

AMENDED RECORD OF DECISION

U.S. Department of Transportation Federal Transit Administration

Woodward Avenue Streetcar Project Detroit, Michigan

Decision

In accordance with 23 CFR part 771, the Federal Transit Administration (FTA) has determined that the requirements of the National Environmental Policy Act (NEPA) of 1969 have been satisfied for the Woodward Avenue Streetcar Project (the Project) sponsored by the Michigan Department of Transportation (MDOT).

The Project is a 3.3-mile, fixed-rail, at-grade streetcar system located entirely within the right-of-way of Woodward Avenue in the City of Detroit. It would operate in mixed traffic and run from Larned Street in downtown Detroit north to Chandler Street/ Delaware Street, north of Grand Boulevard, in the New Center district.

This FTA Record of Decision (ROD) applies to the Streetcar Alternative described and evaluated in the Supplemental Environmental Assessment (EA) for the Project, signed February 1, 2013. The EA supplements the Final Environmental Impact Statement (FEIS) for the Woodward Avenue Light Rail Transit (LRT) Project, signed June 1, 2011. This Amended ROD replaces the ROD issued August 31, 2011 for the LRT Project. Neither the Supplemental EA nor this Amended ROD constitutes an FTA commitment to provide financial assistance for the Project.

Background

The Streetcar Alternative is substantially similar to an alternative studied as part of the FEIS for the Woodward Avenue LRT Project. The FEIS evaluated four alternatives for building a 9.3-mile LRT system on Woodward Avenue from downtown Detroit north to the Michigan State Fairgrounds near 8 Mile Road. These alternatives included two options for how transit service would run along the main portion of Woodward Avenue and three design options focused on service downtown within the central business district. Option A had center, median-running LRT service. Option B had side, curb-running LRT service. The four alternatives were:

- Alternative A1: median-running with downtown design option 1 and 16 stations;
- Alternative B2: curb-running with downtown design option 2 and 21 stations;
- Alternative B3: curb-running with downtown design option 3 and 18 stations; and
- Alternative A4: a combination of median- and curb-running with downtown design option 4 and 19 stations.

The FEIS identified Alternative A4 as the preferred alternative. It had light rail trains operating in the center median of Woodward Avenue from the State Fairgrounds to Park Avenue/Witherell Street and then transitioning to curb-running operation. The FEIS looked at potential sites for a vehicle storage maintenance facility (VSMF), traction power substations (TPSS), and construction staging. In addition, the FEIS included a Section 4(f) analysis and an executed

Section 106 Memorandum of Agreement (MOA) with the Michigan State Historic Preservation Office (SHPO).

Following issuance of the ROD in 2011, however, FTA and the City of Detroit - the project sponsor - decided to terminate the LRT Project after an extensive review of the costs involved to construct and operate it. A coalition of transit supporters from corporate and private institutions in southeast Michigan subsequently revisited a proposal originally put forth in 2009 for a shorter project along Woodward Avenue that could accommodate possible future extensions. This became the Streetcar Alternative. The Supplemental EA evaluated this alternative.

Alternatives Considered

The Supplemental EA compared two alternatives, the light rail Alternative B3 evaluated in the FEIS and the Streetcar Alternative.¹ Light rail and streetcars have much in common, but there are also notable differences in application. Alternative B3 consists of curb-running LRT operating in the right-most travel lane of Woodward Avenue from Adams Street to just north of Grand Boulevard. From north of Grand Boulevard to the Michigan State Fairgrounds, however, the LRT would operate in an exclusive guideway in the roadway median. Within the curb-running/mixed traffic section, the LRT would be running with vehicular traffic. Alternative B3 accommodates future possible extensions and includes overhead wires used to power the LRT vehicles, poles to support the wires, and TPSS.

