

BRT Corridor Selection

Corridor Feasibility Analysis and
Phase 1 Corridor Identification



Presentation Overview

1. What is BRT?
2. BRT System Vision
3. Corridor Selection
Considerations
4. Staff Recommendations
5. Next Steps

1.

What is BRT?



The **Federal Transit Administration** defines Bus Rapid Transit or BRT as “a high-quality bus-based transit system that delivers fast and efficient service that may include dedicated lanes, busways, traffic signal priority, off-board fare collection, elevated platforms, and enhanced stations.”

The **Federal Transit Administration** has found that the benefits of BRT include reductions in average travel time, increased reliability, increased average travel speed, reductions in fuel consumption, reduced emissions, and an improved customer experience.

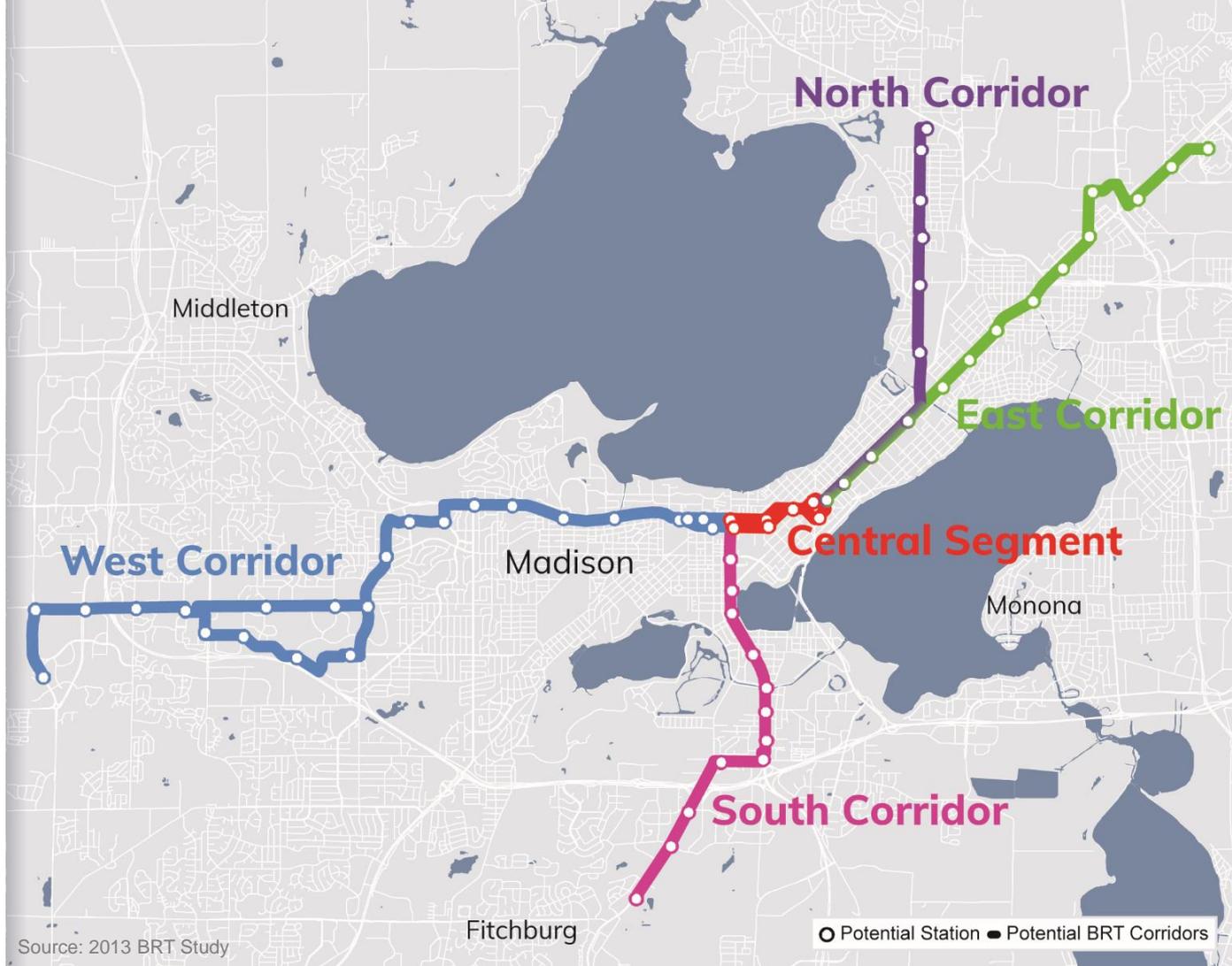
2. BRT System Vision



Madison Area Bus Rapid Transit System

The Madison Area BRT system vision consists of four corridors sharing a central segment that links UW campus to downtown.

Potential Stations shown were identified in 2013 BRT study



3.

Corridor Selection Considerations



The main factors staff considered in determining the feasibility of the corridors for a Phase One project included....



Existing Transit Ridership

How strong is the existing ridership in the corridor relative to the corridor's length?



Origins & Destinations

Where are existing transit riders going to and/or coming from?



Equity

Would the corridor further Madison's vision of being an equitable community?



Existing & Future Land Use

How does BRT serve and enhance the existing and future planned land uses in the corridor?



Development Potential

What is the capacity for and likelihood of redevelopment of major opportunity sites in the different corridors?



Job Density

How many jobs are located along the corridor relative to other corridors?



Destination Density

How many destinations are located along the corridor, including regional attractors?



Capital & Operating Costs

Could the corridor be built within the anticipated Phase One budget of \$50-55 million?



