East-West Corridor
High Capacity Transit Plan

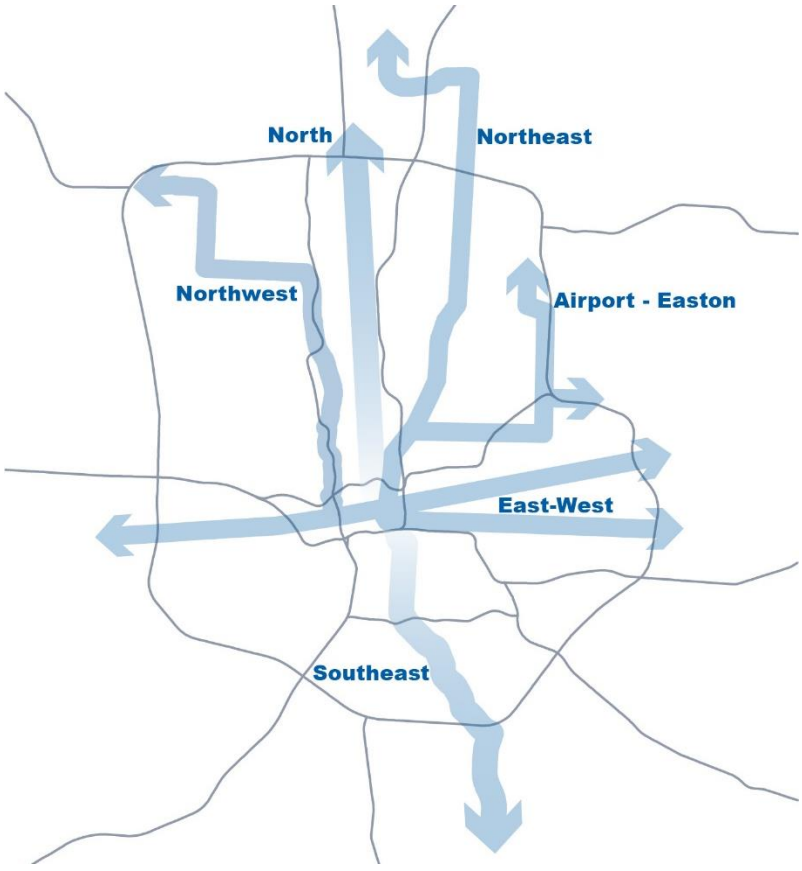
Link US
Moving our region. Together.

Frequently Asked Questions

Q **What is LinkUS?**

A The LinkUS Mobility initiative will provide equitable mobility options for residents and visitors, improve access to jobs and affordable housing, promote economic growth and improve sustainability. LinkUS seeks to provide a complete mobility system along six key regional corridors in Central Ohio. These corridors were identified during the development of the COTA NextGen vision which was created with extensive public input and technical analysis. They were further validated during the insight2050 Corridor Concepts initiative. LinkUS corridors include the Northwest and East-West Corridors. Other corridors that have been identified in previous studies include the North Corridor, Northeast Corridor, Southeast Corridor and Airport-Easton Corridor.

A This holistic, innovative approach will include advanced, high-capacity rapid transit, bikeways, green space, roadways, pedestrian improvements and development along these key regional corridors.



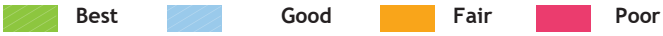
Q Where is the LinkUS East-West Corridor?

A The East-West Corridor is a 20-mile stretch from Prairie Township on the West side along West Broad Street to Reynoldsburg on the East side along East Main Street and East Broad Street and every neighborhood in between.

Q What Rapid Transit Mode has been Selected for the East-West Corridor? Why?

A The AECOM consultant team conducted a high-level analysis of commuter rail (passenger rail operating in freight rail corridors), light rail transit (LRT, operating in separate right-of-way, often on city streets), streetcar (operating in mixed-traffic on city streets), and bus rapid transit (BRT, which operates similar for LRT) to determine the most appropriate mode for the East-West Corridor.

BRT was selected for the East-West Corridor based on corridor fit, ridership capacity, cost per mile to build/operate and available right-of-way.



Mode	Corridor Fit	Ridership Capacity	Cost per Mile per Station	Operating Cost per Hour	Availability of Right-of-Way
Bus Rapid Transit	Best	Best	Best	Best	Best
Light Rail Transit	Good	Poor	Poor	Good	Good
Modern Streetcar	Poor	Poor	Fair	Good	Good
Commuter Rail	Poor	Best	Good	Poor	Poor

Q Was public perception of BRT vs LRT considered?