The Streetcar Alternative is similar to Alternative B3 but assumes a modern streetcar vehicle, which is similar, though slightly smaller, than an LRT vehicle. The Streetcar Alternative comprises a fixed-rail, at-grade streetcar on Woodward Avenue with service operating in mixed traffic from Larned Street in downtown Detroit north to Chandler Street/Delaware Street in New Center. Twelve stations are proposed along Woodward Avenue, eleven with Project implementation and a potential twelfth station in the future. While the Project would be fully functional as a stand-alone system, it would accommodate future extensions. The Streetcar Alternative includes supporting trackwork, a VSMF, an electrical system consisting of an overhead catenary, supporting poles, and four TPSS.

The Supplemental EA evaluated potential sites for supporting ancillary facilities, including the VSMF, TPSS, and construction staging areas. The selected VSMF site would occupy the block between Custer and Bethune on the east side of Woodward. This site is currently vacant and was selected based on the site size and configuration, zoning, and sensitivity to nearby land uses. The site is on the north end of the alignment which supports possible extension of the system north. It has direct, but minimal, frontage on Woodward Avenue. Direct access to the roadway would limit the non-revenue track required and the depth of the site would require less frontage on Woodward Avenue. The site is zoned B4 (Business District) and is separated from residential properties and is overall consistent with existing land use. The four TPSS sites are located approximately 100 feet north of the intersection of Farmer and John R, approximately 170 feet north of Willis and approximately 400 feet west of Woodward, on the west side of Woodward in the block between Amsterdam Street and the Conrail and Grand Trunk Western Railroad bridges, and on the east side of Woodward between Custer and Bethune Streets (within the VSMF site). These sites will be refined during design. The sites were selected based on the anticipated power needs of the system, proximity to Woodward Avenue, and consistency with

¹ The No Build Alternative from the FEIS remained unchanged and was incorporated by reference.

existing land use. Depending on construction needs, four construction staging areas may be required for the Project. One site is south of I-75, two sites are between I-75 and I-94, and one site is north of I-94. These sites will be refined during construction. All are undeveloped and vacant, and will be available for permanent development once construction is complete. Appendix A to this ROD depicts the Streetcar Alternative.

Thus, the primary differences between Alternative B3 and the Streetcar Alternative are:

- the Streetcar Alternative is shorter in length (3.3 miles compared to 9.3 miles);
- the location and number of several proposed stations has changed (12 down from 18);
- the location of the preferred VSMF site has changed;
- the use of streetcar vehicles instead of LRT vehicles; and
- the location of center and curb-running operations has changed.

Basis for Decision

The FTA based its final environmental decision on information in the Draft Environmental Impact Statement for the Woodward Avenue Light Rail Transit Project (January 2011), the FEIS for the LRT Project (June 2011), the Supplemental EA for the Streetcar Project (February 2013), comments received on these documents, and extensive public outreach. The environmental documents constitute a detailed assessment of the environmental impacts of the Project as required by NEPA and Federal transit laws.

The Streetcar Alternative meets the purpose of the Project by improving public transit service and providing greater mobility options for the Woodward Avenue corridor. Adding the streetcar along the corridor will improve transportation equity for all travelers by providing an additional mode to users living and working along the corridor. By offering a new transportation option, those individuals that are dependent on transit will particularly benefit. With frequent headways, the streetcar will improve transit capacity in the corridor, and the additional service will improve linkages to major activity centers along on the corridor with increased service for longer hours. Finally, because this new service will be a permanent investment, the streetcar supports the city's economic development goals and encourages reinvestment in Detroit's urban core.

The need for the Project is based on: strong existing bus ridership and large potential ridership; a significant transit-dependent population along the corridor; overcrowding, reliability issues, and lack of rapid transit alternatives with the current bus system; air quality issues due to the region's nonattainment status; and a focus by local policymakers to implement and operate transit improvements as a part of a more balanced and sustainable approach to future growth. The Streetcar Alternative will connect two of the region's largest destination centers; employment, educational and medical centers in the greater downtown area with adjacent neighborhoods; improve access to jobs and services for residents along the corridor; and offer a new opportunity to live in a walkable and transit-oriented environment.

