

Summary

1. Purpose and Need

The Interurban Transit Partnership (also known as “*The Rapid*”), as a grantee of the Federal Transit Administration (FTA), has prepared this Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) for the proposed Silver Line Bus Rapid Transit (BRT) project, located in Kent County, Michigan. *The Rapid* serves the transit needs of six cities in western Lower Michigan, including East Grand Rapids, Grand Rapids, Grandville, Kentwood, Walker and Wyoming.

This EA has been prepared to provide opportunity for agency and public comment and input, and to identify mitigation measures to address impacts. The EA contains the results of the environmental analyses completed on the proposed project and is used as a decision-making document to determine if the Silver Line BRT Project will result in significant impacts to social, economic, environmental, and transportation factors.

The Silver Line BRT project is a proposed north-south BRT system located in Downtown Grand Rapids and the cities of Wyoming and Kentwood. The proposed alignment for the Silver Line BRT extends 9.6 miles from the Rapid Central Station on the periphery of the Grand Rapids Central Business District (CBD) south to 60th Street within the cities of Wyoming and Kentwood.

The purpose of the Silver Line BRT project is to provide reduced travel time, provide alternative modes of travel to the automobile, and improve reliability for existing and new transit riders from housing in the Silver Line corridor to major employment and educational centers in the Grand Rapids CBD. The need for the Silver Line BRT project is based on the following conditions within the project corridor:

- Increase in population and employment
- Existing transit dependent communities
- Proximity to key destinations including institutions, special event venues and major employers
- Growth in transit ridership
- Increase in congestion
- Transit supportive land use
- Economic development potential

As the second largest city in the State of Michigan, Grand Rapids, and the greater Grand Rapids region inclusive of the six cities in *The Rapid* service area (East Grand Rapids, Grand Rapids, Grandville, Kentwood, Wyoming, and Walker), is expected to experience continued population and employment growth in the future. Downtown Grand Rapids has the highest anticipated future employment increases as well as the presence of major activity centers, such as

universities, hospitals, museums, and special events venues. The Division Avenue corridor, which includes the downtown CBD, is characterized by a high percentage of transit dependent populations, and the proposed project would link these populations to the medical facilities, universities, and other employment centers in Downtown Grand Rapids.

In the last 10 years, ridership on *The Rapid* bus routes in the greater Grand Rapids area has continued to grow with the greatest increase in the Division Avenue corridor. Enhanced transit service and increased frequencies has the potential to improve mobility by attracting more riders in the Division Avenue corridor, as transit service would become more available and convenient for passengers, as well as alleviating projected traffic congestion due to population and job growth.

The jurisdictions in the Division Avenue corridor have land use master plans and zoning that support transit-friendly development, with some emphasis placed along Division Avenue. The City of Grand Rapids encourages dense development along transit routes in the corridor, and Kentwood revised their master plan to include transit-oriented development (TOD) in several corridors, including Division Avenue. Similarly, Wyoming is amending its master plan to include TOD in an attempt to create a less auto-oriented area around Division Avenue, among other areas.

2. Alternatives Considered

The selection of the Locally Preferred Alternative (LPA), defining the key elements of the Silver Line BRT Project, resulted from the Great Transit Grand Tomorrows (GT2) Alternatives Analysis Study (2007). During the Alternatives Analysis phase of the project, *The Rapid* considered ten corridors for a new transit service and concluded that the most appropriate service corridor was the South Corridor, running along and encompassing an area one half-mile either side of Division Avenue from Downtown Grand Rapids to 60th Street in the cities of Wyoming and Kentwood. This corridor recommendation followed from the evaluation of transportation, social, economic, and environmental factors in a four-tiered process. At each stage of evaluation, a progressively smaller field of corridors was assessed against an increasingly more detailed range of evaluation criteria. When combined with input from the public, local agencies and a task force of public and private sector community leaders, only the most promising corridors were advanced, ultimately resulting in the selection of the South Corridor by the GT2 Task Force in 2006 and later (2007) affirmed by *The Rapid* Board of Directors. Public input was provided throughout this selection process and included meetings held in 2003 through 2005.

