the movement of goods, but it will also reduce impacts current supply chains have on the

environment as they transport freight across the Hyperloop corridor—faster, cheaper, safer, and cleaner than through traditional transportation modes.

The evolution of supply chains along the Midwest Connect Hyperloop corridor will involve an unprecedented level of access by way of and additional mode choice, increased capacity and faster delivery times. Corridor assets such as the intermodal facilities in the Rickenbacker area of Columbus will have increased access to supply chains in the Northeast region through Pittsburgh, which when leveraged by local stakeholders, could lead to more businesses settling along the corridor.

...Two or more major airports are linked via Hyperloop, essentially creating a single multi-runway super-hub and optimizing capacity? Many communities across the world have embraced the significance of multimodal hubs for freight and passenger movements. A Hyperloop system that connects commercial airports, regional transit systems, bikeways, passenger rail and single occupancy vehicles (such as car sharing, traditional car rentals, taxis, etc.) is ideal as transportation trends continue to show a preference for multiple mode choices when traveling. Columbus does not currently have a multimodal hub for passenger service, providing limited mode options.

In the same manner, a Hyperloop corridor will enable the freight industry to have a mode choice. As the project develops, opportunities to integrate existing freight intermodal hubs into the Hyperloop corridor will be explored. MORPC sees great potential in connecting Chicago's O'hare International Airport with Rickenbacker International Airport in Columbus. As these facilities are already major airports for freight, connecting them would create a sub-hub for freight and position the Grea Lakes megaregion as a major logistics hub.

...What happens when Hyperloop connections build powerhouse economies by creating supercities?

Connecting the communities from Chicago to Pittsburgh with Hyperloop speeds will build prosperity for the Midwest. In fact, this potential builds on current work by the Federal Highway Administration (FHWA) that recognizes planning must occur at the megaregion scale. FHWA has identified the Great Lakes Megaregion, anchored by Chicago and extending to the east to Pittsburgh. They have identified strengths of the region—including high educational attainment and abundant water resources—but identify that a major challenge is congestion attributed to future freight demand. The Midwest Connect Hyperloop Corridor has potential to help alleviate this freight congestion, as well as connect the Great Lakes megaregion to the Northeast megaregion stretching from Central Pennsylvania, through New York State, and into New England. For more information, visit:

http://www.fhwa.dot.gov/planning/publications/megaregions_report/megaregions06.cfm

Numerous corporations, including JPMorgan Chase, Kraft Heinz, and Abbot Laboratories already maintain operations that span across multiple cities along the Midwest Connect corridor. Providing faster connections between these cities will allow their business associates to personally engage more regularly. Similarly, other businesses may see opportunities to position specific functions of their operations across the region, maximizing business costs, labor pools, and other assets of the diverse communities along the corridor.



Pittsburgh, Pennsylvania

Image by Greater Pittsburgh CVB ([http://](http://www.visitpittsburgh.com/) <http://www.visitpittsburgh.com/>)

PASSENGER AND CARGO FLOWS

Passenger Demand

Current Volumes and Mode Splits. During the year 2015, a total of 1.5 million passenger trips occurred between the Chicago, Columbus and Pittsburgh areas. While the majority of passenger trips to and from Chicago occurred via air, travel between Columbus and Pittsburgh was limited to automobile travel only. Passenger rail travel flows are not included in this analysis because no direct passenger rail routes currently exist. The common travel modes are automobile and air, therefore the passenger flows for these two modes best capture current travel interactions between the three cities. Table 1 below shows the passenger flows between the three anchor cities.

Chicago and Columbus: Nearly 69% of passenger trips between these cities were completed by air in 2015. Due to the lack of a direct highway route between Columbus and Chicago, only 31% of the total passenger trips between the two regions was completed via automobile.

Chicago and Pittsburgh: Much like Columbus, Pittsburgh does not have a direct route via highway to Chicago. This correlates with the fact that in 2015, nearly 94% of passenger travel between Chicago and Pittsburgh was completed by air. Only 6% of travel trips occurred via automobile.

Columbus and Pittsburgh: Due to the proximity of these two cities, all passenger travel trips in 2015 were made by automobile. There is no major air service connecting these cities.

Origin/Destination	Auto*	Auto Percent of Total Travel	Air**	Air Percent of Total Travel	Total Passenger Trips
Chicago and Columbus	190,562	31%	414,750	69%	605,312
Chicago and Pittsburgh	26,597	6%	396,600	94%	423,197
Columbus and Pittsburgh	479,973	100%	-	-	479,973
Total	697,132	46%	811,350	54%	1,508,482

*Ohio Statewide Traffic Forecasting Model

<http://www.dot.state.oh.us/Divisions/Planning/SPR/ModelForecastingUnit/Pages/TravelDemandModeling.aspx>

** The Airline Origin and Destination Survey (Table DB1BMarket, 2015 Q1, Q2, Q3, and Q4)

http://www.transtats.bts.gov/DatabasInfo.asp?DB_ID=125

TABLE
1

Passenger Travel by Mode (2015)

Passenger Demand (Continued)

Air Travel. All three anchor cities have vibrant airports that facilitate domestic and international travel. Table 2 shows the total number of passengers, broken down by domestic and international travelers, for the year 2015.

Air Travel Pricing. According to the Bureau of Transportation Statistics, the average price to fly out of the Chicago airports was \$333 in 2015, while the average fare price to fly out of the John Glenn Columbus airport and Pittsburgh International airport was \$400 and \$390 respectively. Average round-trip fares between Chicago and Columbus was \$183, and Columbus to Pittsburgh round-trip fares averaged \$190.

Trip Duration. Trip duration by automobile depends on weather conditions and construction along the chosen route. On average, travel between Columbus and Pittsburgh takes approximately 2.5 hours. Travel between Columbus and Chicago takes 5.5 hours, and driving between Chicago and Pittsburgh can take over 7 hours.

Travel by air varies depending on whether it is a direct flight. Direct flights between Chicago and Pittsburgh take approximately 1.5 hours, while direct air travel between Chicago and Columbus takes a little over one hour. This excludes travel time associated with flight/baggage check-ins, security clearance, commuting time to the airport, parking, etc., which can easily add two to three hours to trip length.

Airport	Region	Domestic	International	Total
Chicago O'Hare International	Chicago	696,016,894	200,530,408	896,547,302
Chicago Midway	Chicago	10,426,597	377,935	10,804,532
John Glenn International	Columbus	3,269,388	32,231	3,301,619
Rickenbacker International (cargo dedicated)	Columbus	79,639	-	79,639
Pittsburgh International	Pittsburgh	3,795,075	51,254	3,846,329
Total		713,587,593	200,991,828	914,579,421

Source: U.S. Bureau of Transportation Statistics T-100 Market Data

TABLE
2

Total Major Corridor Airport Passengers – Foreign and Domestic (2015)

Cargo Demand

Current Volumes. The flow of goods between Chicago, Columbus, and Pittsburgh is proportional to the thriving sectors of freight and logistics in all three regions. In the year 2015, nearly 54% of the total cargo weight exchanged between the three cities flowed between Chicago and Columbus. Of the remaining cargo weight, 26% of total weight flowed between Chicago and Pittsburgh and 20% flowed between Columbus and Pittsburgh.

The total cargo by value exchanged between the three cities in 2015 shows a different pattern. Nearly 41% of total cargo value flow between the three cities flowed between Chicago and Columbus. Of the remaining cargo value, 25% of total value flowed between Chicago and Pittsburgh and 34% flowed between Columbus and Pittsburgh.

Table 3 shows the total cargo flow by weight and value for 2015.

Origin/Destination	TOTAL FREIGHT - ALL MODES	
	Weight (kton)	Value (million \$)
Chicago and Columbus	3173	6807
Chicago and Pittsburgh	1567	4218
Columbus and Pittsburgh	1183	5645
Total	5923	16670

Source: Freight Analysis Framework Version 4 (FAF4) <http://faf.ornl.gov/fafweb/>

TABLE
3

Combined Cargo Flow by Weight and Value (2015)

Mode Split. In 2015, the largest portion of cargo by weight between the three cities was transported by truck with 73% of total cargo value being transported through this mode. Trucks also moved the most freight by value, accounting for 82% of total cargo value exchanged between the three cities.

Rail carried the second largest amount of cargo by weight, moving 26% of the total cargo weight exchanged between the anchor cities. However, rail moved less cargo by value than air or trucks, with only a 6% share of the total cargo value.

Air cargo flow by weight in 2015 was only 0.3% of the total cargo weight exchanged between the three metropolitan areas. However, the value of this small proportion of cargo made up 12% of the total cargo value.

Tables 4 through 6 on the following page summarize the cargo flows by mode for the three anchor city origin/destination pairings.

Cargo Demand (Continued)

Table 4: Cargo Flow by Weight and Value - Truck Mode

Origin/Destination	TRUCK		PERCENT OF ALL MODES	
	Weight (kton)	Value (million \$)	Weight (kton)	Value (million \$)
Chicago and Columbus	2054	5349	65%	79%
Chicago and Pittsburgh	1125	2737	72%	65%
Columbus and Pittsburgh	1170	5638	99%	100%
Total	4349	13724	73%	82%

Table 5: Cargo Flow by Weight and Value - Rail Mode

Origin/Destination	RAIL		PERCENT OF ALL MODES	
	Weight (kton)	Value (million \$)	Weight (kton)	Value (million \$)
Chicago and Columbus	1107	716	35%	11%
Chicago and Pittsburgh	438	263	28%	6%
Columbus and Pittsburgh	13	3	1%	-
Total	1559	982	26%	6%

Table 6: Cargo Flow by Weight and Value - Air Mode

Origin/Destination	AIR		PERCENT OF ALL MODES	
	Weight (kton)	Value (million \$)	Weight (kton)	Value (million \$)
Chicago and Columbus	12	742	0.4%	11%
Chicago and Pittsburgh	4	1219	0.2%	29%
Columbus and Pittsburgh	0	4	0.0%	0%
Total	16	1964	0.3%	12%

Source: Freight Analysis Framework Version 4 (FAF4) <http://faf.ornl.gov/fafweb/>



Chicago, Illinois

Image by Destinations for Holidays (<https://destinationsforholidays.wordpress.com/tag/chicago-places/>)

GOVERNMENT & POLICY

How does the state normally invest in infrastructure projects? The predominant model of transportation infrastructure investment employed by government entities across the corridor involves direct funding of both capital construction and operation costs. Typically, a combination of federal, state, and local government funds comprise infrastructure spending. Private participation is more common for projects with a more local transportation benefit, potentially incentivizing a developer or business to invest in a transportation improvement.

However, as government resources have become increasingly scarce, government agencies have become more innovative in project delivery. Public private partnerships have increasingly been identified and employed to deliver large-scale improvements and operations, including bridge replacements, highway construction and maintenance, and freight improvements.

Examples of innovative financing and project delivery include: the Indiana Toll Road, the Portsmouth Bypass, Interstate 55 toll lanes, and Rickenbacker air cargo terminal and east-west corridor improvements. For more details on these examples, please see Appendix I, Item No. 1.

These projects represent only a sampling of the more innovative partnerships that governments across the region have employed to advance transportation projects. All four states, Illinois, Indiana, Ohio and Pennsylvania, have some form of enabling legislation permitting public-private partnership (P3) project structures and each has experience and success implementing such partnerships.

Examples of completed infrastructure projects: The Midwest has completed a number of large-scale infrastructure projects in recent years, including the Chicago Rail Improvement Program (CREATE), U.S. 24 Fort to Port, I-69 Indianapolis to Evansville, and Cleveland Voinovich Bridge. For more details on these examples, see Appendix I, Item No. 2.

What risk mitigations or guarantees does government offer to the private sector?

The federal government's Transportation Infrastructure Finance and Innovation Act (TIFIA) provides multiple protections through credit assistance for partners undertaking large-scale transit-oriented development, intelligent transportation, and surface transportation projects. The program offers secured direct loans with flexible repayment terms, loan guarantees on the full-faith-and-credit of the federal government, and standby lines of credit during the first ten years of project operations. For more information on TIFIA, please see Appendix I, Item No. 3.

What transport appraisal model is used by government and how effective is this model?