A There may be perceptions around the reliability or timelines of each mode, but neither reliability nor timeliness of a mode are determined by rubber tires versus steel rail. Other amenities such as dedicated lanes can provide much needed reliability improvements. Reliability can also be enhanced by near level boarding, off-board fare collection and transit signal priority. There are always trade-offs between rail and bus, however for the East-West Corridor it is important to match the appropriate mode to the identified needs and ridership levels.

It is important that the selection of mode for premium rapid transit in the East-West Corridor is federally competitive based on Federal Transit Administration (FTA) criteria: compatible with anticipated ridership, consistent with local and regional plans, and provides the greatest value for cost. Both BRT and LRT can provide frequent and reliable service, offer travel benefits with traffic signal priority, can be integrated with enhanced stations for riders, spur development in a corridor and offer zero-emissions vehicles. Based on FTA criteria, BRT is the more appropriate fit and will be more competitive for federal funds.

Q **How is future ridership determined? What is being considered in the future ridership number?**

A The ridership forecasts which will be developed as part of the detailed evaluation will represent both current year (pre-COVID) ridership and horizon year (2040) ridership. The ridership for current year and horizon year will be based on the regionally adopted socio-economic data (e.g. population, employment, access to an automobile, etc.).

Mid-Ohio Regional Planning Commission (MORPC) is responsible for generating the growth forecasts that feed into our ridership projections.

In other words, MORPC's insight2050 "one million more" people projected to be in Central Ohio by 2050 is an assumption in our ridership forecasts. The federal government requires that we use the FTA STOPS model and these regional growth forecasts when pursuing federal capital funding. This ensures transit systems across the U.S. are using the same methodology. For more on FTA's ridership forecasting process, see transit.dot.gov/funding/grant-programs/capital-investments/stops.

Q **How will the East-West Corridor Bus Rapid Transit (BRT) service compare to CMAX, COTA's existing BRT service on Cleveland Avenue?**

A Defining the scope and scale of BRT investment in the corridor is the major output of this study. Features that are under consideration for the East-West Corridor that are not currently present in CMAX include:

- Majority dedicated lanes
- Zero-emission or electric vehicles
- Near-level boarding at stations
- Board/alight via any vehicle door
- Off-board fare collection
- Transit signal preemption
- Complete Street Improvements

While CMAX began service along Cleveland Ave in 2018 and does not include all of these amenities, COTA will look at ways of improving the service and the Northeast Corridor in the future.

The design of BRT within the East-West Corridor will be context-sensitive to the surrounding neighborhood and potential ridership. (BRT will likely look different in downtown Columbus than in Reynoldsburg, and Hilltop may look different than Bexley.) The Technical Group, Stakeholder Group and the public will be invited to provide input on the design through online surveys and virtual work sessions.

Q **Will BRT in the East-West Corridor operate in dedicated lanes? How does that make a difference?**

A It is our goal to provide dedicated lanes wherever possible throughout the East-West Corridor. Dedicated lanes can improve speed and reliability compared to conventional bus service that operates in mixed traffic. The analysis we are conducting now will identify the benefits and impacts of dedicated lane operations throughout the corridor. We will be sharing the analysis process and results at upcoming stakeholder and public meetings.

Q **How 'easy' is it to convert BRT to LRT in the future? Are there examples of conversions in other cities?**

A One example of this is in Seattle where the Downtown Transit Tunnel with bus-only lanes opened in 1990. One bus lane was converted to an LRT line that opened in 2009. Bus service operated alongside LRT in the tunnel until 2019, when a second LRT line was added and several bus routes moved to surface streets. It was not inexpensive to make these conversions but still cost less than had the right of way not already been preserved. The potential conversion of BRT to LRT or other higher capacity transit mode of the future will be dependent on attracting increased ridership, which will require changes in zoning and land uses, including policies regarding parking and creation of a walkable environment along the corridor.

Allowing for and focusing development along the corridor will provide density of both residents and jobs to promote ridership and support a higher capacity transit mode. It is also possible that some new mode will emerge. Preserving dedicated lanes now leaves open possibilities to evolve to new service models in the future.

Q **Are there things we can oversize or upgrade into a BRT design now that makes conversion easier, like making stops bigger?**

A The best way to support the future conversion to future higher capacity transit mode is to dedicate right-of-way – or a portion of it – exclusively for transit. Not only will this reserve the space within the right-of-way for transit into the future (like Seattle), but it will also signal to the development community Columbus's long-term commitment to transit in this corridor. Experience in other cities has shown this encourages developers to invest in developing/redeveloping along the corridor. Additional short-term benefits of this solution include improved travel times, which can reduce BRT service costs and help build ridership in the corridor.