Further evaluation of the Locally Preferred Alternative resulted in consideration of various alignment options within the downtown. The Downtown Alternatives Report (2009) documented the screening process that resulted in the final alignment being considered in this EA. In accordance with NEPA requirements, the No Action Alternative will remain in the EA process as a basis for comparison for potential impacts of the Locally Preferred Alternative.

Alternatives that have been considered for the Silver Line BRT project include the No Action Alternative and the Locally Preferred Alternative.

The **No Action Alternative** serves as a baseline against which to evaluate the effects of the Locally Preferred Alternative on transportation, social, economic, and environmental factors. The No Action Alternative undertakes no major transit system improvements or investments within the Division Avenue corridor, but rather maintains the existing transit system with 15-45 minute headways in off-peak hours and 15-30 minute headways in peak-hour service.

The **Locally Preferred Alternative** proceeds from the CBD of Grand Rapids and then follows Division Avenue to the south service boundary at 60th Street. The proposed alignment is 9.6 miles in length, starting at the Rapid Central Station in Downtown Grand Rapids, traveling north to Michigan Street via Grandville Avenue, Market Avenue, and Monroe Avenue. The alignment then circulates through downtown and follows Division Avenue southbound. The Locally Preferred Alternative was initially routed along Lafayette Avenue for approximately three blocks. Following an evaluation of transportation, socio-economic, and environmental factors and neighborhood meeting input, it was subsequently rerouted to Ransom Avenue to avoid residential areas within the Heritage Hill Historic District, increase proximity to major activity centers along Ransom Avenue, and produce a minimal impact on traffic flow.

The proposed BRT system includes eighteen stations with a pair of platforms at each station location, with the exception of the station at Central Station of a single platform. No property acquisition is proposed as part of the project, since each of the stations will be located in existing road rights-of-way. The eighteen stations are proposed at the following locations:

1. Central Station (existing)
2. Monroe Avenue/Fulton Street
3. Monroe Avenue/Lyon Street
4. Michigan Street
5. Crescent Street
6. Ransom Avenue/Fountain Street
7. Jefferson Avenue/Wealthy Street
8. Division Avenue/Logan Street
9. Division Avenue/Franklin Street
10. Division Avenue/Hall Street
11. Division Avenue/Cottage Grove Street
12. Division Avenue/Burton Street
13. Division Avenue/Alger Street
14. Division Avenue/28th Street
15. Division Avenue/36th Street
16. Division Avenue/43rd Street

17. Division Avenue/54th Street
18. Division Avenue/60th Street

The Locally Preferred Alternative would use low-floor, multiple-door vehicles running in the existing travel lanes closest to the curb in each direction and complementing the existing local bus (Route #1) operating plan in the corridor. The Locally Preferred Alternative proposes 10-minute headways in peak hours, 15-minute headways in off-peak hours, and 30-minute headways late night and on weekends with the BRT system operating from 5:00 a.m. to 11:30 p.m. weekdays, 6:00 a.m. to 10:00 p.m. Saturday, and 7:00 a.m. to 7:00 p.m. Sunday.

3. Capital Cost Estimate

The total cost of constructing the Silver Line project is estimated at \$37 million in the year of planned expenditure (2013). These current cost figures are based on the Federal Transit Administration's (FTA) Standard Cost Categories (SCC) worksheet and were prepared prior to the completion of Preliminary Engineering (PE) plans. The State of Michigan has committed to supporting the project with a 20 percent local match. The 20 percent state match is for project construction, as operating monies will be sourced from local funds.

The primary Federal funding for the Silver Line BRT project is Section 5309 New Starts/Very Small Starts Funds. Based on the standard FTA funding policy of 80 percent Federal and 20 percent local match, up to an estimated \$37 million of Section 5309 New Starts/Small Starts funds is being requested for the Locally Preferred Alternative.

4. Environmental Consequences and Mitigation

The EA reports on the potential environmental, social, and economic impacts associated with the No Action Alternative and the Locally Preferred Alternative. The resource areas analyzed in this document are presented below with a summary of anticipated adverse and beneficial impacts proposed mitigation measures, and final design considerations for the Locally Preferred Alternative. The No Action Alternative is included for comparison. More detailed information on impacts and mitigation measures can be found in Chapter 3.0 with the corresponding section references shown below.