There is not a universal model used to evaluate transportation projects in the U.S. However, federal and state departments of transportation do employ evaluation mechanisms to evaluate projects for inclusion in short- and long-range planning documents and specific funding opportunities. For instance, the Ohio Department of Transportation determines how funds for major new projects will be allocated by using an evaluation through its Transportation Review Advisory Council (TRAC). Each project is scored based on factors of transportation, local investment, economic impact, and project funding. Once each project is scored the TRAC board finalizes allocations based on the evaluation results, funding availability, and support. For more information, visit: <http://www.dot.state.oh.us/trac/Pages/TRAC-Application-Toolkit.aspx>

TRAC is representative of formal government evaluation tools because it contains both objective and subjective process components. The subjective components provide flexibility for decision makers to consider both the technical evaluation and other factors that the evaluation may not be able to measure, such as political or community support or a unique project benefit. Therefore, if the Midwest Connect Hyperloop corridor were to compete for state or federal funding, many of the funders would have flexibility to consider the unique impacts of the project, including the economic revitalization impact on the major cities along the corridor and the strong support from the partnership we will build.

Government & Policy (Continued)

What Value of Time is typically employed by government in your region? The United States Department of Transportation (USDOT) recognizes that the value of travel time is a critical factor in evaluating the benefits of transportation infrastructure investment. To this end, USDOT maintains and regularly updates guidance for valuing travel delays and time savings. This guidance is employed by USDOT when evaluating federal funding of competitive grant applications and/or when conducting benefit-cost analysis of projects. Additionally, the guidance has also been used as a tool and framework by some state transportation agencies.

USDOT's guidance recognizes three major principles in the value of reducing travel time:

- Time saved from travel that could be dedicated to production and provide a monetary benefit to travelers/businesses
- Time saved that could be spent in recreation or leisure for which an individual is willing to pay
- Conditions of travel that could be unpleasant or stressful to the traveler

As mentioned above, beyond formal government evaluation tools, transportation improvements within the United States must have political support to move forward. Generally, travel time is highly valued among elected officials. When the State of Ohio was considering rail connections between Cincinnati, Columbus, and Cleveland—the state's three largest cities—one of the major arguments of political critics was that the average speed would not be competitive with a private automobile. The speeds discussed in the development of Hyperloop would certainly catch the attention of the public and elected officials alike, removing a key argument against alternatives to highways for inter-city transportation.

What do you consider the top 3 socioeconomic benefits from Hyperloop? There are numerous socioeconomic benefits to constructing a Hyperloop along our proposed corridor, but the top three include:

Safety: Reducing highway crashes and fatalities continues to be a priority for our region and the United States at large. In Ohio alone last year, the

state recorded 302,307 traffic crashes and 1,110 deaths. Public safety officials continue to address common contributors such as impaired driving, but they have faced a new challenge in recent years. Busy commuters are using their driving time to talk on their cell phones or send text messages, causing distracted driving that negatively impacts driver performance.

Hyperloop provides an opportunity to remove drivers from our highways and place them on a mode of transport that eliminates the possibility of human control errors and impacts of unpredictable weather. This not only benefits the passengers using the Hyperloop, but all highway drivers who will experience a reduction in crash-generating traffic. Reducing highway injuries and fatalities will require multiple approaches, and the Hyperloop can be a major contributor on the path to zero traffic-related deaths.

Access to Jobs & Education: Our region was the epicenter of industrialization in the United States. The industries of Chicago, Fort Wayne, Columbus, Pittsburgh, and other Midwestern cities produced steel, appliances, automobiles, building materials, and numerous other products beginning in the late 1800's. In recent decades, however, deindustrialization and globalization have led to major changes in manufacturing, resulting in plant closings and job losses that have helped to give the Midwest its secondary name—the Rust Belt.

Job loss and economic restructuring have forced our region to be more creative in terms of economic development and revitalization. White collar jobs, within company headquarters and vendors, are also concentrated in metropolitan areas. Therefore, accessing our cities has become a major priority for our region. Creating easier and quicker connections between major job centers and educational facilities are critical to the continued revitalization of the region. The ability to make these connections at the speeds and ease of Hyperloop will be a game changer in terms of economic growth.

Government & Policy (Continued)

Time Savings: The old phrase “time is money” has never been more relevant. As our cities and workforce strive to compete in the modern, globalized, and fast-paced world, every second counts. Reducing travel times between major cities not only means improved access to jobs and education as previously mentioned, but it will benefit regional businesses by strengthening connections, contribute to tourism by making travel quicker and easier in the context of our already over-scheduled lives, and lead to economic and physical revitalization of our city cores through spin-off development at Hyperloop stations. All of these time saving benefits will translate to dollars in the pockets of business owners, employees, and local governments.

The benefits of time savings are not only monetary, however. Reducing travel times between cities will also benefit quality of life for the residents of our region.

Are there any policy measures planned to stimulate modal-shift towards sustainable modes, energy efficiency programs, improved congestion methods, innovation and open data collection?

The Midwest, and specifically Central Ohio, is a major hotbed for innovation in transportation. The City of Columbus recently beat out 77 cities across the U.S. in the Smart City Challenge. Launched by the United States Department of Transportation (USDOT), the Smart City Challenge invited cities across the country to define what it means to be a “smart city” and become the first city in the country to fully integrate innovative technologies such as autonomous cars, connected vehicles, smart sensors, and electric vehicles. Beating out finalists including San Francisco, California and Austin, Texas; Columbus will receive \$50 million in grant funding through USDOT and Vulcan, Inc. This grant funding was leveraged by \$90 million in locally generated matching funds, meaning that \$140 million in smart technologies will be researched and implemented in Central Ohio. This award was immediately followed up with another \$6 million from USDOT to create a smart corridor on US 33, which connects urban Columbus with the industries of Logan, Union and Northwest Franklin Counties, home of major industry partners such as Honda of America. For more information on Smart Columbus see Appendix I, Item No. 4.

How does government in your region support or incentivize inward investment?

Governments within the region work aggressively to support and incentivize inward investment. Each state within the region is equipped with various tools and organizations to attract investment and job creation. In Indiana, the Indiana Economic Development Corporation recently announced a 10-year, \$1 billion initiative to accelerate innovation across the state through various business development and research initiatives. In Ohio, the state has formed JobsOhio, a statewide non-profit charged with job creation that has made impressive strides attracting investment around nine industry sectors ranging from aerospace to advanced manufacturing to logistics and distribution. Each state also offers an array of funding options including low-interest loans, private activity bond allocations, credits and abatements on both state and local taxes, loan guarantees, and grants for training and development. As the states of the Midwest have seen the boom and bust of industry, all have realized that government must be a partner in economic development and that often means being an active participant in financing.

The Midwest has a robust Community Development Finance Institution (CDFI) network with all four states boasting a number with regional or statewide focus (Illinois – 29, Indiana – 9, Ohio – 20, Pennsylvania – 30). These CDFIs have collectively been awarded more than \$4.6 billion in New Markets tax credit funding since the program was created in 2002. New Markets is a federal program that leverages investment with low income communities and is one of hundreds of federal funding programs aimed at inward investment. Besides the USDOT, other federal agencies including the Departments of Treasury, Housing and Urban Development, Agriculture, Commerce, and Labor provide various funding and technical assistance sources that could be beneficial to a comprehensive transportation and/or economic revitalization project.

Government & Policy (Continued)

There are also a number of tools that governments have employed to reduce risk for the private sector, such as the aforementioned TIFIA program. Additionally, each state in our region has their own Public Private Partnership (P3) legislation. Illinois' PPP for Transportation Act allows the state's transportation department, tollway authority, and municipalities to pursue PPP agreements and has specific provisions for high-speed rail and magnetic levitation (mag lev) projects, demonstrating interest in non-highway projects. Indiana boasts some of the earliest P3 legislation in the country and demonstrated early success with the aforementioned toll road lease. Ohio is newer to the P3 game, but has passed enabling legislation, closed on its first major transaction, and has several transportation and non-transportation projects on the drawing table. Finally, Pennsylvania is putting its P3 legislation to use in an innovative fashion along the Pennsylvania Turnpike. A P3 partnership is being used to install a broadband network along the 550-mile turnpike to meet future communication and smart vehicle needs. Although additional legislative changes or approvals may be required to support Hyperloop in a model that shares risk and crosses state borders, each state's prior success with P3 demonstrates strong potential for success.

What legislative process is typically required in your region for the Government to approve and what is a typical rough timeline for infrastructure projects? Transportation improvements in our region are generally planned for and approved through a federal-state-local partnership. The USDOT and its agencies, including the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and Federal Transit Administration (FTA) administer national transportation planning and federal funding programs. Each state has created its own department of transportation that has responsibility for certain federal and state transportation facilities, as well as statewide planning and funding programs. On the regional level within states, Metropolitan Planning Organizations (MPOs) coordinate local governments and decision makers to plan for and fund transportation improvements with the region. MPOs are responsible for both short-range (within 4 years) and long-range (20 year)

planning. Included in MPO short and long-range plans are a requirement for federal transportation funding.

The timeline for approving a transportation improvement can vary greatly on the nature of a project, required environmental reviews, right-of-way acquisition, funding availability, and other considerations. Recognizing that government may not always be as agile as necessary to address infrastructure needs, USDOT and states have been working to expedite project development processes. In 2009, the FHWA launched the Every Day Counts initiative to develop innovative methods to shorten the project delivery process at the state level. This work has resulted in the development of best practice models that could be implemented for high-priority projects, such as a Midwest Connect Hyperloop. The Smart City Challenge and Columbus project is an excellent example of innovative and expedited project delivery when a specific effort is prioritized by federal, state, and local partners.

Which regulatory bodies are responsible for current modes of transport in your region?

New technologies are typically evaluated and tested by the same bodies that are planning for and developing transportation infrastructure. The Smart City Challenge has made Columbus a hotbed of transportation innovation where new technologies are tested and advanced. As the Smart Columbus project creates an environment more accepting to new ideas and innovations, the table is already set for discussions of how to incorporate and compliment inter-city Hyperloop connections.

Other major regulatory agencies that intersect with transportation include state departments of public safety, highway patrols/state police, and utility commissions. These agencies will need to be engaged early on to see if any legislative or policy changes are necessary to accommodate Hyperloop. These entities have potential to be major supporters of a Hyperloop effort as congestion will be reduced and safety of existing transit modes will benefit.



Fort Wayne, Indiana

Image by Globe-News (<http://amarillo.com/news/latest-news/2015-07-18/can-it-work-here>)

ACCELERATION PLAN

The Midwest Connect Hyperloop corridor proposal is still in its early stages of development and further partnerships, specifically along the corridor between Columbus and Pittsburgh, must still be forged to permit the acceleration plan to be defined. However, MORPC believes that existing partnerships along the Chicago to Columbus corridor route and the state-controlled right-of-way between Columbus and Pittsburgh are major assets to advancing the project. MORPC is prepared to coordinate and lead the necessary steps to develop a vetted and financially sound acceleration plan.

Legislative Strategy. MORPC and our members are highly active on the legislative front, maintaining lobbyists at both the state and federal levels and regularly engaging with our legislative delegations. We believe that this legislative expertise and relationship, combined with the legislative partnerships of future partners, can be leveraged to result in legislative changes necessary at both the state and federal levels to advance a Hyperloop corridor within the region. We understand that finding an appropriate funding split between public and private entities will be necessary to achieve rapid governmental support, and we will make this a priority from the start of the coordination effort.

Prior to the legislative advocacy process, detailed plans for regulatory approvals and procurement will be developed following best practice models from the USDOT and other models employed by partner states. If this exploration determines that there are statutory roadblocks to expedited delivery of the project, legislative changes will be sought to remove or reduce those requirements as part of the advocacy efforts.

Corridor Partnerships – Private Sector. Additionally, the federal government and all states along the corridor already have enabling legislation for P3 approaches. Project plans will examine these statutes and successful project models completed across the country to maximize the benefit to private

sector investors in an effort to attract more non-government participation. Further, an examination of the P3 statutes in each state will be examined to determine if changes need to be made to ensure that all provide for the necessary components in the proposed Hyperloop project, including crossing state borders. MORPC also understands that a brand new, innovative implementation path will have to be forged for this Hyperloop corridor, as it represents an entirely different model of providing transportation and existing tools may not be the best avenue for success.