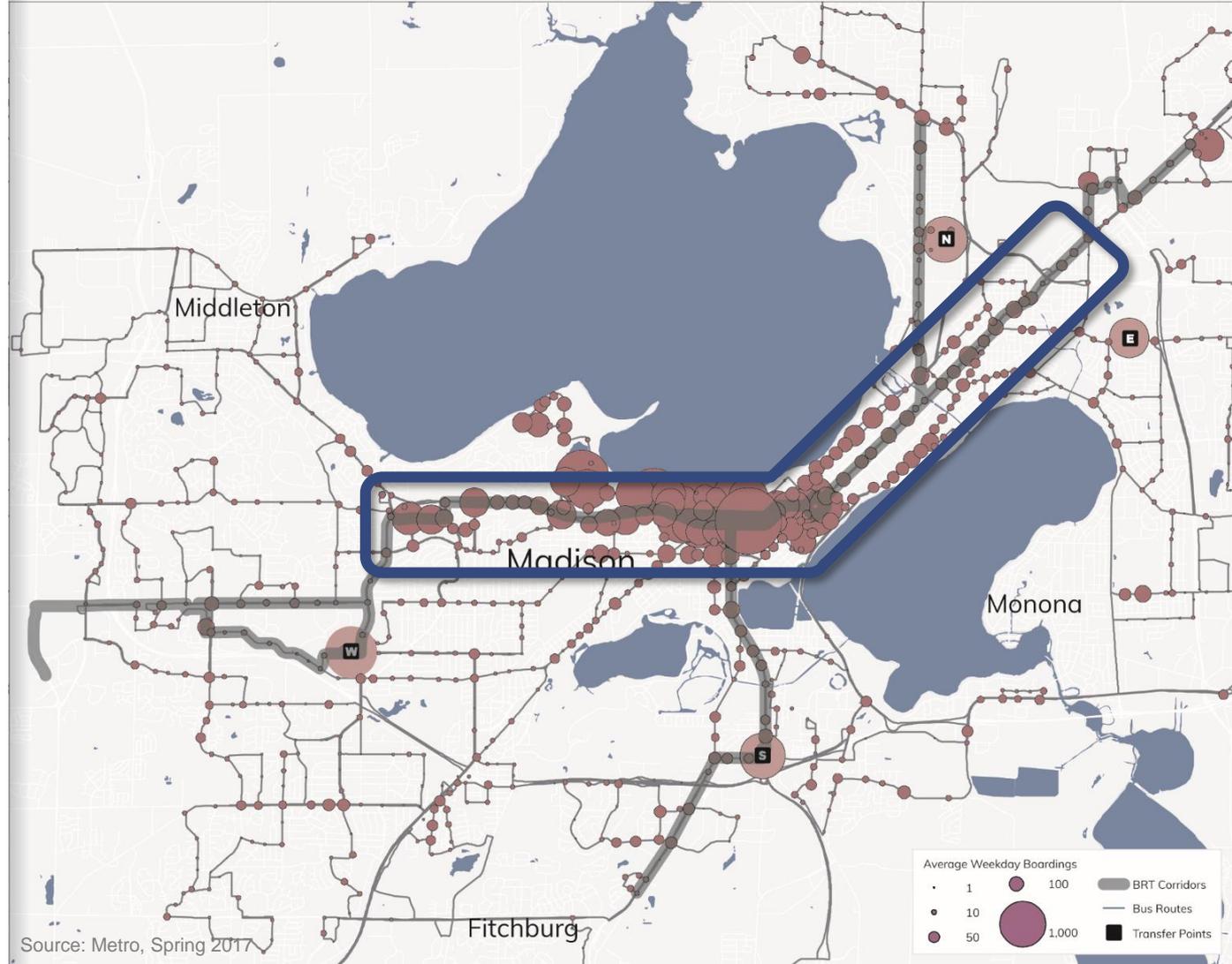
Technical Readiness

Does it appear that the corridor could be built within the expected timeframe and project budget and in coordination with other efforts?



Existing Transit Ridership

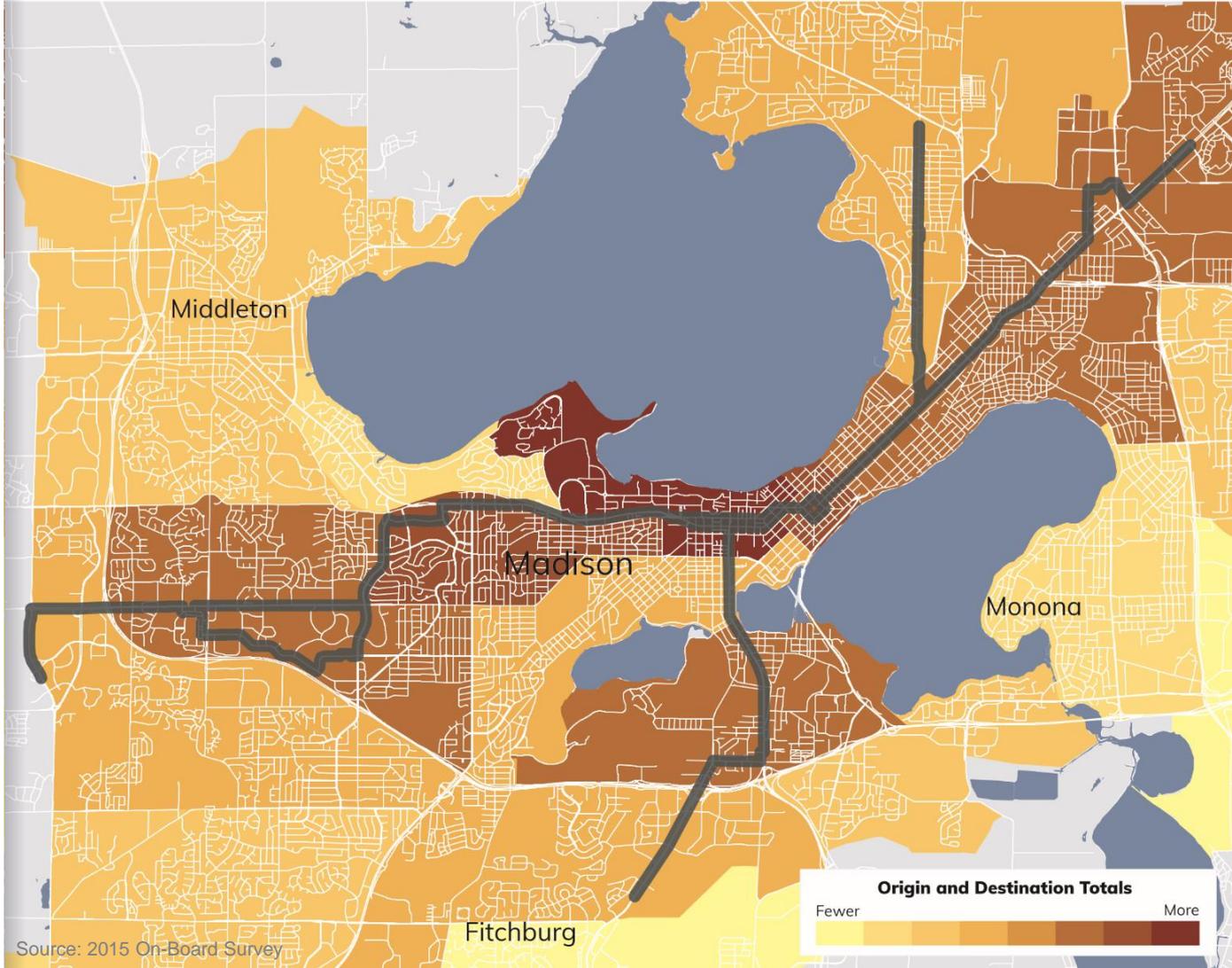
Highest transit ridership occurs, unsurprisingly, in the UW campus and downtown areas. Additionally, the East and West Towne malls, Madison College, Hilldale/Hill Farms, and high schools are popular destinations. There is a noticeable concentration of ridership along the University Ave. and East Isthmus corridors.





Origins & Destinations

Highest origin/destination areas include downtown and the UW campus areas, along with areas along University Avenue through Hill Farms, East Isthmus, E. Washington Ave. out to East Towne, Park Street south of Erin St., and Mineral Point Rd. out to West Towne.