Resource Topic	Potential Impacts		Proposed Mitigation	Final Design Considerations
	Adverse	Beneficial		
Land Use and Zoning (Section 3.1)				
Locally Preferred Alternative	None	<ul style="list-style-type: none"> Enhanced connections could spur economic redevelopment in some locations. Transit Oriented Development, as identified in local plans, will be supported. 	None	None
No Action	None	None	Not Applicable	Not Applicable
Social/Economic Conditions (Section 3.2)				
Locally Preferred Alternative	None	<ul style="list-style-type: none"> Increased access to and along the corridor. Improved mobility for residents and commuters. Potential economic development. 	None	None
No Action	None	None	Not Applicable	Not Applicable
Environmental Justice (Section 3.3)				
Locally Preferred Alternative	<ul style="list-style-type: none"> Short term impacts during construction. 	<ul style="list-style-type: none"> Minority and low income populations will benefit from enhanced mobility and access to employment. 	<ul style="list-style-type: none"> Coordination with businesses and residents to minimize construction disruptions. 	None
No Action	None	None	Not Applicable	Not Applicable
Traffic and Transportation (Section 3.4)				
Locally Preferred Alternative	<ul style="list-style-type: none"> Level of Service exceeding LOS D at six Division Avenue intersections. 	<ul style="list-style-type: none"> Use of Transit Signal Priority (TSP) at select signalized intersections will enhance local bus service. 	<ul style="list-style-type: none"> Update traffic signal timings, and consider shared BRT/general traffic lanes in select locations. 	<ul style="list-style-type: none"> Evaluate shared BRT/general traffic lanes treatment and pedestrian pushbuttons where appropriate. Identify signalized locations for TSP.
No Action	None	None	Not Applicable	Not Applicable
Historic and Archeological Resources (Section 3.5)				
Locally Preferred Alternative	None	None	None	None
No Action	None	None	Not Applicable	Not Applicable
Air Quality (Section 3.6)				
Locally Preferred Alternative	None	None	None	None

Resource Topic	Potential Impacts		Proposed Mitigation	Final Design Considerations
	Adverse	Beneficial		
No Action	None	None	Not Applicable	Not Applicable
Noise (Section 3.7)				
Locally Preferred Alternative	Short term impacts during construction	None	None	None
No Action	None	None	Not Applicable	Not Applicable
Water Resources/Quality (Section 3.8)				
Locally Preferred Alternative	None	None	None	None
No Action	None	None	Not Applicable	Not Applicable
Floodplains (Section 3.9)				
Locally Preferred Alternative	None	None	None	<ul style="list-style-type: none"> Consult with MDNRE on floodplain considerations during design of the Monroe Avenue stations (Fulton Street and Lyon Street).
No Action	None	None	Not Applicable	Not Applicable
Hazardous Materials (Section 3.10)				
Locally Preferred Alternative	None	None	None	None
No Action	None	None	Not Applicable	Not Applicable
Parkland (Section 3.11)				
Locally Preferred Alternative	<ul style="list-style-type: none"> Short-term impacts during construction 	<ul style="list-style-type: none"> Improved mobility options for pedestrians, bicyclists, and other recreation users that are transit dependent. 	None	<ul style="list-style-type: none"> Ensure during station design to not impede pedestrian and bicycle traffic.
No Action	None	None	Not Applicable	Not Applicable
Safety and Security (Section 3.12)				
Locally Preferred Alternative	None	<ul style="list-style-type: none"> Video surveillance cameras to be installed on BRT buses. 	None	<ul style="list-style-type: none"> Use of video surveillance cameras and alert call buttons to be evaluated during station design.
No Action	None	None	Not Applicable	Not Applicable
Indirect and Cumulative Effects (Section 3.15)				
Locally Preferred Alternative	<ul style="list-style-type: none"> Minor cumulative impacts to existing or isolated natural resources 	<ul style="list-style-type: none"> Induced land use change may create higher densities consistent with local plans 	<ul style="list-style-type: none"> Local land use plans and regulatory controls 	<ul style="list-style-type: none"> Station design plans in vicinity of 60th Street (near Crippen Drain)
No Action	None	None	Not Applicable	Not Applicable