Corridor Partnerships – Local Government Agencies. As a regional association of local governments, MORPC is highly experienced in working with local communities. MORPC also understands that the key to both maximizing government inward investment incentives and attracting economic development along the corridor requires highly coordinated development surrounding Hyperloop stations. As part of the plans for the project, MORPC envisions tasking each community with planning for the appropriate placement of stations, based on right-of-way considerations; connections to jobs, education and medical facilities; redevelopment opportunities; and local priorities. Station planning will require each city to develop a plan and development strategy for appropriate transit oriented development and intermodal connectivity around the Hyperloop stations. With both an eye towards economic development and financing for the Hyperloop, the plan should include specific strategies for incentivizing the development through inward investment incentives and financial tools that will ensure the developments benefiting from proximity to the Hyperloop contribute to the system's construction and/or operation. This could include direct impact fees, tax increment financing, payments in lieu of taxes abated, new community authorities, special assessments, special districts, upfront investment in completion of the Hyperloop or other strategies. During project development, MORPC envisions an iterative process where each city will be asked to develop a model that will generate specific revenue and ridership projections.

Acceleration Plan (Continued)

Do you envision opportunities to partner with another region(s), and if so, what is the purpose of this collaboration? Midwest Connect seeks to connect four major sub regions within the Midwest, including Greater Chicago, Northwest Indiana/Ft. Wayne, Central Ohio/Columbus, and Western Pennsylvania/Pittsburgh. MORPC has already developed partnership agreements with communities from Chicago to Columbus, including Gary and Ft. Wayne, Indiana and Lima, Kenton, Marysville, and Columbus, Ohio to study passenger rail connections. These existing relationships will be leveraged to form a consortium to support exploration of the Hyperloop corridor as an alternative. Partners in the corridor between Columbus and Pittsburgh will be acquired as the Midwest Connect Hyperloop corridor project advances.

As the Midwest Connect concept is still under development, the nature of the partnership(s) necessary to finance, build, operate, and maintain the Hyperloop corridor have not yet been determined. It will be necessary to coordinate between the USDOT, its agencies, and the four state departments of transportation involved in this effort. MORPC is prepared to lead the initial coordination of these parties in an effort to further study and define the correct partnership and oversight framework to successfully erect and operate a Hyperloop connection across the Midwest region.

Are there potential investors in your project group? At this time, investors have not been secured for this partnership. However, MORPC envisions great potential for both public and private sector investors in the proposed Midwest Connect Hyperloop corridor project. Columbus has already proven its ability to raise local equity through the Smart Columbus project, with more than \$90 million raised from local partners—mostly from the private sector—through the leadership of the Columbus Partnership. The Partnership is a group of more than 60 CEOs from the Columbus region’s leading businesses and institutions. The organization has been a major leader in championing advanced, game changing transportation

technologies and was an early supporter of the Midwest Connect effort. As this project continues, the Columbus Partnership will be an important leader in the effort.

Additionally, Columbus and the Midwest are quickly becoming hotspots for venture capitalism with the launch of Silicon Valley tycoon Mark Kvamme’s Drive Capital. In just three years, Drive Capital has raised and deployed two \$300 million tranches of funds for Midwest start-ups, including an initial investment of \$50 million by OSU. As the project partnerships further develop along the corridor, MORPC will work with partners across the Midwest region to identify and engage private sector partners in an effort to attract investment in both the study and development of a Hyperloop corridor.

Please identify any expertise that you would like to contribute to further study. One of MORPC’s greatest strengths lies within our technical team. MORPC staffs an exceptional group of transportation technical experts who will be ready to contribute to the Midwest Connect Hyperloop corridor project. MORPC also excels at building lasting relationships in a stakeholder setting. We are known as the region’s “collaboration table”, and we assist our members and external professional peers in advancing transportation planning.

MORPC is ready to provide support in land use, population, and transportation forecasting; overall project coordination; and financing and operations technical assistance. We also believe that powerhouse institutional leaders such as the Ohio State University and Battelle Memorial Institute can provide important contributions as the project further develops. Both were key contributors to the Smart Columbus effort and will see similar benefits from the Midwest Connect Hyperloop corridor.

Finally, we would like to reemphasize our existing partnerships with communities from Chicago to Columbus that have been working on improving passenger connections. This foundation will allow further planning for the Midwest Connect Hyperloop corridor to quickly accelerate with the support of the Hyperloop One team.

Appendix I

Government & Policy

October 28, 2016

Government & Policy

This appendix supplements the “Government and Policy” section of this proposal. More information is provided, including details on specific projects, to demonstrate collaboration among the corridor stakeholders. The goal of this providing this detailed information is to demonstrate our thorough knowledge of the mechanisms involved in infrastructure improvement investments.

1. Innovative financing and project delivery strategies:

- **Indiana Toll Road:** Spanning 157 miles between the Chicago Skyway and Ohio Turnpike in Northern Indiana, the Indiana toll road links Chicago with the eastern seaboard of the United States. Also known as Interstates 80 and 90, the limited-access highway was opened to traffic in 1956. By the early 2000’s, the tollway was challenged with significant deferred maintenance at the same time that the State of Indiana was facing a \$3 billion gap between transportation funding needs and projected revenues. In an effort to tackle both challenges, the state entered into a 75-year concessionaire lease agreement with the newly-formed Indiana Toll Road Concession Company (ITRCC), a joint venture between a Spanish toll road operator and an investment bank. The lease netted the state an upfront payment of \$3.8 billion, which was used to complete highway projects throughout the state, pay down all debt on the toll road, and create a trust fund for future infrastructure projects. Additionally, the ITRCC is responsible for continued maintenance of tollway throughout the lease, removing the state from this responsibility. Currently, ITRCC is undertaking \$200 million in improvements throughout the corridor, reconstructing 70 miles of asphalt and 53 bridges. In Illinois, the Chicago Skyway, a 7.8 mile elevated segment of Interstate 90 was also leased for 99 years, trading all operations and maintenance responsibilities for \$1.83 billion in upfront payments to the City of Chicago.
- **Portsmouth Bypass:** Located in South Central Ohio, the Portsmouth bypass provides a four-lane, limited access highway around the City of Portsmouth. The route allows traffic to avoid traffic signals, intersections, and access points on the current 26-mile route the follows US 52 and US 23 through urban Portsmouth and New Boston. The Ohio Department of Transportation (ODOT) originally planned to complete the project under a design-build model over three phases and 13 years. After re-evaluating the project, ODOT determined the project could be completed in one four year phase by implementing a DBFOM – Design, Build, Finance, Operate, and Maintain P3 approach. Using this model, the private sector will complete design and construction during a four year period and then provide operations and maintenance for a 35 year period. As the highway will not charge a toll, the private sector is repaid through availability payments through a mix of state and federal Appalachian Development Highway System funds. This approach attracted \$49 million in private equity and is estimated to save the State of Ohio at least 20% compared to the design-build approach for the \$634 million project.
- **Interstate 55 Toll Lanes:** After seeing success with other P3 projects, the State of Illinois is pursuing such an arrangement for Interstate 55 in Greater Chicago. The proposed project calls for construction of an express toll lane in each direction along a 25-mile stretch of the highway. The corridor carries approximately 175,000 vehicles a day. At least 15% of the daily traffic are trucks, making the corridor important for both freight and

commuting. The Illinois Department of Transportation has issued a Request for Information to gather private sector input on the proposal and a joint resolution to enable a P3 approach is moving through the Illinois General Assembly. The state is currently anticipating that if P3 is ultimately implemented, it would involve a revenue risk toll concession with private financing under a DBFOM – Design, Build, Finance, Operate, and Maintain approach.

- Rickenbacker Air Cargo Terminal:** Rickenbacker International Airport, located in Central Ohio, is one of the few cargo-dedicated airports in the world. The airport compliments an intermodal rail terminal, industrial and warehousing development, and a foreign-trade zone to comprise the growing Rickenbacker Inland Port. As the volume of incoming international cargo increased, the need for additional air cargo space became apparent. The Columbus Regional Airport Authority and local businesses created a unique partnership to develop a new \$17 million air cargo facility. The logistics arm of L Brands, a major fashion retailer headquartered in Columbus, developed the new warehouse on ground leased from the airport authority with incentives from local governments and the non-profit JobsOhio. The company, and its third-party operator, are responsible for operation and maintenance of the facility, as well as marketing and attraction. Although this facility was only recently completed in summer of 2016, the number of weekly inbound flights have increased six fold since opening.
- Rickenbacker Intermodal Connector:** Located in close proximity to the aforementioned Rickenbacker International Airport, Rickenbacker Intermodal is a major Norfolk Southern train to truck transfer facility for cargo containers. Its location allows containers to reach Columbus from the Port of Virginia overnight. To provide a grade-separated secondary connection to Rickenbacker Intermodal, Rickenbacker Airport, and the adjacent logistics parks, a collaborative project between multiple local governments, the State of Ohio, and the USDOT was launched. Utilizing a federal grant, the \$12 million improvement was completed in 2015, linking the Rickenbacker area with an east-west connector to U.S. 23. Further phases of the project may include further widening of the connector and an upgraded interchange with U.S. 23.

These projects represent only a sampling of the more innovative partnerships that governments across the region have employed to advance transportation projects. All four states, Illinois, Indiana, Ohio and Pennsylvania, have some form of enabling legislation permitting P3 project structures and each has experience and success implementing such partnerships.

2. Examples of completed infrastructure projects:

Chicago Rail Improvement Program (CREATE) – Comprehensive improvements that include 70 projects: grade separations, chokepoint reductions, viaduct restorations, and safety enhancements. Cost: \$31.5 million. Construction timeframe: 2003-2033.

U.S. 24 Fort to Port: A 90 mile, four-lane highway connection between Ft. Wayne, Indiana (fort) and Toledo, Ohio (port). This project connects Ft. Wayne with the Great Lakes region, Canada, and eastern seaboard. Cost: \$93 million (Indiana) and \$169 million (Ohio). Construction timeframe: 2006-2012 (completed).

I-69 Evansville to Indianapolis: An Interstate highway connecting Evansville, Indiana to Indianapolis, Indiana. This project links to I-69, an interstate that is planned to transverse areas from Mexico to Canada. Cost: \$3.5 billion. Construction timeframe: 2007-2016 (Sections 1-5 of 6 completed).

Voinovich Bridge: An urban inner-belt bridge located in Downtown Cleveland, it is a critical component of the Interstate 90 inner-belt reconstruction. A 1950s bridge replacement, it serves 140,000 motorists a day. This project is innovative in its design-build expedited construction delivery. Cost: \$500 million. Construction timeframe: 2011-2016 (completed).

3. Transportation Infrastructure Finance and Innovation Act (TIFIA)

The federal government's Transportation Infrastructure Finance and Innovation Act (TIFIA) provides multiple protections through credit assistance for partners undertaking large-scale transit-oriented development, intelligent transportation, and surface transportation projects. The program offers secured direct loans with flexible repayment terms, loan guarantees on the full-faith-and-credit of the federal government, and standby lines of credit during the first ten years of project operations.

TIFIA recognizes the challenges of non-traditional financing strategies for transportation projects, given the uncertainty of potential revenue streams derived from tolls, other user-backed revenues, or development-related revenue sources such as tax-increment financing districts. As these revenues can be difficult to predict, especially for new facilities, TIFIA offerings can reduce risk for both public and private partners by providing federal guarantees.

Although the four individual states in the region may not have specific complimentary programs like TIFIA that address risk by private investors, the success of all four in completing transportation improvement or operations/managements projects through the use of public-private partnerships demonstrates that these states understand that some level of risk must be shared by both public and private partners.

4. Smart Columbus – Proposed Technologies

Smart Columbus includes many diverse technologies that will seek to accomplish multiple goals. LED and connected smart street and traffic lights will contribute to energy efficiency. Parking and truck delivery coordination systems will reduce congestion in the downtown core. Connected vehicles will allow trucks to platoon and reduce connections along major freight corridors. A smart transportation card serving all modes of transport will provide for better open data tracking commuting trends. Autonomous vehicles will provide "last mile" connections in Easton, a major mixed-use shopping, office, and residential district, improving access to employment and reducing congestion. While each one of the technologies are impressive in their own right, the major benefit to Columbus, the Midwest region, and the country will be the experimentation and innovation sparked in the context of defining what a smart city means. Further funding will need to be raised. Legislative changes will be needed to support new technologies. Habits may need to be adjusted. These challenges are not taken for granted, but we are confident the Columbus region will prevail because of the initial and immediate commitment of both the public and private sectors that brought about the \$90 million match commitment. Adding Hyperloop connections into the new definition of smart cities will be a benefit to Columbus and Hyperloop alike.