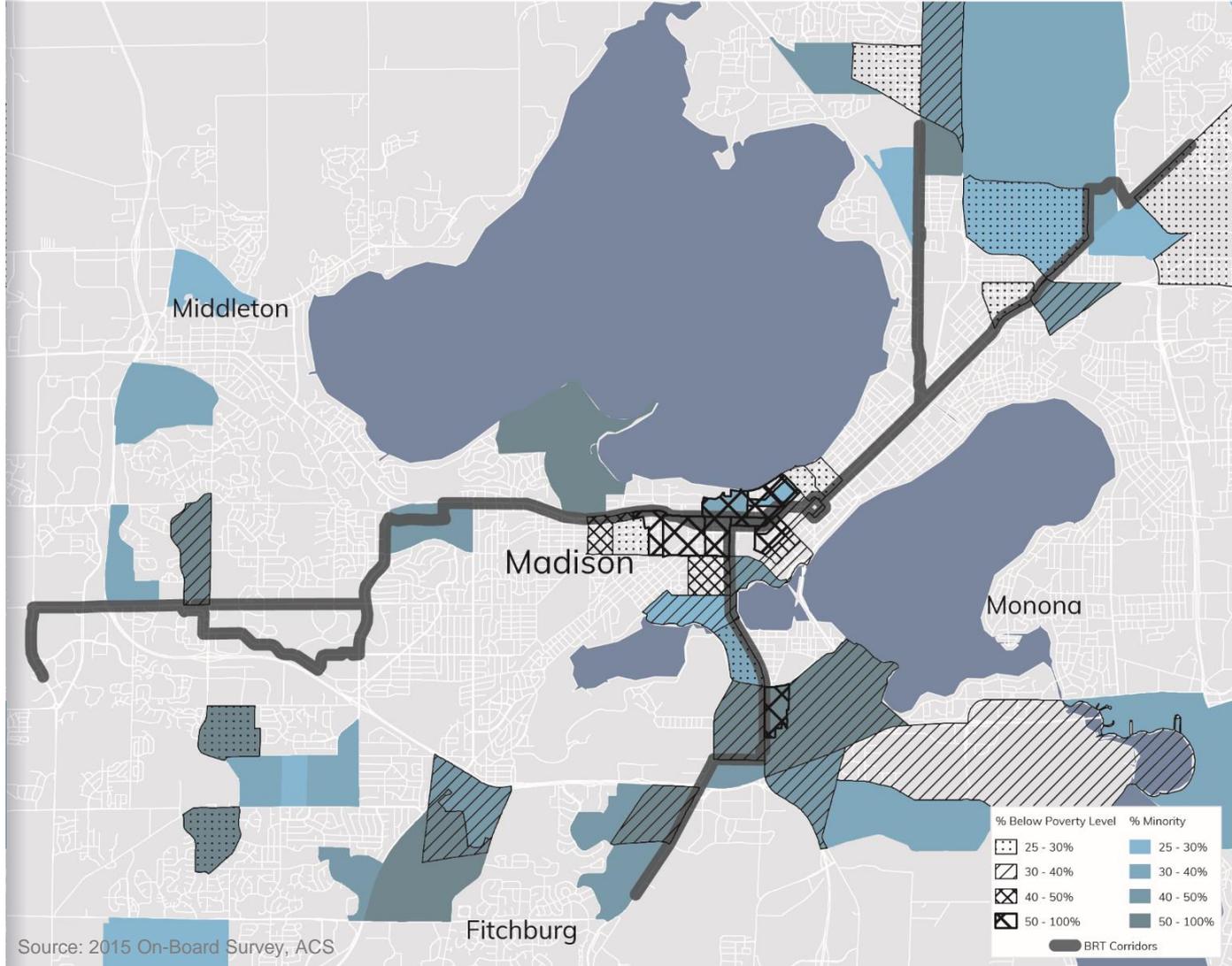
Source: 2015 On-Board Survey



Equity

Minority populations have origins/destinations concentrated more on the periphery of the Madison area.

Minority residents live in many of the same areas as low income residents. Concentrations of low income residents live south of the Beltline, along Park St., along E. Washington Ave, and on North side. Many of the low income areas downtown are student housing areas.