Q **What vehicles are being considered for the East-West Corridor? Are electric vehicles being considered? What features are available for BRT vehicles (air filtration or technology)?**

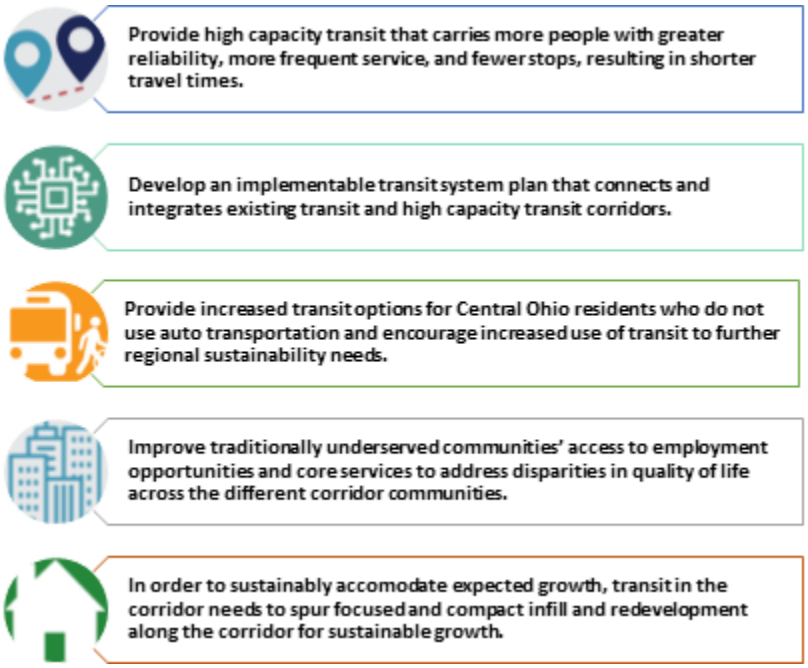
A Vehicle selection for the East-West Corridor will not occur for a few years, but COTA will continue to monitor and explore various features for its BRT vehicles based on public input and the latest technology. COTA's goal is to be 100% diesel-free by 2025, which could include Compressed Natural Gas (CNG) or electric vehicles. COTA will make additional choices for air filtration and technology when the vehicle purchase process begins later.

Q **How long would it take for BRT or LRT to travel the length of the 20-mile corridor?**

A Both BRT and LRT can reach speeds up to and over 55 miles per hour but would not operate in excess of the posted speed limit. Average corridor operating speeds will be determined by the corridor design, distance between stations, traffic and signal timing, safety and passenger comfort. Assuming similar stop spacing, traffic signal priority, off-board fare collection and lengths of dedicated lanes, BRT and LRT travel times would be expected to be very similar. Approximate time for traveling the full length of the East-West Corridor will be determined after service frequency, guideway options, and the locations and amount of stations are confirmed. Those details are being developed now.

Q How is equity being considered and prioritized in this effort?

A Equity is at the forefront of the LinkUS initiative and the East-West Corridor Plan. The Purpose and Need Statement, which complements the federal process we are following, was developed to identify the transportation needs and challenges in the East-West Corridor. Planners analyzed public input, income levels, the number of zero car households, access to jobs and several other factors. As a result, five needs emerged that premier, advanced rapid transit can help address, including:



As the project moves into the detailed evaluation and phase, equity will continue to be a key factor in selecting a Locally Preferred Alternative. A series of technical memos will be developed: capital cost, economic development, transportation and parking, environmental analysis, ridership and operating and maintenance costs. Each technical memo will reflect the goals identified in the Purpose and Need and will provide additional data for making decisions. We will continue to engage the public and corridor stakeholders throughout this process.

Q What are the Federal Transit Administration's (FTA) financial requirements and criteria? Where can I learn more about those requirements?

A COTA is planning to pursue funding through the FTA's Capital Investment Grant (CIG) program. This is the primary federal program to fund major transit capital improvements in the US, and is a multi-stage, multi-year process. It includes two funding categories: New Starts and Small Starts. For New Starts projects there are three stages: Project Development, Engineering and Full Funding Grant Agreement. For Small Starts projects there are only two stages: Project Development and Small Starts Grant Agreement. With each stage of the process FTA gains a better understanding of the project and the benefits and risks associated with the project.

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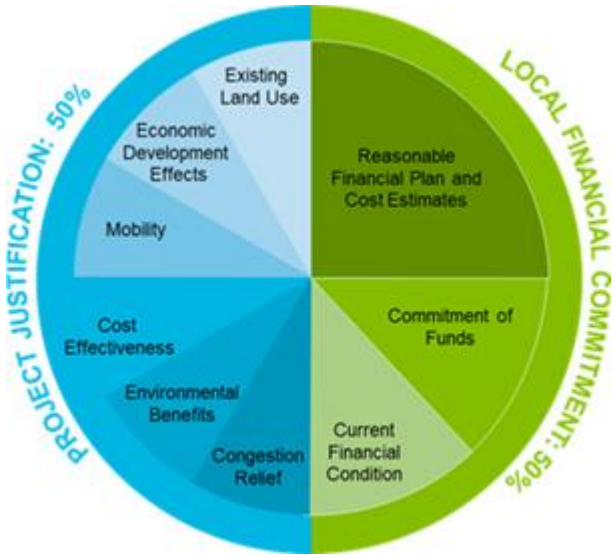
Similarly, with each stage local project sponsors gain confidence that FTA will ultimately support the project financially. For New Starts projects, the project must have a total estimated capital cost greater than $300 million or be seeking $100 million or more in CIG funds. Small Starts projects must have a total estimated capital cost of $300 million or less and must be seeking less than $100 million in CIG funding.