Appendix II

Major Traffic Generators

October 28, 2016

Top 20 Largest Employers by Region

Columbus, OH Region

Employer	Sector	FTE
The Ohio State University	Education	29685
State of Ohio	Government	22030
JP Morgan Chase	Financial Activities	16975
Ohio Health	Health Care	16000
Nationwide Insurance	Financial Activities	11235
United States Government	Government	10800
City of Columbus	Government	8653
Columbus Public Schools	Education	8611
Mt. Carmel Health Systems	Health Care	8448
Honda of America	Manufacturing	7400
Franklin County	Government	6048
Nationwide Children's Hospital	Health Care	5762
Kroger	Retail Trade	5417
Limited Brands	Retail Trade	5200
Huntington Bancshares	Financial Activities	4170
Cardinal Health	Health Care	4030
Medco Health	Health Care	3831
American Electric Power	Utilities	3527
Battelle	Professional Services	2,618
Southwestern City Schools	Education	2500

Source: City of Columbus Economic Development 2016

Top 20 Largest Employers by Region

Pittsburgh, PA Region

Employer	Sector	FTE
UPMC	Health Care	43,000
Highmark Health	Health Care	22,000
US Government	Government	17,347
Commonwealth of Pennsylvania	Government	12,822
University of Pittsburgh	Education	12,386
Giant Eagle	Retail Trade	10,742
BNY Mellon Corp	Financial Activities	7,000
Allegheny County	Government	6,750
Wal-Mart	Retail Trade	6,200
Eat'n Park Hospitality Group	Retail Trade	5,614
Westinghouse Electric Co.	Chemicals/Technology	5,600
United States Steel Corp	Manufacturing	5,121
Carnegie Mellon University	Education	4,663
Excelsa Health	Health Care	4,658
Pittsburg Public Schools	Education	3,899
Verizon Communications	Telecommunications	3,300
City of Pittsburgh	Government	3,082
Heritage Valley Health System	Health Care	3,055
Fed Ex	Logistics	3,000
Allegheny Technologies	Manufacturing	2,900

Source: Pittsburgh Business Times 2016

Top 20 Largest Employers by Region

Lima, OH Region

Employer	Sector	FTE
St. Rita's Medical Center	Health Care	3,000
Lima Building Trades Council	Manufacturing	1,470
Lima Memorial Health System	Health Care	910
Metokote Corporation	Manufacturing	800
Ford Motor Company	Manufacturing	650
Dana Corporation	Manufacturing	621
DTR Industries, Inc.	Manufacturing	611
SpartanNash	Retail Trade	550
University of Northwestern Ohio	Education	530
Plumbers & Pipefitters Local Union 776	Manufacturing	500
Wal-Mart	Retail Trade	450
Husky Lima Refinery	Manufacturing	420
Rudolph Foods Company	Retail Trade	400
Joint Systems Manufacturing	Manufacturing	400
Alfred Nickels Bakery Of Ohio Inc.	Retail Trade	300
Correctional Behavioral Solutions Of Ohio, Inc.	Government	300
Lakeview Farms, Inc.	Retail Trade	300
Oakwood Correctional Facility	Government	292
Procter & Gamble Manufacturing Company	Manufacturing	250
Accubuilt	Manufacturing	230

Source: Allen Economic Development Group 2016

Top 20 Largest Employers by Region

Fort Wayne, IN Region

Employer	Sector	FTE
Parkview Health Systems	Health Care	4,710
Lutheran Health Network	Health Care	4,301
Fort Wayne Community Schools	Education	4,230
General Motors	Manufacturing	3,909
Lincoln Financial Group	Insurance/Health Care	1,970
City of Fort Wayne	Government	1,814
Allen County Government	Government	1,605
BFGoodrich	Rubber Tire Manufacturing	1,580
IPFW	Education	1,255
BAE Systems Platform Solutions	Technology	1,150
Frontier Communications Corp.	Telecommunications	1,150
Raytheon Systems Co.	Technology	950
Harris Corporation	Telecommunications	888
Sweetwater Sound	Technology	850
Steel Dynamics Inc.	Manufacturing	825
Norfolk Southern Corp	Logistics	784
Northwest Allen County Schools	Education	742
Benchmark Human Services	Health Care	683
Vera Bradley	Retail Trade	630
Edy's Grand Ice Cream	Retail Trade	542

Source: Greater Fort Wayne Economic Development 2016

Top 20 Largest Employers by Region

Chicago, IL Region

Employer	Sector	FTE
US Government	Government	42,887
Chicago Public Schools	Education	37,406
City of Chicago	Government	30,276
Cook County	Government	21,795
Advocate Healthcare	Health Care	18,308
University of Chicago	Education	16,197
Northwestern Memorial Healthcare	Health Care	15,317
State of Illinois	Government	15,136
JP Morgan Chase	Financial Activities	14,158
United Continental Holdings	Aviation	14,000
Health Care Service Corp	Health Care	13,006
Walgreens Boots Alliance Inc.	Retail Trade	13,006
Presence Health	Health Care	10,500
Abbott Laboratories	Health Care	10,000
Northwestern University	Education	9,708
Jewel-Osco	Retail Trade	9,660
Chicago Transit Authority	Government	9,510
University of Illinois at Chicago	Education	9,212
American Airlines Group Inc.	Aviation	8,900
Rush University Medical Center	Health Care	8,273

Source: Crain's List 2016

Fortune 500 Company Headquarters by Region

Columbus, OH Region

Company Name	Rank	City
Cardinal Health	21	Dublin, OH
Nationwide Mutual Insurance	69	Columbus, OH
American Electric Power	165	Columbus, OH
L Brands Inc.	234	Columbus, OH
Big Lots	495	Columbus, OH

Pittsburgh, PA Region

Company Name	Rank	City
Dick's Sporting Goods	365	Coraopolis, PA
PPG Industries	182	Pittsburgh, PA
United States Steel	244	Pittsburgh, PA
WESCO International	357	Pittsburgh, PA
PNC Financial	171	Pittsburgh, PA
Kraft Heinz	153	Pittsburgh, PA

Lima, OH Region

Company Name	Rank	City
Marathon Petroleum	42	Findlay, OH

Fort Wayne, IN Region

Company Name	Rank	City
Zimmer Biomet Holdings	431	Warsaw, IN
Steel Dynamics	356	Ft. Wayne, IN

Chicago, IL Region

Company Name	Rank	City
Boeing	24	Chicago, IL
Archer Daniels Midland	41	Chicago, IL
Walgreen Boots Alliance	19	Deerfield, IL
United Continental Holdings, Inc.	80	Chicago, IL
The Allstate Corporation	81	Northbrook, IL
Mondelez International, Inc.	94	Deerfield, IL
Sears Holdings Corporation	111	Hoffman Estates, IL
McDonald's Corporation	109	Oak Brook, IL
Exelon Corporation	95	Chicago, IL
US Foods, Inc.	122	Rosemont, IL
Abbott Laboratories	138	Abbott Park, IL
AbbVie Inc.	123	North Chicago, IL
Kraft Heinz	153	Northfield, IL
Baxter International Inc.	286	Deerfield, IL
Illinois Tool Works Inc.	211	Glenview, IL
CDW Corporation	220	Vernon Hills, IL
R.R. Donnelley & Sons Company	255	Chicago, IL
Navistar International Corporation	281	Lisle, IL
W.W. Grainger, Inc.	285	Lake Forest, IL
Discover Financial Services	283	Riverwoods, IL
Motorola Solutions, Inc.	451	Schaumburg, IL
LKQ Corporation	369	Chicago, IL
Anixter International Inc.	391	Glenview, IN
Packaging Corp of America	446	Lake Forest, IL

Chicago, IL Region Cont.

Company Name	Rank	City
Ingredion Incorporated	456	Westchester, IL
Old Republic International Corp.	442	Chicago, IL
Jones Lang LaSalle	436	Chicago, IL
Essendant	477	Deerfield, IL
Univar	315	Downers Grove, IL
Telephone & Data Systems	496	Chicago, IL

Source: Forbes 2016

Appendix III

Data Tables

October 28, 2016

NETWORK SUMMARY

Proposed Hyperloop Network Summary Sheet

This is sample data, please replace with actual data for your corridor

	Ref	km on Corridor	Location	Catchment Area	Population	Employment	Avg Household Income	Avg Household Car Ownership	Other Information
Chicago	A	0	http://arcgiswebadp1.morn.com/webadaptor/ras/servlets/image-hyperloop/MapServer/kml/mag/image.kml		9,550,108	4,681,500	\$63,153	1.62	
Columbus	B	493	Same as above		2,021,632	1,021,600	\$58,192	1.79	
Pittsburgh	C	785	Same as above		2,353,045	1,156,200	\$54,080	1.66	

2015 PASSENGER FLOWS, BOTH DIRECTIONS

Origin/Destination Pairings	Auto*	Airline**	Total
OD 1: Chicago and Columbus	190,562	414,750	605,312
OD 2: Chicago and Pittsburgh	26,597	396,600	423,197
OD 3: Columbus and Pittsburgh	479,973	-	479,973
Total	697,132	811,350	1,508,482

Source:

*Ohio Statewide Traffic Forecasting Model

<http://www.dot.state.oh.us/Divisions/Planning/SPR/ModelForecastingUnit/Pages/TravelDemandModeling.aspx>

Catchment Areas - Auto***:

OD 1: all TAZs (Traffic Analysis Zones in statewide model) within 60-min travel time to the potential Hyperloop stations in Chicago and Columbus, respectively

OD 2: all TAZs within 60-min travel time to the potential Hyperloop stations in Chicago and Pittsburgh, respectively

OD 3: all TAZs within 60-min travel time to the potential Hyperloop stations in Columbus and Pittsburgh, respectively (excluding

** The Airline Origin and Destination Survey (Table DB1BMarket, 2015 Q1, Q2, Q3 and Q4)

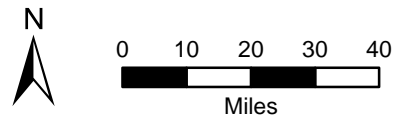
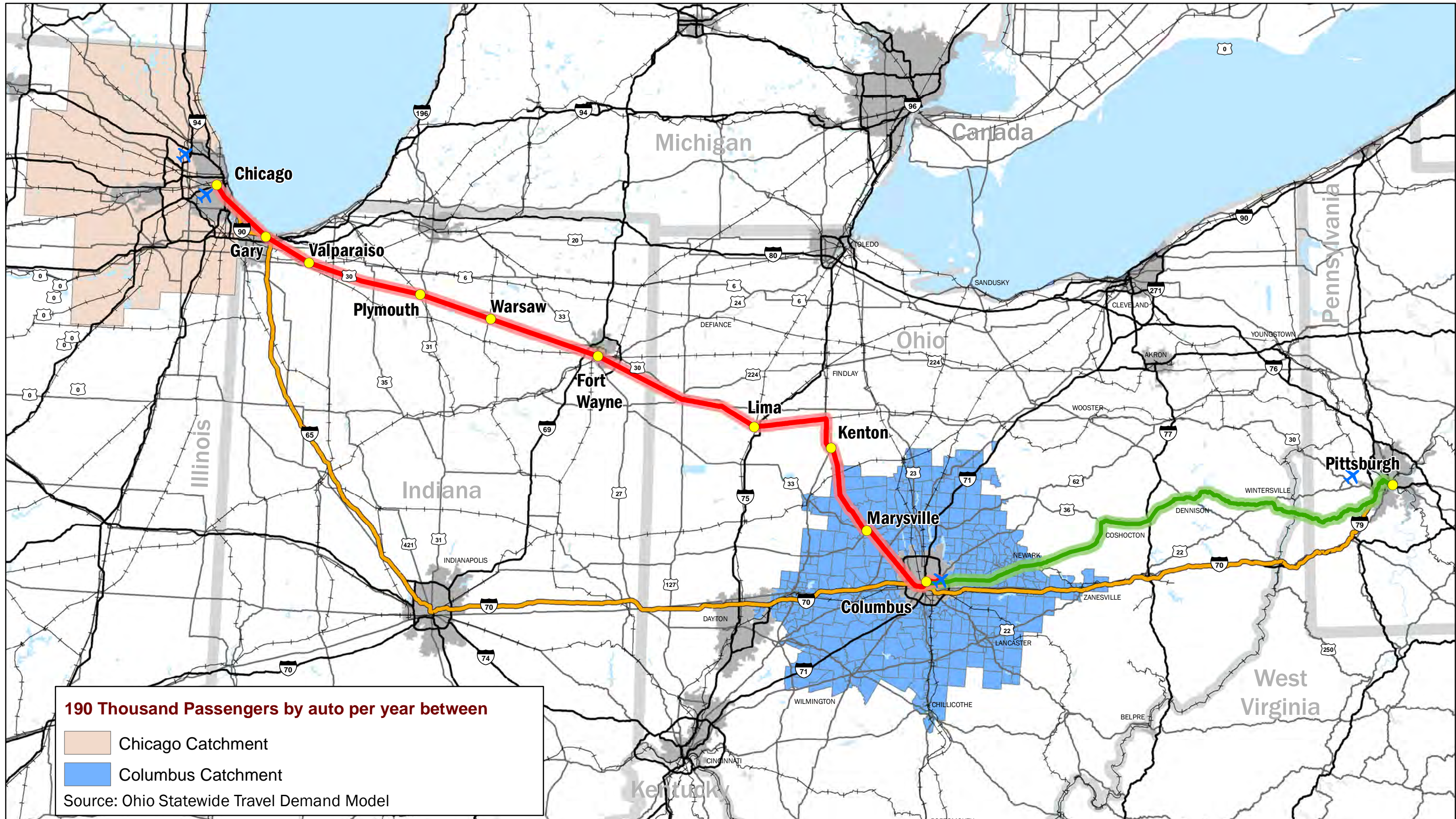
http://www.transtats.bts.gov/DatabaselInfo.asp?DB_ID=125