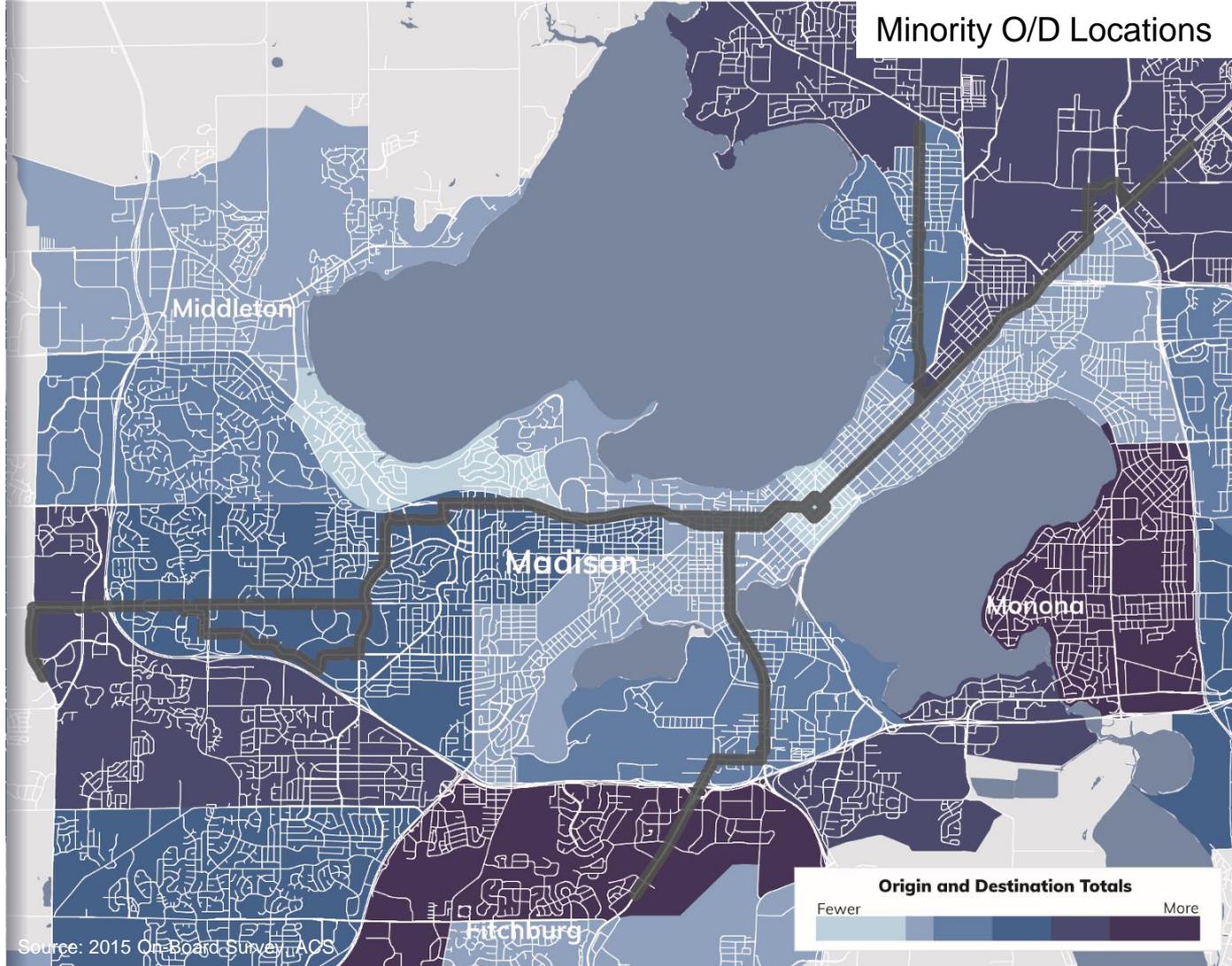
Source: 2015 On-Board Survey, ACS



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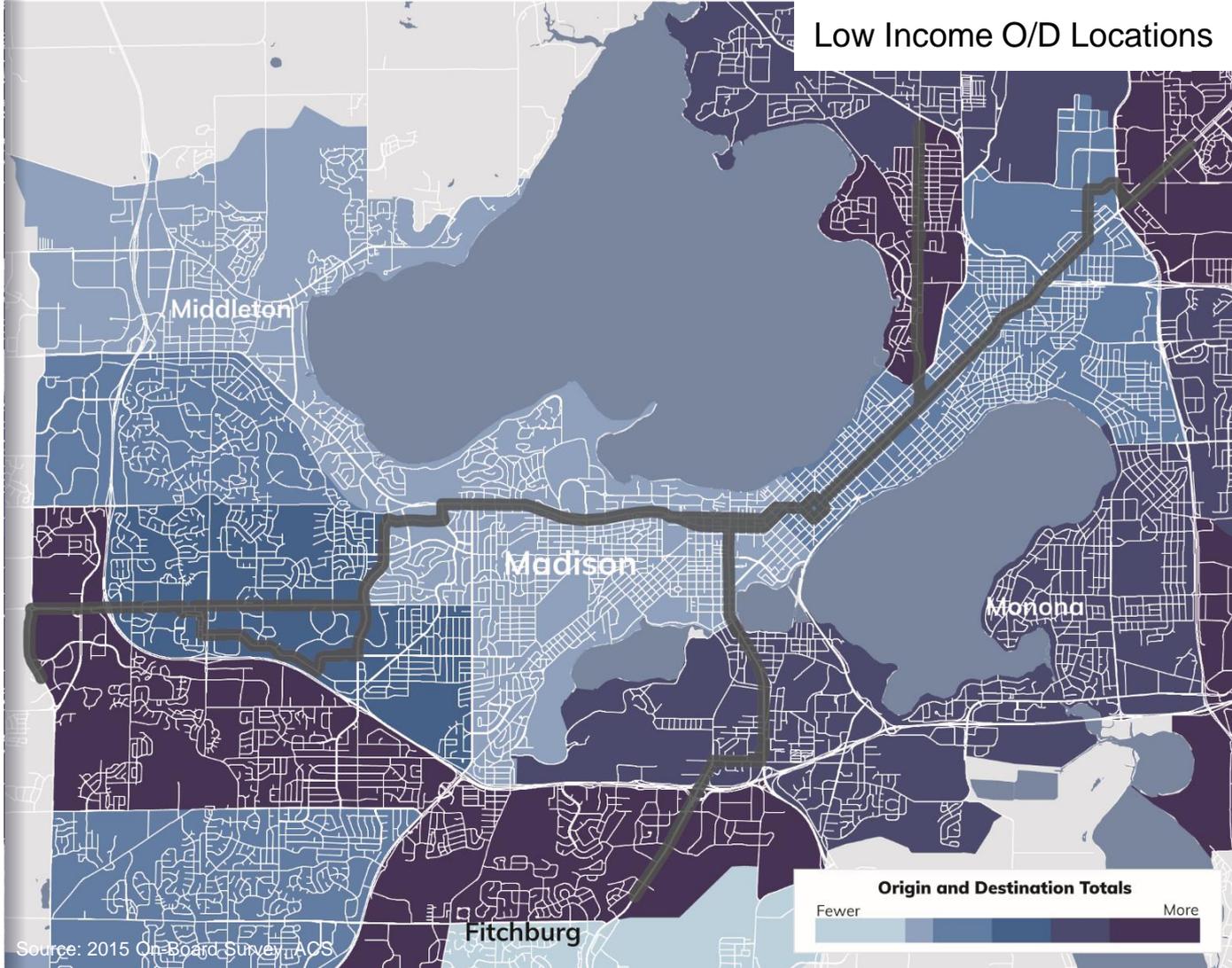




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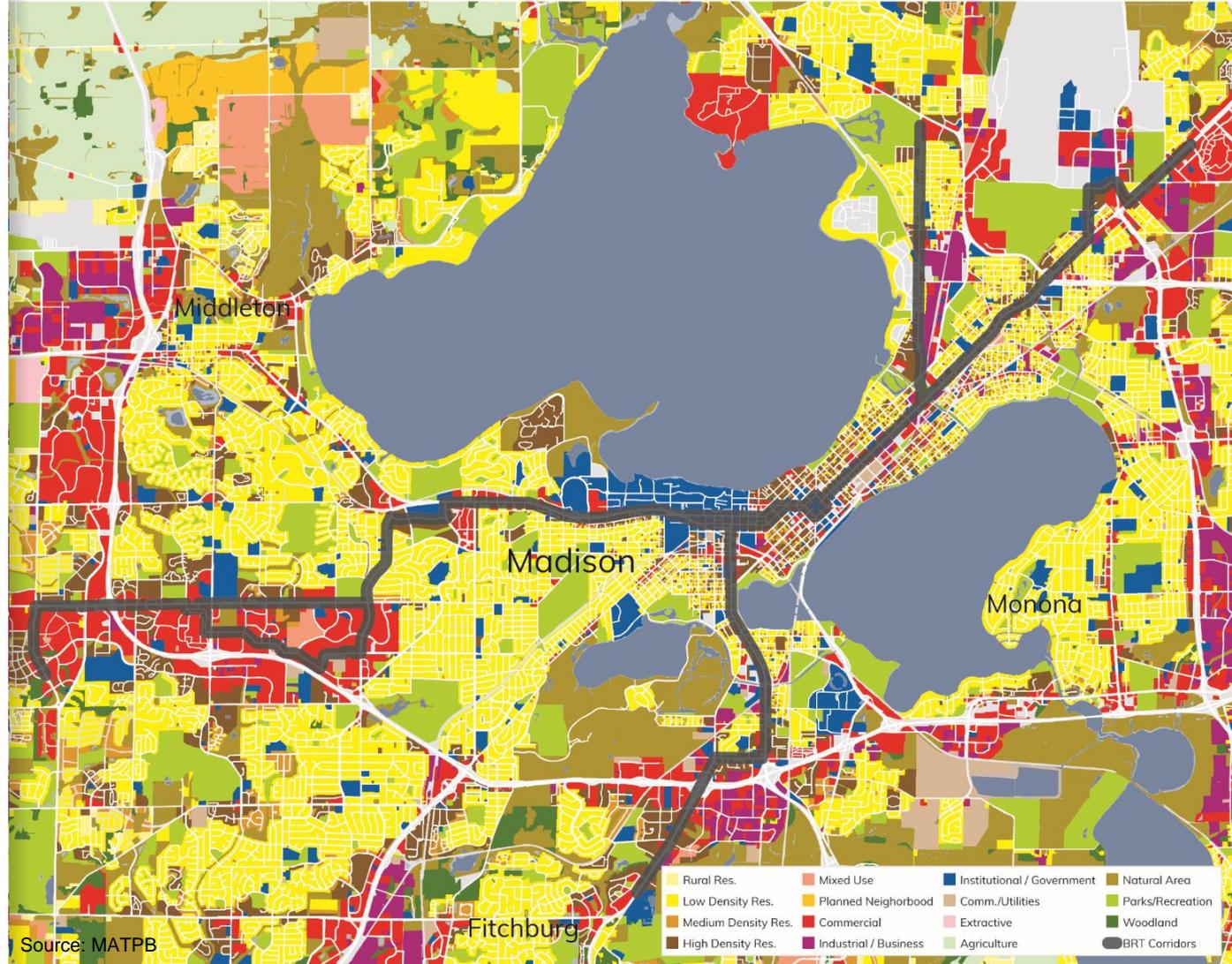