The Project is envisioned to be a single system within a program of larger and interconnected transit investments. The Project supports possible future system extensions at both the northern and southern terminus to provide additional connections to key land use and transportation destinations within Detroit.

Public Opportunity to Comment

The Project Team engaged the public extensively throughout development of the Supplemental EA. In coordination with the Southeast Michigan Council of Governments (SEMCOG), the team hosted an open house on August 21, 2012, to present the Project. It provided information and gave notice that FTA and MDOT were initiating a Supplemental EA. The team created a project Web site (www.mi.gov/woodwardstreetcar) to provide updates and related documentation.

MDOT engaged the public and partner agencies through other meetings. On November 14, 2012, MDOT attended the City of Detroit's Non-Motorized Facilities Quarterly Task Force meeting to discuss the Project and receive comments. The meeting addressed non-motorized transportation projects along the corridor. On January 3, 2013, MDOT met with bicycle advocates and other local groups to discuss how the Project would accommodate bicycle use.

FTA released the Supplemental EA for a 30-day public comment period on February 12, 2013. MDOT published legal notices of the release in local newspapers, including the *Detroit Free Press* and the *Detroit News*. SEMCOG sent a news release out to local media in southeast Michigan. The Project Team made hardcopies of the document available at local libraries along Woodward Avenue and posted an electronic version of the document on the Project Web site.

On February 28, 2013, the FTA and MDOT held a public hearing on the Project at the Detroit Public Library Main Branch. Staff was on-hand for a three hour period. The team gave a formal presentation and received comments on the Project. Appendix D summarizes and responds to the comments received at the hearing and throughout the public comment period.

Measures to Minimize Harm

The FTA requires MDOT, as project sponsor, to coordinate with other agencies as necessary to implement all mitigation measures included in Appendix C to this ROD. FTA requires MDOT to ensure that mitigation commitments are included within a Project Management Plan (PMP) and implemented during design and construction. This ensures that mitigation commitments are incorporated into design documents, cost estimates, and schedules. MDOT will implement and monitor the mitigation commitments through quarterly updates of a Mitigation Monitoring Program or by other means presented in the PMP and approved by FTA.

Historic Properties

FTA determined the Woodward Avenue Streetcar Project would have an adverse visual effect on historic properties. Details of the effects determinations for historic structures are provided in the Woodward Avenue Streetcar Project's Section 106 Technical Report. Of the 65 NRHP-listed and eligible properties in the Streetcar Alternative Area of Potential Effects, the Project would adversely affect five historic properties, have no adverse effect to 23 historic properties, and have no effect to 37 historic properties. FTA determined that there would be no adverse effect to the two National Historic Landmarks. No direct physical impacts would occur to those properties, and no indirect adverse effects, such as visual, noise and vibration impacts, were anticipated. Generally, the adverse effects consisted of visual impacts to historic properties' setting, feeling, or association.

The FTA and the Michigan SHPO have executed a Section 106 MOA to address historic resources mitigation. The MOA contains mitigation measures and conditions MDOT will follow

to minimize adverse effects to historic properties. Mitigation measures include design workshops with the SHPO and consulting parties for each phase of the Project to review and discuss proposed design plans for all Project elements that may adversely affect any historic property. The MOA is included as Appendix D to this ROD.

Air Quality

FTA determined that the Project will not result in any adverse regional or local air quality impacts. The Project is included in the amended regional transportation plan, *Direction2035*, and the amendment to the 2011-2014 Transportation Improvement Program. As the Project is predicted to reduce the vehicle miles travelled in the study area, it is predicted to have a beneficial impact on regional air quality levels. The Project is not expected to measurably affect mobile source air toxics or PM_{2.5} levels, and it has been determined to not be a project of air quality concern by the Interagency Working Group.