Airports considered***:

OD 1: ORD and MDW in Chicago; CMH in Columbus

OD 2: ORD and MDW in Chicago; PIT in Pittsburgh

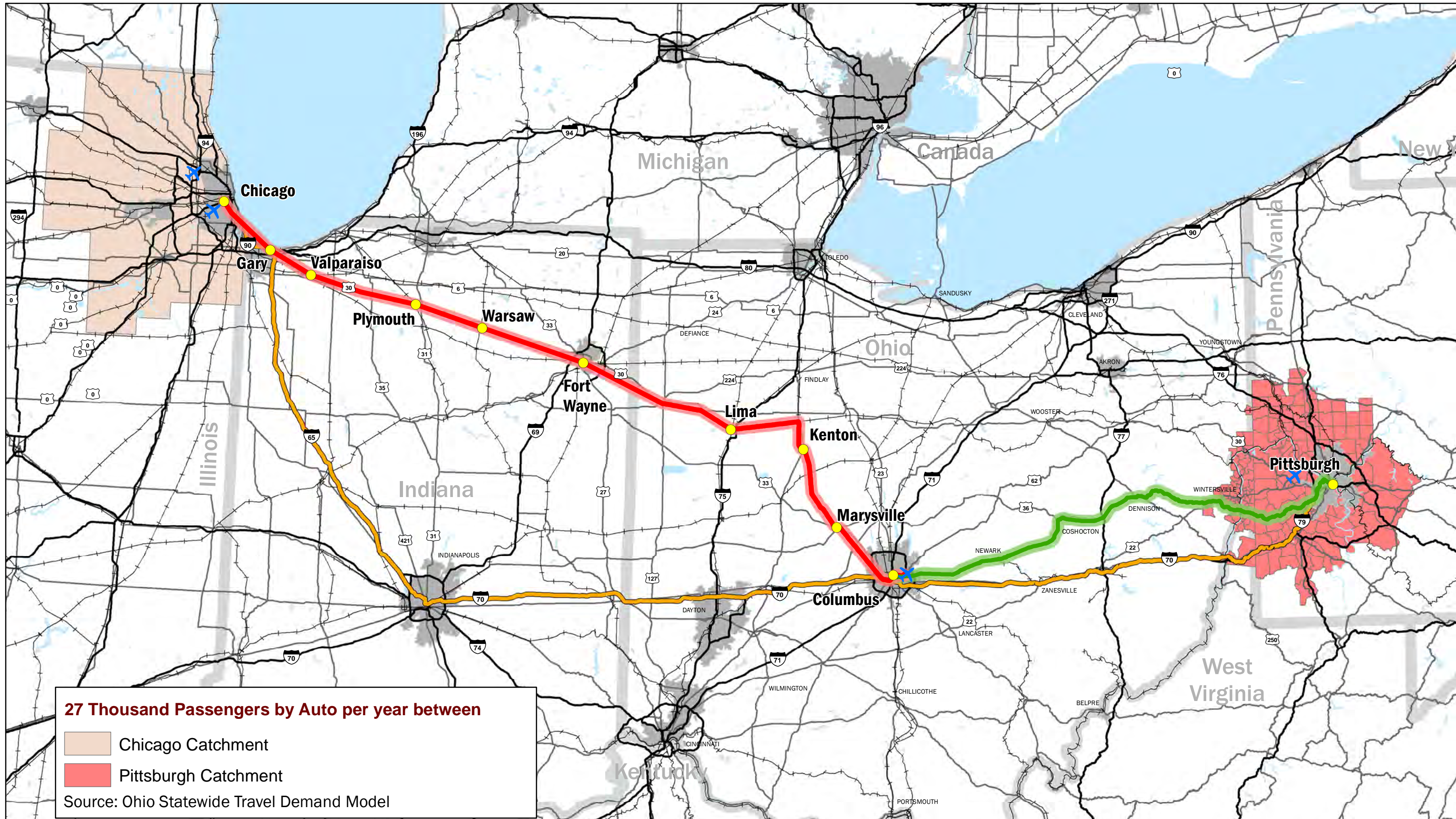
*****see attached maps for better illustration**



- Proposed Rail Stop
- Chicago to Columbus Rail Corridor
- Columbus to Pittsburgh Rail Corridor
- Interstate Connection
- Airport
- Railroad
- Urban Area

Passenger Auto Catchments between Chicago and Columbus

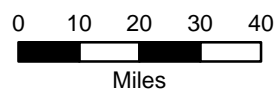
Columbus to Chicago: 306 miles
 Columbus to Pittsburgh: 182 miles



27 Thousand Passengers by Auto per year between

- Chicago Catchment
- Pittsburgh Catchment

Source: Ohio Statewide Travel Demand Model

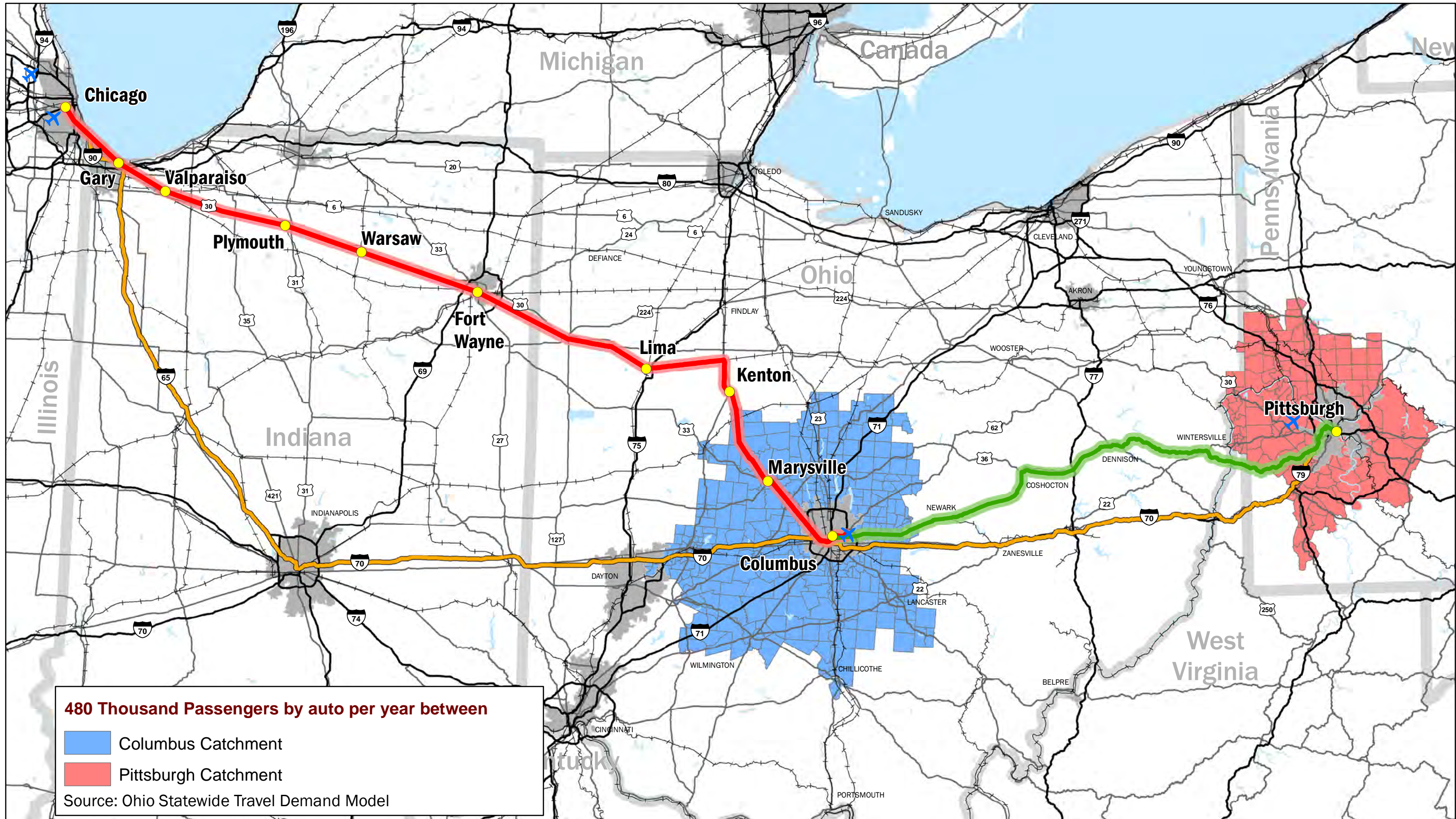


- Proposed Rail Stop
- Chicago to Columbus Rail Corridor
- Columbus to Pittsburgh Rail Corridor
- Interstate Connection
- Airport
- Railroad
- Urban Area

**Passenger Auto Catchment
between Chicago and Pittsburgh**
 Columbus to Chicago: 306 miles
 Columbus to Pittsburgh: 182 miles



The information shown on this map is compiled from various sources made available to us which we believe to be reliable.
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 10/27/2016



The information shown on this map is compiled from various sources made available to us which we believe to be reliable.
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 10/27/2016



- Proposed Rail Stop
- Chicago to Columbus Rail Corridor
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Passenger Auto Catchment between Columbus and Pittsburgh

Columbus to Chicago: 306 miles
 Columbus to Pittsburgh: 182 miles

2015 AND 2040 CARGO FLOW SUMMARY (BOTH DIRECTIONS)

2015 Total Freight

Origin/Destination Pairings	Airline		Rail		Truck		Total	
	weight (kton)	value (million \$)	weight (kton)	value (million \$)	weight (kton)	value (million \$)	weight (kton)	value (million \$)
OD 1: Chicago and Columbus	12	741.84	1107.43	715.58	2053.6	5349.24	3173.03	6806.66
OD 2: Chicago and Pittsburgh	3.81	1,218.63	438.31	262.67	1,125.26	2,736.76	1,567.38	4,218.06
OD 3: Columbus and Pittsburgh	0.16	3.70	12.81	3.44	1,169.70	5,638.00	1,182.67	5,645.14
Total	15.97	1,964.17	1,558.55	981.69	4,348.56	13,724.00	5,923.08	16,669.86

2015 Time-sensitive Freight**

Origin/Destination Pairings	Airline		Rail		Truck		Total	
	weight (kton)	value (million \$)	weight (kton)	value (million \$)	weight (kton)	value (million \$)	weight (kton)	value (million \$)
OD 1: Chicago and Columbus	4.51	309.71	9.61	151.82	474.57	1425.67	488.69	1887.2
OD 2: Chicago and Pittsburgh	2.46	1,151.36	1.71	20.47	195.30	616.26	199.47	1,788.09
OD 3: Columbus and Pittsburgh	0.05	2.03	-	-	115.85	2,541.90	115.90	2,543.93
Total	7.02	1,463.10	11.32	172.29	785.72	4,583.83	804.06	6,219.22