Existing & Future Land Use

Land use along the east and west corridors consists of higher density employment, retail, residential, and institutional uses. These corridors have the most growth potential.

The north and south corridors are lower density, but have nodes of higher intensity use. These corridors have long-term economic development potential, but not at same scale.

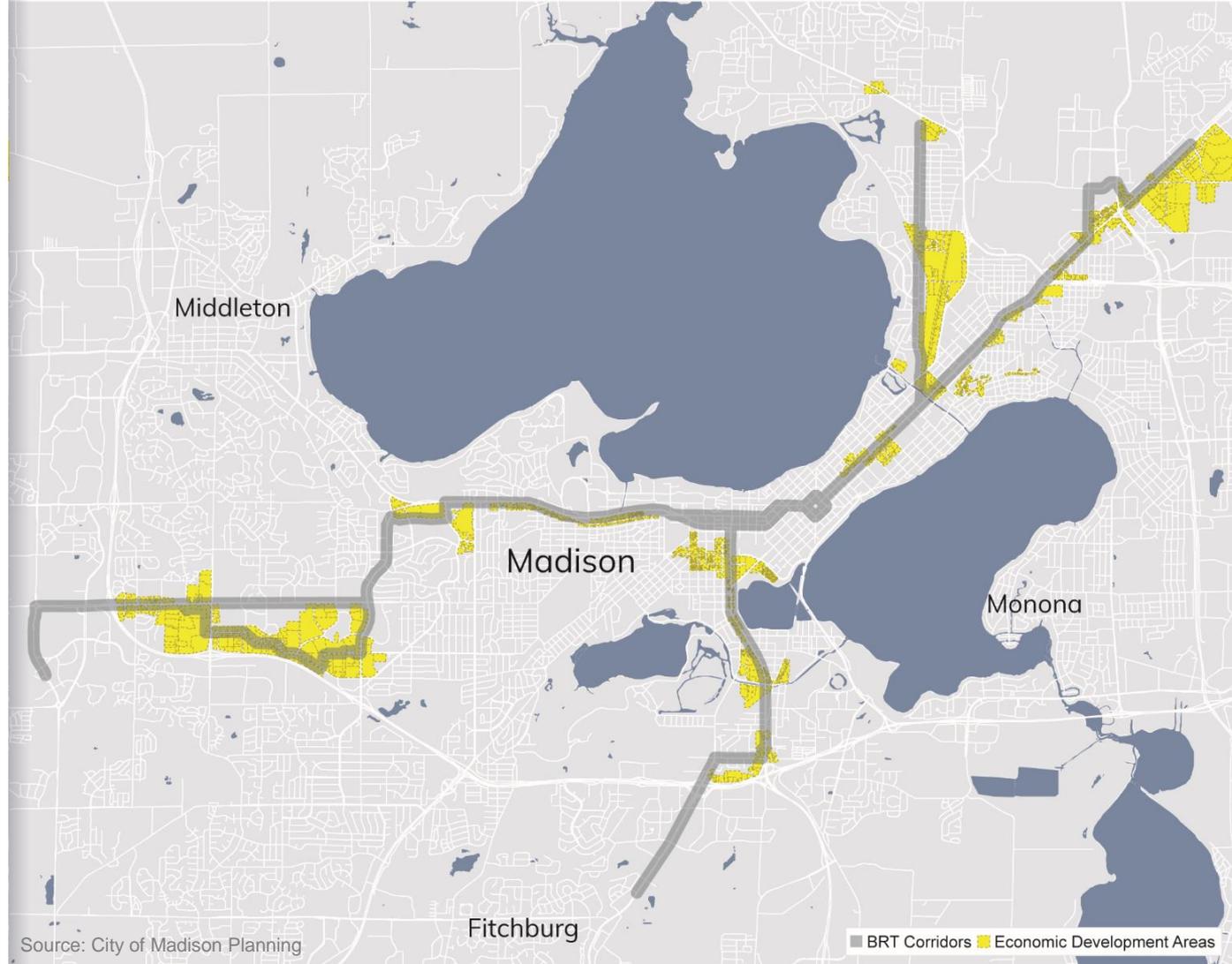


Source: MATPB



Development Potential

Sites along each of the corridors were examined for redevelopment potential. While sites are available along all corridors outside of the central downtown area, sites on the west and east lines offer more redevelopment potential due to larger parcel sizes.