FTA evaluates projects on two equally weighted primary criteria: Local Financial Commitment and Project Justification. In order to be considered for funding by the FTA, a project must score medium or higher on both the Local Financial Commitment and Project Justification criteria. The primary criteria are based on a series of sub-criteria as shown in the figure and outlined in the table below. The FTA's Final CIG Interim Policy Guidance document can be found on the FTA website at: Final Capital Investment Grant Program Interim Policy Guidance | FTA (dot.gov).



Land Use

- Land Use measure evaluates the existing conditions within proposed station areas. A station area encompasses a ½ mile radius around the station. The land use measure includes an examination of the following key demographic information including employment, population density, affordable housing, existing pedestrian facilities and parking supply.

Economic Development

- The economic development rating is based on: Transit supportive plans and policies, supporting zoning near transit and tool to implement those plans and policies and demonstrated performance of those plans and policies. Additionally the potential impact of transit on development and the policies and tools to preserve or increase affordable housing.

Mobility Improvements

- The mobility improvement rating is based on the number of passengers using the new stations, transit dependent passengers are counted twice

Cost Effectiveness

- FTA's Cost Effectiveness rating is a blend of costs (annual operating and maintenance costs plus annualized capital costs) and annual ridership.

Environmental Benefits

- Environmental benefits are computed based on the change in vehicle miles traveled (VMT) by automobiles and transit vehicles and the annualized capital costs of the alternative. The FTA methodology relates VMT to regional air quality pollutants, energy use, greenhouse gas emissions, and safety with conversion factors taking into account the differences between vehicle types, e.g., automobile, diesel bus, hybrid bus, buses with compressed natural gas (CNG), light rail vehicle, commuter rail (diesel), and commuter rail (electric).

Congestion Relief

- FTA evaluates congestion relief based on the number of new weekday transit trips.

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How can smaller metro cities have light rail, subway, trolley, etc while Columbus still relies upon and looks to buses as a solution?

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Investment in public transit, in any city, should respond to the needs of that specific community and reflect technical analyses, ridership forecasts and public input. COTA's 2017 NextGen Transit vision identified several high capacity transit corridors in Central Ohio. The plan lists a variety of modes for exploration including LRT, BRT, streetcar and commuter rail . BRT was selected for the East-West Corridor based on corridor fit, ridership capacity, cost per mile to build/operate and available right-of-way. (See fact sheet {insert link} for more details comparing BRT to LRT.)Many cities have a combination of several modes based on the specific needs and ridership demand in each corridor. Selecting BRT for the East-West Corridor does not prevent another mode from being selected in a different corridor.

Q How will the project affect street parking?

A Any potential impacts to on-street parking is being considered as part of the Detailed Evaluation. Parking impacts and potential mitigation strategies will be further refined throughout the final design of the East-West Corridor.

Q How will the changes to the corridor benefit bicyclists and pedestrians?

A The public and corridor stakeholders have voiced strong support for improvements to make it safer for pedestrians and bicyclists. COTA will work closely with community partners and the public to identify what types of improvements are needed and where. These enhancements (type and location of sidewalks, bike lanes or multi-use paths) will be outlined in more detail as the project is further refined and moves into preliminary engineering.

Q How will future high capacity transit corridors interact with each other? Will the Northwest and East-West Corridors connect downtown?

A The East-West and Northwest Corridor project teams are working closely to identify connections in the Downtown Columbus area. Both corridors will connect to existing COTA bus service allowing for the ease of transfers and connections to the larger COTA network. Planned and future corridors will also identify and plan connections to existing trails, bikeways and pedestrian facilities.

Q Who will operate the rapid transit system?

A The Central Ohio Transit Authority (COTA) is the regional public transit provider for greater Columbus and Central Ohio. As the lead agency, COTA would be the recipient of federal funds and operate the service. The high capacity transit initiative is just one part of LinkUS, Central Ohio's transformational and comprehensive prosperity and mobility initiative. Partners include COTA, the City of Columbus, MORPC and Franklin County. This collaborative effort, along with the participation of many other local communities and organizations, make this a transformative opportunity for our region to prepare for the future with great forethought and purpose.