2040 Total Freight

Origin/Destination Pairings	Airline		Rail		Truck		Total	
	weight (kton)	value (million \$)	weight (kton)	value (million \$)	weight (kton)	value (million \$)	weight (kton)	value (million \$)
OD 1: Chicago and Columbus	34	2549.61	1657.56	1540.3	3082.89	8304.04	4774.45	12393.95
OD 2: Chicago and Pittsburgh	11.75	3,392.21	810.55	525.49	1,715.51	4,259.83	2,537.81	8,177.53
OD 3: Columbus and Pittsburgh	0.33	11.34	21.30	5.73	1,714.77	10,492.64	1,736.40	10,509.71
Total	46.08	5,953.16	2,489.41	2,071.52	6,513.17	23,056.51	9,048.66	31,081.19

2040 Time-sensitive Freight**

Origin/Destination Pairings	Airline		Rail		Truck		Total	
	weight (kton)	value (million \$)	weight (kton)	value (million \$)	weight (kton)	value (million \$)	weight (kton)	value (million \$)
OD 1: Chicago and Columbus	15.67	1356.16	33.66	541.45	729.02	2404.42	778.35	4302.03
OD 2: Chicago and Pittsburgh	8.56	3,219.78	6.11	72.59	337.13	1,110.38	351.80	4,402.75
OD 3: Columbus and Pittsburgh	0.12	7.06	-	-	232.55	6,111.38	232.67	6,118.44
Total	24.35	4,583.00	39.77	614.04	1,298.70	9,626.18	1,362.82	14,823.22

Source:

*Freight Analysis Framework Version 4 (FAF4) <http://faf.ornl.gov/fafweb/>

Catchment Areas***:

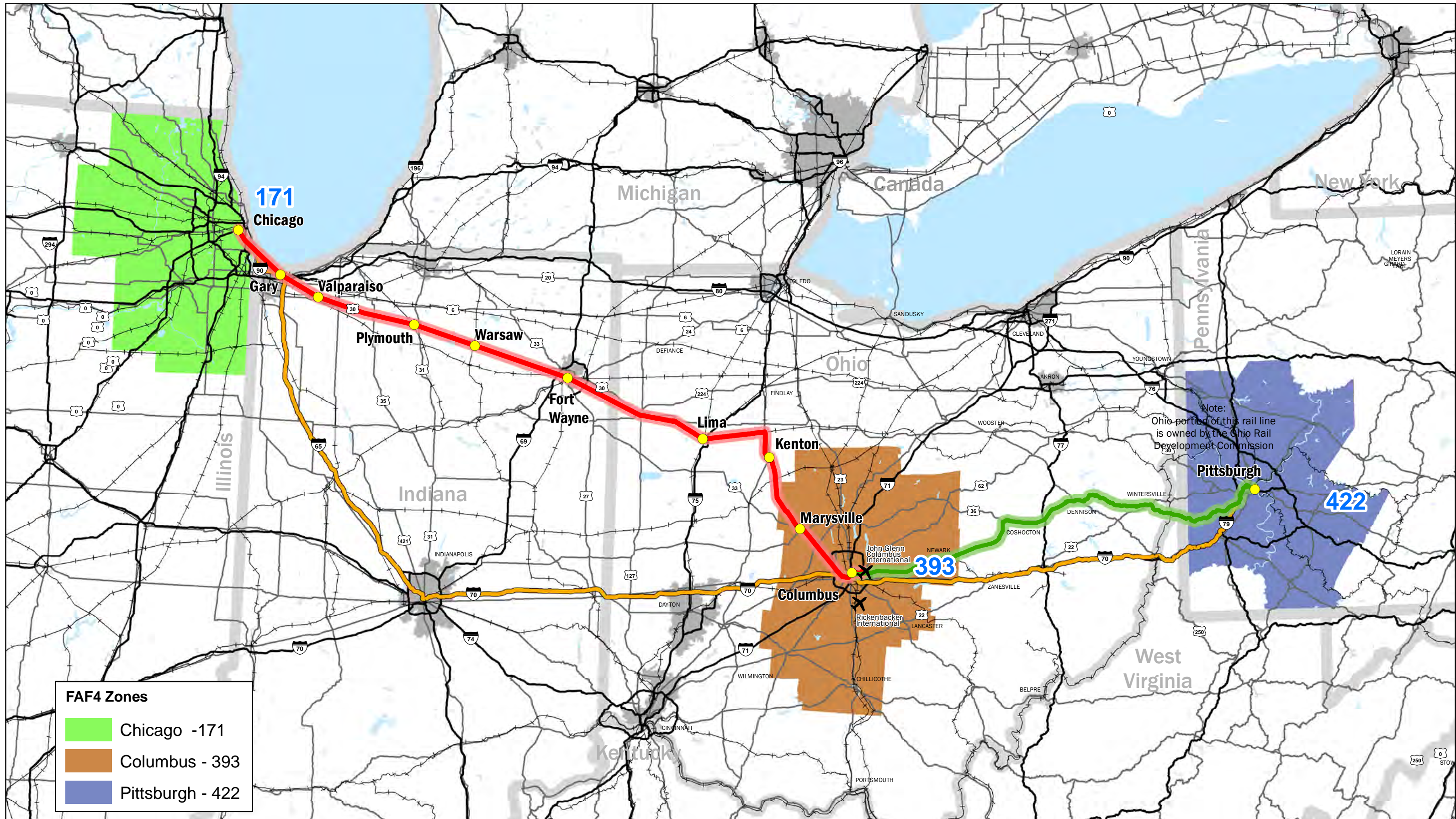
Chicago - FAF4 Zone 171

Columbus - FAF4 Zone 393

Pittsburgh - FAF4 Zone 422

** Time-Sensitive Freight: Electronics, Pharmaceuticals, Live animal/fish, Textiles, Chemicals, Precision instruments, Meat/seafood

***see attached maps for better illustration



FAF4 Zones

- Chicago - 171
- Columbus - 393
- Pittsburgh - 422

Note:
Ohio portion of this rail line
is owned by the Ohio Rail
Development Commission



- Proposed Rail Stop
- Chicago to Columbus Rail Corridor
- Columbus to Pittsburgh Rail Corridor
- Interstate Connection
- Airport
- Railroad
- Urban Area

Cargo Catchment Area

Columbus to Chicago: 306 miles
Columbus to Pittsburgh: 182 miles

Appendix IV

Memorandums of Agreement

October 28, 2016

MEMORANDUM OF AGREEMENT

BY AND AMONG THE FOLLOWING PARTIES (hereinafter, “**the Parties**”) City of Columbus, Ohio; City of Lima, Ohio; City of Kenton, Ohio; City of Marysville, Ohio; City of Fort Wayne, Indiana; City of Warsaw, Indiana; City of Plymouth, Indiana; City of Valparaiso, Indiana; City of Gary, Indiana; the Mid-Ohio Regional Planning Commission; and the Indiana Department of Transportation.

BE IT KNOWN THAT:

WHEREAS, utilizing the Northern Indiana / Ohio Passenger Rail Corridor Feasibility Study and Business Plan as a basis for action, the Parties propose to systematically and incrementally develop the intercity passenger rail system in cooperation with existing freight rail operators and owners of right-of-way along a corridor from Chicago to Columbus through northern Indiana hereafter known as the **Northern Indiana/Ohio Passenger Rail Initiative**; and

WHEREAS, a well-coordinated transportation system of rail, air, highways, and water provide economic benefits and efficiencies to all municipalities along and in close proximity to the rail line; and

WHEREAS, Chicago is the largest economic center of the Midwest and creating another transportation link between this Midwest hub and a growth corridor stretching through Northern Indiana to Columbus will make the entire corridor more economically competitive and stimulate economic benefits to the cities, counties, villages, and townships along and in close proximity to the line, according to the Northern Indiana/Ohio Passenger Rail Corridor Feasibility Study and Business Plan; and

WHEREAS, each of the major municipalities along the corridor contributes unique economic strengths that benefit the entire corridor:

The capitol of the State of Ohio, Columbus, within Franklin County (pop. 1,195,537) are home to Nationwide Mutual Insurance, Limited Brands, Huntington Bancshares, Cardinal Health, American Electric Power, Battelle Memorial Institute, Chemical Abstracts, Wendy’s, Bob Evans, Big Lots, and The Ohio State University, as well as regional facilities of JPMorgan Chase, The Kroger Company, Express Scripts, and Alliance Data Retail Systems.

Marysville, Ohio and Union County (pop. 52,300), one of the fastest growing areas of Ohio, are home to the North American headquarters of Honda of America Mfg., Inc., the world headquarters of the Scotts Miracle-Gro Company, Veyance Technologies (formerly Goodyear) and Parker Hannifin.

Kenton, Ohio and Hardin County (pop. 32,058), provide a transportation hub, as six state and federal highways travel through the City, including U.S. Route 68 and State Routes 53, 67, 31, 309, and 292. Hardin County is seen as a manufacturing, agriculture, and educational center because of the presence of a dynamic blend of major manufacturers, a diverse agriculture base, and one of the nation’s finest private universities.

Lima, Ohio and Allen County (pop. 105, 825) are a regional hub for manufacturing such as Ford Motor Company, Procter & Gamble, Dana, General Dynamics, Husky Energy,

Ashland Chemicals, PCS Nitrogen, Ineos, Linde, American Trim and Metokote.

Fort Wayne, Indiana and Allen County (pop. 355,329) offer cultural attractions, arts, and theater that rival those of the United States' larger metropolitan cities. Attractions such as Fort Wayne Children's Zoo, Science Central, and Tin Caps minor league baseball offer something for everyone. The city is home to Fortune 500 Company Steel Dynamics, Inc. and numerous other manufacturing-related businesses.

Warsaw, Indiana and Kosciusko County (pop. 77,609) are home to many prominent orthopedic companies including DePuy, Zimmer / Biomet, and Medtronic, totaling \$11 billion in annual sales, representing 1/3 of the world's orthopedics sales volume, and representing an employment base of 13,000 direct and indirect jobs. Grace College & Seminary in Winona Lake offers its 1,600 students a diverse environment with high academic standards in over 60 majors.

Plymouth, Indiana and Marshall County (pop. 47,024) have the advantage of being centrally located between Chicago, Indianapolis, and Detroit. With its small town feel and big city proximity, it is the perfect location to call home or to locate a business. Internationally-recognized Culver Academies, hosting secondary students from 19 countries and 41 states, is the largest single employer within Marshall County.

Valparaiso, Indiana and Porter County (pop. 165,682) are located in the northwest corner of the state and are considered part of the Chicago Metropolitan area. Valparaiso University, an independent Lutheran, liberal arts institution with 3,000 undergraduates and 1,000 law and graduate students from most U.S. states and 50 countries, calls the city home.

Gary, Indiana and Lake County, Indiana (pop. 80,294) are located in the southeastern portion of the Chicago metropolitan area. Gary, known for its steel-manufacturing legacy, seeks to capitalize on its proximity to the Midwest region's economic core with a major public - private development partnership centered on the Gary - Chicago International Airport.