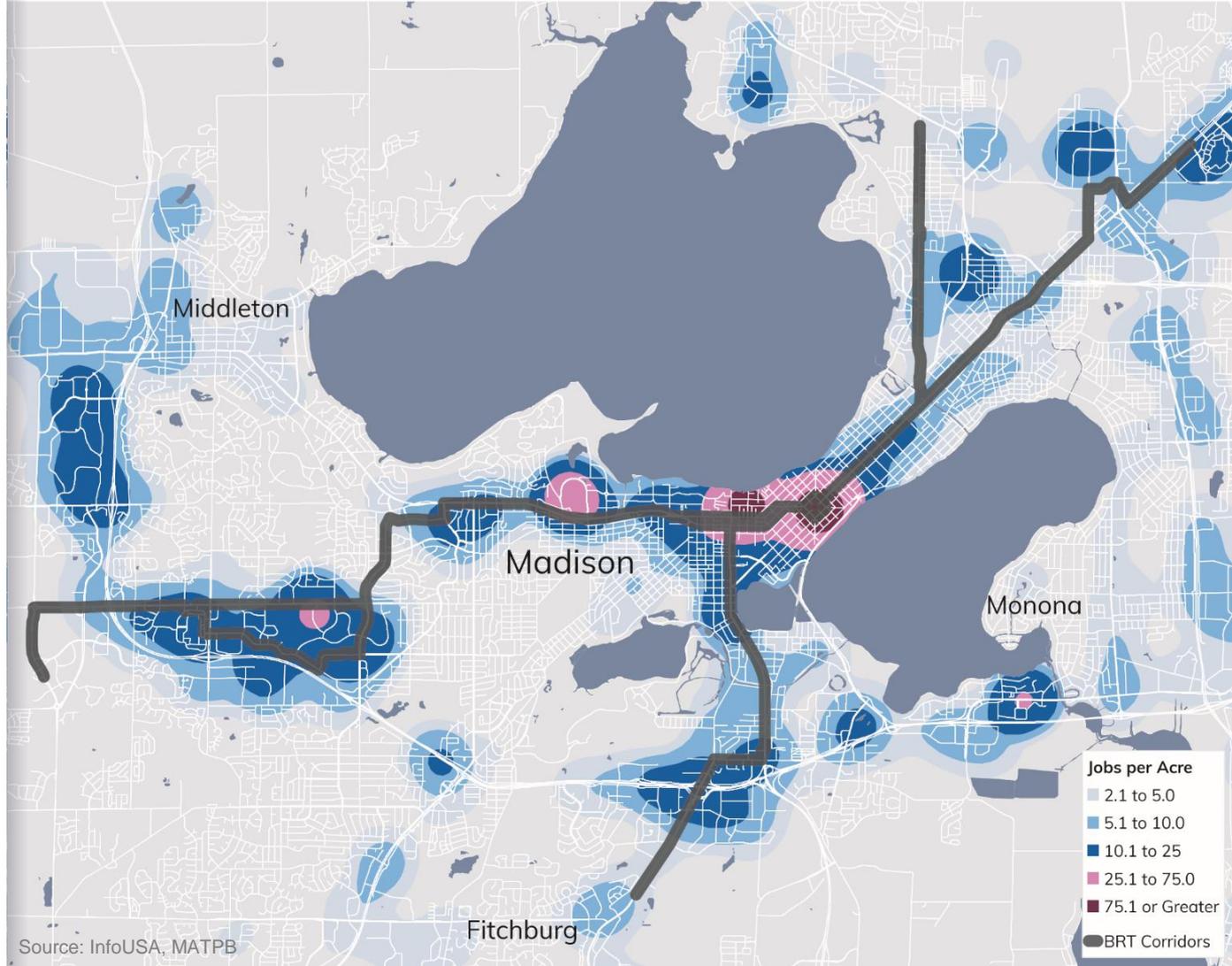




Job Density

Job concentrations are found downtown, on UW campus, UW Research Park, the malls, and along University Ave., East Washington Ave, and Park Street.

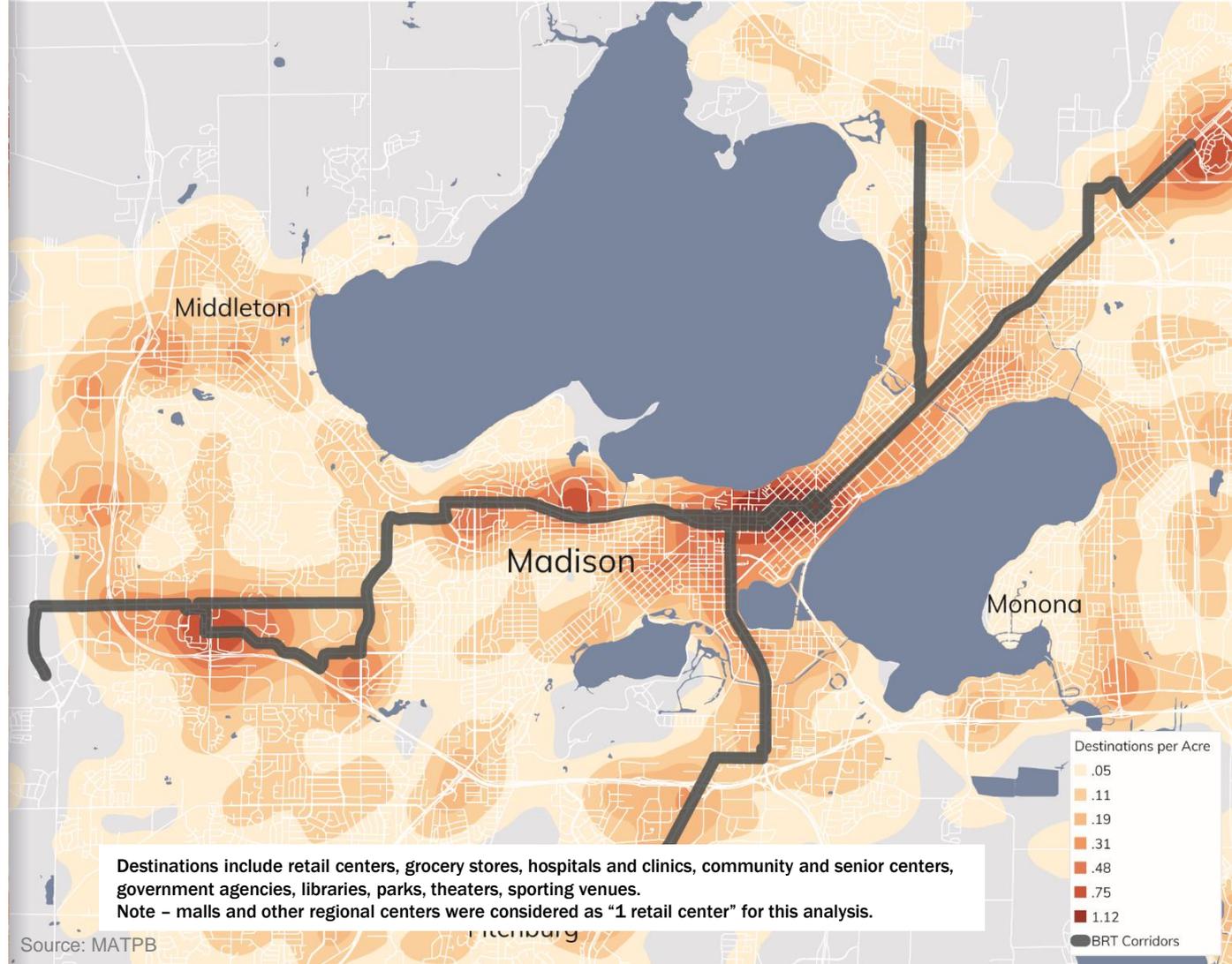
The “core” of employment lies between Hill Farms to the west and the First St./ East Washington intersection to the east.





Destination Density

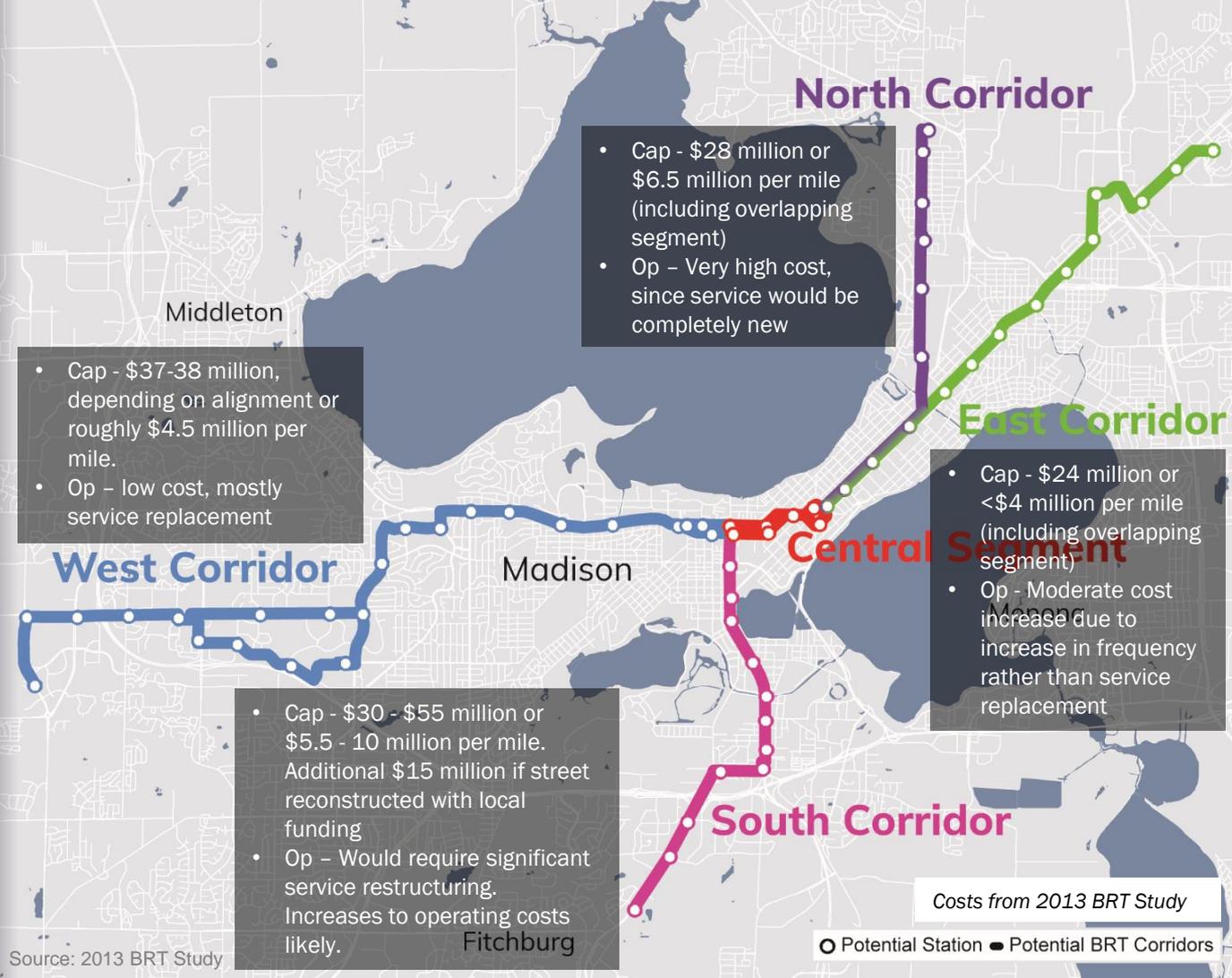
Travel destination density is highest in the downtown, Hilldale, S. Park Street, and E. Washington Ave. areas. UW Research Park, Darbo/Worthington, East and West Towne Malls, and Warner Park area also contain significant densities of destinations.





Capital & Operating Costs

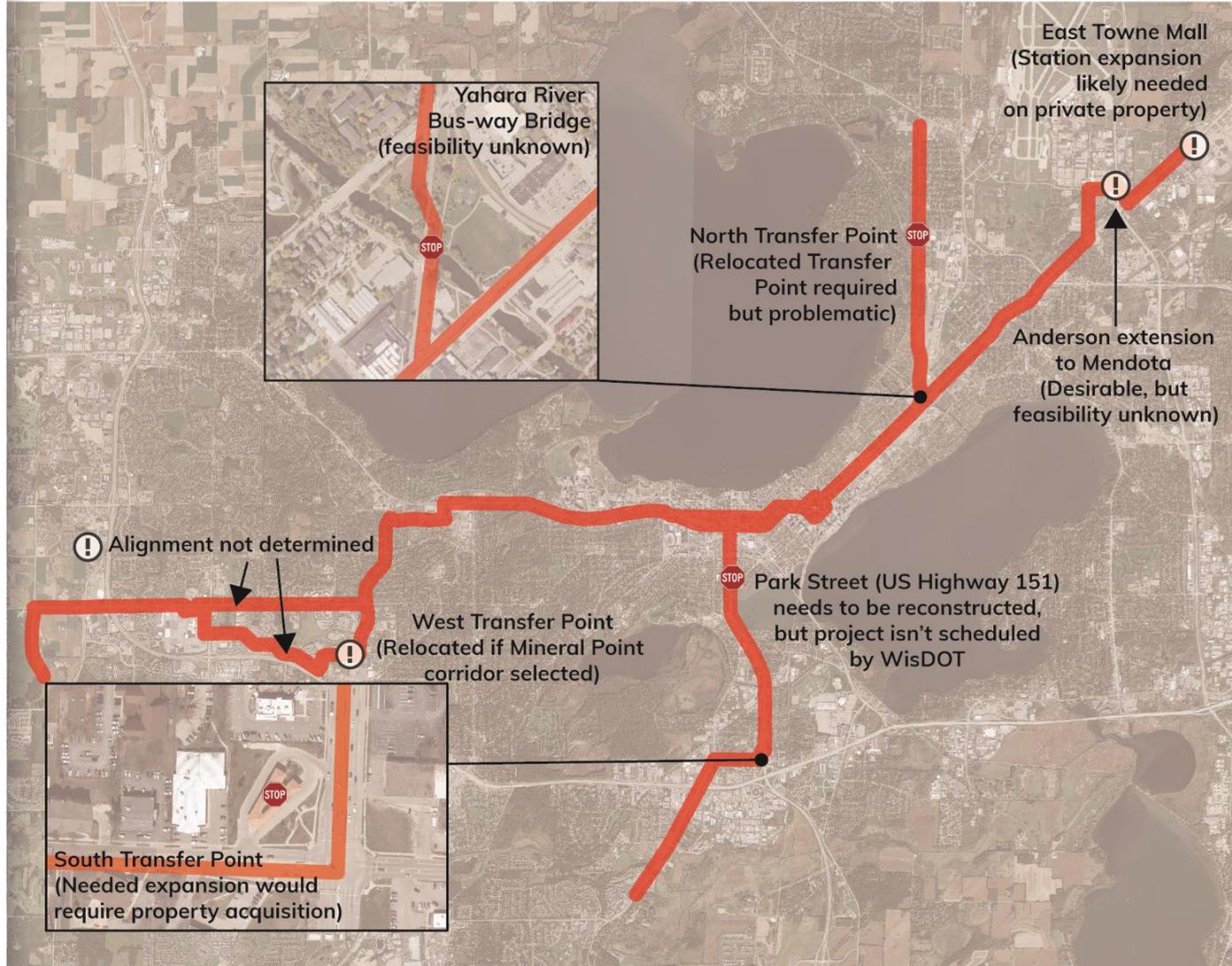
The east and west corridors are least expensive in terms of capital and operating costs, since the roads have been recently reconstructed and service levels are already high, reducing net added operating costs. The south corridor is potentially most expensive if median-running option chosen and/or local funding used to reconstruct roadway (if done before WisDOT programs reconstruction project).