WHEREAS, there are 141 institutions of higher education located within 25 miles of the railheads designated in the Feasibility Study and Business Plan for the passenger rail corridor, and there are more than 896,000 students enrolled at these 141 institutions; and

WHEREAS, an economically vibrant Midwest will provide a higher quality of life for its residents; and

WHEREAS, the passenger rail corridor, in cooperation with the owners of the existing rail right-of-way, would accommodate both future high speed passenger rail and freight rail service within the corridor by utilizing and improving the existing track configuration and rail crossings; and

WHEREAS, it is the intent and purpose of this Agreement to continue to cultivate a working relationship among the parties to facilitate the development and implementation of passenger rail service, and to plan for future integration of the Northern Indiana / Ohio Corridor into a larger regional and national passenger rail network; and

WHEREAS, high speed rail encourages higher-density, mixed-use development at or near

stations, improves business productivity, expands visitor opportunities, broadens regional labor markets, and helps support the growth of technology clusters, according to the U.S. Conference of Mayors report, “The Economic Impacts of High Speed Rail on Cities and their Metropolitan Areas”; and

WHEREAS, the Parties propose to act in partnership with the Federal Railroad Administration (FRA) in advancing the development of an inter-city passenger rail corridor on existing right-of-way linking several communities in the states of Ohio, Indiana, and Illinois; and

WHEREAS, it is necessary for municipal and county governmental and regional planning jurisdictions in the three States to jointly undertake and coordinate a variety of tasks in order to realize the objective of creating an inter-city passenger rail corridor mutually benefitting the constituencies served by such governments and planning authorities; and

WHEREAS, significant interstate, regional and inter-local cooperation will be required to coordinate the planning and predevelopment of high speed passenger rail service within this corridor, including tasks of procuring and administering grants; acquiring allocations from the States or from political subdivisions of the States, or from the Federal government; soliciting assistance from private corporations and from other organizations both public and private; and

WHEREAS, the Parties are or may be involved, individually or collectively, in the planning and funding, of inter-city passenger rail transportation services within the corridor, including linkages between surface and air transportation modes; and

WHEREAS, one or more of the Parties or a consortium of the Parties may subsequently agree to collaborate to make available such administrative and coordinating support as may be necessary to the successful fulfillment of the purposes of this Agreement;

NOW THEREFORE, BE IT RESOLVED: That the Parties will cooperate with each other in order to enable a **Tier One Environmental Impact Study (EIS)** and related documents as required by regulations adopted and published by the FRA, and as required by the FRA for their approval of inter-city passenger rail corridors, and to proceed with the EIS at the earliest opportunity;

AND IN FURTHERANCE OF THAT RESOLUTION, THE PARTIES AGREE:

- (1) To cooperate in such joint budgeting, fund-raising, appropriation and procurement activities as may be necessary to obtain the planning, environmental, engineering, and operational analyses required by the FRA for completion of a Tier One EIS;
- (2) To explore the funding needed for the Tier One EIS process and to determine in a fair manner the amount needed from each participating jurisdiction hereafter by the Parties and specified in a separate agreement;
- (3) To participate together with representatives of the Parties in such planning, coordinating, and decision-making activities as may be required from time to time, particularly to guide the bid and contractor selection process, and to manage, evaluate, and complete the EIS;
- (4) To furnish such information whether to the Parties in their collective capacity, to the EIS contractor, or to the FRA, as may be necessary for the completion of the various analyses required by the Tier One EIS process;
- (5) To endeavor in good faith to secure funding, consistent with and in accordance with the

- schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
 - (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
 - (8) To explore the establishment of a management structure for the project, governed by a board of directors appointed by the Parties, to serve as the project manager and provide advocacy, branding, fundraising, and project development and execution on behalf of the parties.
 - (9) This MOA constitutes the entire agreement among the parties, and no changes or modifications to this MOA shall be made unless agreed to by all parties to this MOA in writing; and
 - (10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

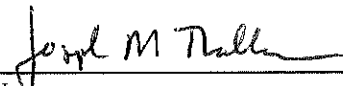
This Memorandum of Agreement is approved by:

Name	Title/Organization	Date
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- schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
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 - (10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

This Memorandum of Agreement is approved by:

	Mayor, City of Warsaw, Indiana	8-6-2014
Name	Title/Organization	Date
Joseph M. Thallemer		

RESOLUTION NO. 14-012

**A RESOLUTION AUTHORIZING THE CITY OF KENTON,
OHIO TO ENTER INTO A MEMORANDUM OF
AGREEMENT FOR THE PARTICIPATION IN THE
NORTHERN INDIANA/OHIO PASSENGER RAIL
INITIATIVE AND DECLARING AN EMERGENCY.**

WHEREAS, in conjunction with the City of Kenton, Ohio, the City of Columbus, Ohio, City of Lima, Ohio, City of Marysville, Ohio, City of Fort Wayne, Indiana, City of Warsaw, Indiana, City of Plymouth, Indiana, City of Valparaiso, Indiana, City of Gary, Indiana, and the Mid-Ohio Regional Planning Commission have proposed to systematically and incrementally develop a intercity passenger rail system in cooperation with existing freight rail operators and owners of right-of-way along a corridor from Chicago to Columbus through northern Indiana (the “Northern Indiana/Ohio Passenger Rail Initiative”);

WHEREAS, a passenger rail corridor established by the Northern Indiana/Ohio Passenger Rail Initiative would, in cooperation with the owners of the existing rail right-of-way, accommodate both future high speed passenger rail and freight rail service within the corridor by utilizing and improving the existing track configuration and rail crossings;

WHEREAS, the above-mentioned parties desire to enter into a Memorandum of Agreement to continue to cultivate a working relationship among the parties and the Federal Railroad Administration to facilitate the development and implementation of passenger rail service and to plan for future integration of the Northern Indiana/Ohio Corridor into a larger regional and national rail network; and

WHEREAS, the Council of the City of Kenton now desires to enter into this Resolution to approve the Memorandum of Agreement and authorize the Mayor to execute the Memorandum of Agreement.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Kenton, Ohio:

SECTION I. That the Council hereby authorizes the City of Kenton to enter into a Memorandum of Agreement in substantially the form attached hereto as Exhibit A and the Mayor be and is hereby authorized and directed to execute the above described agreement.


SECTION II. This Resolution shall be an emergency measure for the immediate and best protection of the public peace, health, safety, and welfare, the particular emergency being the need to timely coordinate and participate in the Northern Indiana/Ohio Passenger Rail Initiative. Therefore, if passed by the requisite two-thirds of all members elected to Council, this Resolution shall be in force and effect from and after its approval by the Mayor; otherwise, from and after the earliest period allowed by law.

Passed this 25th day of August, 2014.



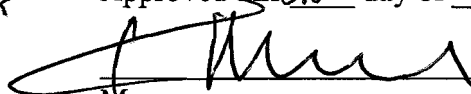
President of Council

Attest:



Clerk

Approved this 25th day of August, 2014.

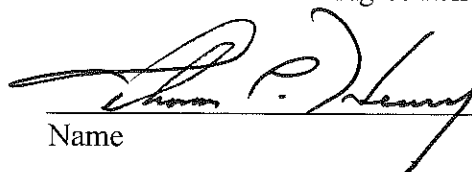


Mayor

Editor's Note Randy Mann, Mayor

- (3) To participate together with representatives of the Parties in such planning, coordinating, and decision-making activities as may be required from time to time, particularly to guide the bid and contractor selection process, and to manage, evaluate, and complete the EIS;
- (4) To furnish such information whether to the Parties in their collective capacity, to the EIS contractor, or to the FRA, as may be necessary for the completion of the various analyses required by the Tier One EIS process;
- (5) To endeavor in good faith to secure funding, consistent with and in accordance with the schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
- (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
- (8) To explore the establishment of a management structure for the project, governed by a board of directors appointed by the Parties, to serve as the project manager and provide advocacy, branding, fundraising, and project development and execution on behalf of the parties.
- (9) This MOA constitutes the entire agreement among the parties, and no changes or modifications to this MOA shall be made unless agreed to by all parties to this MOA in writing; and
- (10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

This Memorandum of Agreement is approved by:

	<i>MAYOR</i>	<i>8/19/14</i>
Name	Title/Organization	Date

Editor's Note, Thomas Henry, Mayor, City of Fort Wayne

- schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
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This Memorandum of Agreement is approved by:



Mayor, City of Columbus

9/5/2014


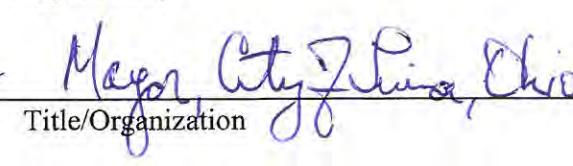
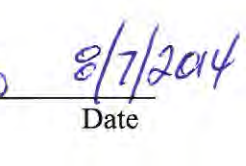
Name

Title/Organization

Date

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This Memorandum of Agreement is approved by:

		
Name	Title/Organization	Date


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This Memorandum of Agreement is approved by:

<i>Robert H. Zee</i>	<i>Director Multimodal Planning Program</i>	<i>August 12, 2014</i>
Name	Title/Organization	Date
	<i>INDOT</i>	

- schedule and project expenditure plan as approved by the Parties in their collective capacity;
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This Memorandum of Agreement is approved by:

	<i>Mayor City of Plymouth</i>	<i>8-12-14</i>
Name	Title/Organization	Date

regulations adopted and published by the FRA, and as required by the FRA for their approval of inter-city passenger rail corridors, and to proceed with that Study at the earliest opportunity;
AND IN FURTHERANCE OF THAT RESOLUTION, THE PARTIES ALL AGREE:

- (1) To cooperate in such joint budgeting, fund-raising, appropriation and procurement activities as may be necessary to obtain the planning, environmental, engineering, and operational analyses required by the Federal Railroad Administration for completion of an EIS;
- (2) To contribute to the support and funding of the EIS process as a participating jurisdiction in a fair manner in an amount to be determined hereafter by the Parties and specified in a separate agreement;
- (3) To participate together with representatives of the Parties in such planning, coordinating, and decision-making activities as may be required from time to time, particularly to guide the bid and contractor selection process, and to manage, evaluate, and complete the EIS;
- (4) To furnish such information whether to the Parties in their collective capacity, to the EIS contractor, or to the Federal Railroad Administration, as may be necessary to the completion of the various analyses required by the Tier One EIS process;
- (5) To endeavor in good faith to secure funding, consistent with and in accordance with the schedule and project expenditure plan as approved by each of the Parties;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
- (7) That the Parties of the Northern Indiana / Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute; recession of existing law; change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Northern Indiana / Ohio Corridor and any partners shall take steps to notify each other as needed in a timely manner;
- (8) To explore the establishment of a management structure for the project, governed by a board of directors appointed by the Parties, to serve as the project manager and provide advocacy, branding, fundraising, and project development and execution on behalf of the parties; and

This Memorandum of Agreement is approved by:

Jon Costas		Mayor City of Valparaiso	September 9, 2014
Name	Signature	Title/Organization	Date

schedule and project expenditure plan as approved by the Parties in their collective capacity;

- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
- (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
- (8) To explore the establishment of a management structure for the project, governed by a board of directors appointed by the Parties, to serve as the project manager and provide advocacy, branding, fundraising, and project development and execution on behalf of the parties.
- (9) This MOA constitutes the entire agreement among the parties, and no changes or modifications to this MOA shall be made unless agreed to by all parties to this MOA in writing; and
- (10) Upon consent of the original parties to the MOA, additional

  
Name Title/Organization Date

parties may become signatories to the MOA.

This Memorandum of Agreement is approved by:

Amendment No. 1 to the Memorandum of Agreement

BY AND AMONG THE FOLLOWING PARTIES (hereinafter, "**the Parties**") City of Columbus, Ohio; City of Lima, Ohio; City of Kenton, Ohio; City of Marysville, Ohio; City of Fort Wayne, Indiana; City of Warsaw, Indiana; City of Plymouth, Indiana; City of Valparaiso, Indiana; City of Gary, Indiana; and the Mid-Ohio Regional Planning Commission;

WHEREAS, the Parties signed an Memorandum of Agreement (MOA) effective August 6, 2014 to cooperate with each other in order to enable a Tier One Environmental Impact Study (EIS) and related documents as required by regulations adopted and published by the FRA, and as required by the FRA for their approval of inter-city passenger rail corridors, and to proceed with the EIS at the earliest opportunity; and

WHEREAS, in accordance with Item (9) and Item (10) of the MOA:

(9) This MOA constitutes the entire agreement among the parties, and no changes or modifications to this MOA shall be made unless agreed to by all parties to this MOA in writing; and

(10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

NOW, THEREFORE, the parties hereto agree to amend the MOA to include the following parties (revisions indicated in bold lettering):

BE IT KNOWN THAT:

WHEREAS, the Parties agree to extend the MOA to include county governments with a proposed stop along the growth corridor, including Franklin County, Ohio; Union County, Ohio; Hardin County, Ohio; Allen County, Ohio; Allen County, Indiana; Kosciusko County, Indiana; Marshall County, Indiana; Porter County, Indiana; and Lake County, Indiana; and

WHEREAS, the Parties agree to extend the MOA to include all Metropolitan Planning Organizations along the growth corridor, including the Lima-Allen County Regional Planning Commission; Northeastern Indiana Regional Coordinating Council; Michiana Area Council of Governments; and Northwest Indiana Regional Planning Commission;

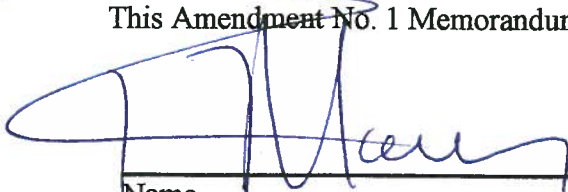
WHEREAS, by signing this Amendment once the Parties have signed it, the county governments and Metropolitan Planning Organizations listed above agree to Items (1) to (10) of the MOA effective August 6, 2014;

This Amendment No. 1 Memorandum of Agreement is approved by:

Name

Title/Organization

Date

Amendment No. 1 to the Memorandum of Agreement

BY AND AMONG THE FOLLOWING PARTIES (hereinafter, **“the Parties”**) City of Columbus, Ohio; City of Lima, Ohio; City of Kenton, Ohio; City of Marysville, Ohio; City of Fort Wayne, Indiana; City of Warsaw, Indiana; City of Plymouth, Indiana; City of Valparaiso, Indiana; City of Gary, Indiana; and the Mid-Ohio Regional Planning Commission;

WHEREAS, the Parties signed an Memorandum of Agreement (MOA) effective August 6, 2014 to cooperate with each other in order to enable a Tier One Environmental Impact Study (EIS) and related documents as required by regulations adopted and published by the FRA, and as required by the FRA for their approval of inter-city passenger rail corridors, and to proceed with the EIS at the earliest opportunity; and

WHEREAS, in accordance with Item (9) and Item (10) of the MOA:

(9) This MOA constitutes the entire agreement among the parties, and no changes or modifications to this MOA shall be made unless agreed to by all parties to this MOA in writing; and

(10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

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WHEREAS, the Parties agree to extend the MOA to include all Metropolitan Planning Organizations along the growth corridor, including the Lima-Allen County Regional Planning Commission; Northeastern Indiana Regional Coordinating Council; Michiana Area Council of Governments; and Northwest Indiana Regional Planning Commission;

WHEREAS, by signing this Amendment once the Parties have signed it, the county governments and Metropolitan Planning Organizations listed above agree to Items (1) to (10) of the MOA effective August 6, 2014;

This Amendment No. 1 Memorandum of Agreement is approved by:


Name _____ Title/Organization Mayor, City of Lima, Ohio Date 1/13/2015

Amendment No. 1 to the Memorandum of Agreement

BY AND AMONG THE FOLLOWING PARTIES (hereinafter, "**the Parties**") City of Columbus, Ohio; City of Lima, Ohio; City of Kenton, Ohio; City of Marysville, Ohio; City of Fort Wayne, Indiana; City of Warsaw, Indiana; City of Plymouth, Indiana; City of Valparaiso, Indiana; City of Gary, Indiana; and the Mid-Ohio Regional Planning Commission;

WHEREAS, the Parties signed an Memorandum of Agreement (MOA) effective August 6, 2014 to cooperate with each other in order to enable a Tier One Environmental Impact Study (EIS) and related documents as required by regulations adopted and published by the FRA, and as required by the FRA for their approval of inter-city passenger rail corridors, and to proceed with the EIS at the earliest opportunity; and

WHEREAS, in accordance with Item (9) and Item (10) of the MOA:

(9) This MOA constitutes the entire agreement among the parties, and no changes or modifications to this MOA shall be made unless agreed to by all parties to this MOA in writing; and

(10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

NOW, THEREFORE, the parties hereto agree to amend the MOA to include the following parties (revisions indicated in bold lettering):

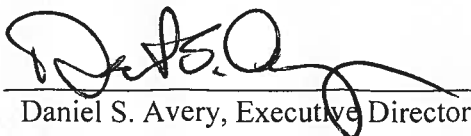
BE IT KNOWN THAT:

WHEREAS, the Parties agree to extend the MOA to include county governments with a proposed stop along the growth corridor, including Franklin County, Ohio; Union County, Ohio; Hardin County, Ohio; Allen County, Ohio; Allen County, Indiana; Kosciusko County, Indiana; Marshall County, Indiana; Porter County, Indiana; and Lake County, Indiana; and

WHEREAS, the Parties agree to extend the MOA to include all Metropolitan Planning Organizations along the growth corridor, including the Lima-Allen County Regional Planning Commission; Northeastern Indiana Regional Coordinating Council; Michiana Area Council of Governments; and Northwest Indiana Regional Planning Commission;

WHEREAS, by signing this Amendment once the Parties have signed it, the county governments and Metropolitan Planning Organizations listed above agree to Items (1) to (10) of the MOA effective August 6, 2014;

This Amendment No. 1 Memorandum of Agreement is approved by:


Daniel S. Avery, Executive Director

Northeastern Indiana Regional
Coordinating Council

June 02, 2015

Date

Amendment No. 1 to the Memorandum of Agreement

BY AND AMONG THE FOLLOWING PARTIES (hereinafter, “**the Parties**”) City of Columbus, Ohio; City of Lima, Ohio; City of Kenton, Ohio; City of Marysville, Ohio; City of Fort Wayne, Indiana; City of Warsaw, Indiana; City of Plymouth, Indiana; City of Valparaiso, Indiana; City of Gary, Indiana; and the Mid-Ohio Regional Planning Commission;

WHEREAS, the Parties signed an Memorandum of Agreement (MOA) effective August 6, 2014 to cooperate with each other in order to enable a Tier One Environmental Impact Study (EIS) and related documents as required by regulations adopted and published by the FRA, and as required by the FRA for their approval of inter-city passenger rail corridors, and to proceed with the EIS at the earliest opportunity; and

WHEREAS, in accordance with Item (9) and Item (10) of the MOA:

(9) This MOA constitutes the entire agreement among the parties, and no changes or modifications to this MOA shall be made unless agreed to by all parties to this MOA in writing; and

(10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

NOW, THEREFORE, the parties hereto agree to amend the MOA to include the following parties (revisions indicated in bold lettering):

BE IT KNOWN THAT:

WHEREAS, the Parties agree to extend the MOA to include county governments with a proposed stop along the growth corridor, including Franklin County, Ohio; Union County, Ohio; Hardin County, Ohio; Allen County, Ohio; Allen County, Indiana; Kosciusko County, Indiana; Marshall County, Indiana; Porter County, Indiana; and Lake County, Indiana; and

WHEREAS, the Parties agree to extend the MOA to include all Metropolitan Planning Organizations along the growth corridor, including the Lima-Allen County Regional Planning Commission; Northeastern Indiana Regional Coordinating Council; Michiana Area Council of Governments; and Northwest Indiana Regional Planning Commission;

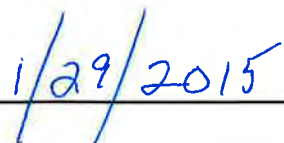
WHEREAS, by signing this Amendment once the Parties have signed it, the county governments and Metropolitan Planning Organizations listed above agree to Items (1) to (10) of the MOA effective August 6, 2014;

This Amendment No. 1 Memorandum of Agreement is approved by:



Name

Title/Organization



Date

RESOLUTION NO. 14-012

**A RESOLUTION AUTHORIZING THE CITY OF KENTON,
OHIO TO ENTER INTO A MEMORANDUM OF
AGREEMENT FOR THE PARTICIPATION IN THE
NORTHERN INDIANA/OHIO PASSENGER RAIL
INITIATIVE AND DECLARING AN EMERGENCY.**

WHEREAS, in conjunction with the City of Kenton, Ohio, the City of Columbus, Ohio, City of Lima, Ohio, City of Marysville, Ohio, City of Fort Wayne, Indiana, City of Warsaw, Indiana, City of Plymouth, Indiana, City of Valparaiso, Indiana, City of Gary, Indiana, and the Mid-Ohio Regional Planning Commission have proposed to systematically and incrementally develop a intercity passenger rail system in cooperation with existing freight rail operators and owners of right-of-way along a corridor from Chicago to Columbus through northern Indiana (the “Northern Indiana/Ohio Passenger Rail Initiative”);

WHEREAS, a passenger rail corridor established by the Northern Indiana/Ohio Passenger Rail Initiative would, in cooperation with the owners of the existing rail right-of-way, accommodate both future high speed passenger rail and freight rail service within the corridor by utilizing and improving the existing track configuration and rail crossings;

WHEREAS, the above-mentioned parties desire to enter into a Memorandum of Agreement to continue to cultivate a working relationship among the parties and the Federal Railroad Administration to facilitate the development and implementation of passenger rail service and to plan for future integration of the Northern Indiana/Ohio Corridor into a larger regional and national rail network; and

WHEREAS, the Council of the City of Kenton now desires to enter into this Resolution to approve the Memorandum of Agreement and authorize the Mayor to execute the Memorandum of Agreement.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Kenton, Ohio:

SECTION I. That the Council hereby authorizes the City of Kenton to enter into a Memorandum of Agreement in substantially the form attached hereto as Exhibit A and the Mayor be and is hereby authorized and directed to execute the above described agreement.

SECTION II. This Resolution shall be an emergency measure for the immediate and best protection of the public peace, health, safety, and welfare, the particular emergency being the need to timely coordinate and participate in the Northern Indiana/Ohio Passenger Rail Initiative. Therefore, if passed by the requisite two-thirds of all members elected to Council, this Resolution shall be in force and effect from and after its approval by the Mayor; otherwise, from and after the earliest period allowed by law.

Passed this 25th day of August, 2014.




President of Council

Attest:



Clerk

Approved this 25th day of August, 2014.



Mayor

Editor's Note Randy Mann, Mayor

- schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
 - (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
 - (8) To explore the establishment of a management structure for the project, governed by a board of directors appointed by the Parties, to serve as the project manager and provide advocacy, branding, fundraising, and project development and execution on behalf of the parties.
 - (9) This MOA constitutes the entire agreement among the parties, and no changes or modifications to this MOA shall be made unless agreed to by all parties to this MOA in writing; and
 - (10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

This Memorandum of Agreement is approved by:

	<i>Mayor, City of Marysville</i>	<i>8-7-2014</i>
Name	Title/Organization	Date

- schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
 - (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
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 - (10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

This Memorandum of Agreement is approved by:



Mayor, City of Columbus

9/5/2014

Name

Title/Organization

Date

- schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
 - (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
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This Memorandum of Agreement is approved by:

		
Name	Title/Organization	Date

- schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
 - (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
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 - (10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.

This Memorandum of Agreement is approved by:

<i>Robert B. Zier</i>	<i>Quintan Multimodal Planning Program</i>	<i>August 12, 2014</i>
Name	Title/Organization	Date
	<i>INDOT</i>	

- schedule and project expenditure plan as approved by the Parties in their collective capacity;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
 - (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
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 - (10) Upon consent of the original parties to the MOA, additional parties may become signatories to the MOA.


This Memorandum of Agreement is approved by:

	<i>Mayor City of Plymouth</i>	<i>8-12-14</i>
Name	Title/Organization	Date

regulations adopted and published by the FRA, and as required by the FRA for their approval of inter-city passenger rail corridors, and to proceed with that Study at the earliest opportunity;
AND IN FURTHERANCE OF THAT RESOLUTION, THE PARTIES ALL AGREE:

- (1) To cooperate in such joint budgeting, fund-raising, appropriation and procurement activities as may be necessary to obtain the planning, environmental, engineering, and operational analyses required by the Federal Railroad Administration for completion of an EIS;
- (2) To contribute to the support and funding of the EIS process as a participating jurisdiction in a fair manner in an amount to be determined hereafter by the Parties and specified in a separate agreement;
- (3) To participate together with representatives of the Parties in such planning, coordinating, and decision-making activities as may be required from time to time, particularly to guide the bid and contractor selection process, and to manage, evaluate, and complete the EIS;
- (4) To furnish such information whether to the Parties in their collective capacity, to the EIS contractor, or to the Federal Railroad Administration, as may be necessary to the completion of the various analyses required by the Tier One EIS process;
- (5) To endeavor in good faith to secure funding, consistent with and in accordance with the schedule and project expenditure plan as approved by each of the Parties;
- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
- (7) That the Parties of the Northern Indiana / Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute; recession of existing law; change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Northern Indiana / Ohio Corridor and any partners shall take steps to notify each other as needed in a timely manner;
- (8) To explore the establishment of a management structure for the project, governed by a board of directors appointed by the Parties, to serve as the project manager and provide advocacy, branding, fundraising, and project development and execution on behalf of the parties; and

This Memorandum of Agreement is approved by:

Jon Costas		Mayor City of Valparaiso	September 9, 2014
Name	Signature	Title/Organization	Date

schedule and project expenditure plan as approved by the Parties in their collective capacity;

- (6) To coordinate the creation and distribution of education and outreach materials to be used to gain support for the continuation of the project;
- (7) That the Parties of the Northern Indiana/Ohio Corridor and appropriate partners will coordinate fundraising using a mutually agreed-upon strategy. In the event that funding for the program is constrained by statute, rescission of existing law, change in funding requirements or eligibility; or reduction in identified funding levels or availability, the Parties and any partners shall take steps to notify each other as needed in a timely manner;
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Name Title/Organization Date

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