Technical Readiness

- The north and south corridors have significant hurdles to overcome before implementation.
- Feasibility of Yahara River bus-way bridge is major question; also would need WSOR cooperation and an EIS.
- North Transfer Point relocation costly and requires private property acquisition.
- Park Street, a state connecting highway, is in poor condition and should be rebuilt with BRT project. State has not scheduled project.
- South Transfer Point requires expansion, private property acquisition.



4.

Staff Recommendations



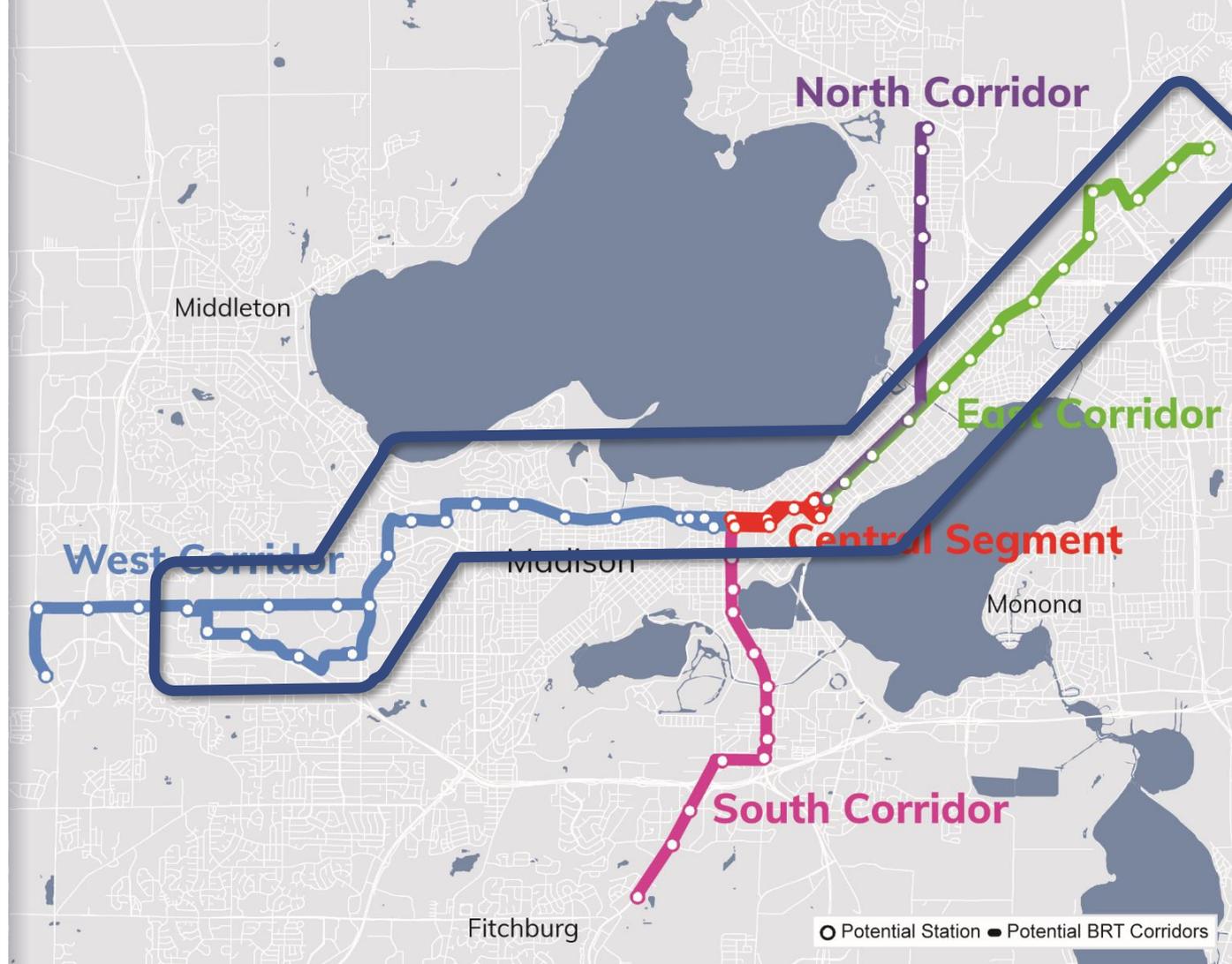
Staff team from Metro, MPO, and City of Madison developed a consensus that technical readiness issues eliminated both the South and North corridors from Phase One project consideration.

Selection of East/West corridor supported by other selection criteria: existing ridership and transit travel patterns, land uses, density, cost, redevelopment potential, and equity.

Staff recommends proceeding with study to develop scope of initial project within the East/West corridor.

Recommended Madison Area Bus Rapid Transit System

Phase One
Corridor within
which project
will be
identified



5. Next Steps



Timeline/Next Steps

2012-2013	MATPB (MPO) feasibility study identifies long-term vision for BRT
2013-2015	MATPB and City of Madison endorse BRT system plan and moving forward to next phase of study
2017	MATPB adopts Regional Transportation Plan 2050, which recommends completing project planning leading to initial BRT project with future expansion.
2017	Staff feasibility analysis of alternative BRT corridors; City Common Council and MATPB consider selection of east-west corridor for Phase One project for further evaluation
2018	More detailed evaluation of selected corridor; refinement and identification of initial project (Locally-Preferred Alternative (LPA))
2019	Apply to Federal Transit Administration (FTA) to enter Project Development/NEPA
2019-2020	Project Development – detailed planning/design
Fall 2020	Apply for final design/construction grant for federal FY 2021 budget
2021-2022	Final Design
2023-2024	Construction

Questions/Comments?

If you have any questions please don't hesitate to contact us at:

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