Section 4(f)

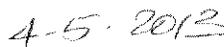
A FTA-funded project must comply with the provisions of law at 49 U.S.C. § 303 and that statute's implementing regulation. The implementing regulation (23 CFR part 774) provides certain protections for public parklands and recreational lands, wildlife and waterfowl refuges, and historic sites. These resources are referred to as Section 4(f) properties. FTA identified exceptions to the requirement for Section 4(f) approval at 23 CFR part 774.13. These exceptions include the restoration, rehabilitation, or maintenance of transportation facilities that are on or eligible for the National Register when we conclude that such work will not adversely affect the historic transportation facility and the officials with jurisdiction have not objected to FTA's no adverse effect determination. Therefore, FTA determined that the Project has no direct, temporary, or constructive use of any Section 4(f) properties that would disrupt the use or enjoyment of these properties or result in a finding of adverse effect to historic properties.

Determinations and Findings

On the basis of the determinations made in compliance with Federal law, the FTA finds that the Project, as described in the Supplemental EA, and including the mitigation measures identified in that document and summarized in this ROD, satisfies the requirements of the National Environmental Policy Act of 1969, the Department of Transportation Act of 1966, the National Historic Preservation Act of 1966, and the Clean Air Act of 1970 (all as amended).



Marisol Simon
Regional Administrator
Federal Transit Administration
Region V



Date

- Appendix A: Project Map
- Appendix B: Summary of Environmental Impacts
- Appendix C: Mitigation and Monitoring Commitments
- Appendix D: Comments and Responses
- Appendix E: Section 106 Memorandum of Agreement

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Appendix A

Project Map

Project Map: Streetcar Alignment and Station Locations



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|  | Study Area |  | Vehicle Storage and Maintenance Facility Site (VSMF) |
|  | Woodward Streetcar Alignment |  | Traction Power Substation Site (TPSS) |
|  | Woodward Streetcar Station |  | Construction Staging Area (CSA) |

Source: Woodward Streetcar Project Team, 2013

Appendix B

Summary of Environmental Impacts

This appendix summarizes the social, economic, and environmental impacts of the Project. The following table lists the impacts and benefits of the Project by environmental discipline. The Supplemental EA provides a full description of the environmental impacts.

Evaluation Measure	Impact / Benefit
Air Quality	Beneficial impact on regional air quality
Hazardous Materials	Potential hazardous materials present on preferred Vehicle Storage and Maintenance Facility (VSMF) and Traction Power Substation (TPSS) sites, suspected contaminated sites near station and at railroad underpass, sites will be remediated if materials are found
Historic Properties	Adverse visual effects to 5 historic properties. Adverse effects would be from the streetcar stations and their potential to diminish the integrity of the property's setting, feeling, and association.
Archaeological Resources	Potential impacts to Original Protestant Cemetery, which has been documented with the street right-of-way. Site will be monitored during construction and mitigated if necessary
Noise	Potential for moderate noise impacts near Preferred VSMF site
Vibration	No impact to adjacent structures
Land Use / Zoning / Public Policy	Limited visual impact on neighborhoods from preferred VSMF and TPSS sites
Neighborhood Character	Temporary construction-phase disruption of traffic and pedestrian travel patterns
Community Facilities and Services	Temporary construction-phase disruption of direct access to community facilities and pedestrian travel patterns
Parkland	Temporary construction-phase disruption of traffic and pedestrian travel patterns
Visual and Aesthetic Conditions	No visual impacts with the Preferred VSMF Site 1; some minor visual impacts with alternate VSMF Sites 2 and 3.
Utilities	Temporary service disruptions and traffic detours during required utility relocations
Energy	Likely decrease in overall energy use with Streetcar operations; Temporary increase in energy use for construction
Parking	Loss of on-street parking on one side of the street (up to 344 spaces) which will be determined during design phase of the project

Evaluation Measure	Impact / Benefit
Roadways and Levels of Service (LOS)	All major signalized intersections would operate acceptably, travel times may increase by 1-2 minutes, some detours during construction
Storm Water Management	Limited impact due to an increase in impervious surface and subsurface runoff located at the VSMF site
Indirect	Would encourage new transit oriented development near Streetcar stations, may encourage infill redevelopment of underutilized or vacant parcels near stations
Cumulative	Would enhance economic development opportunities in some parts of the study area, gentrification may occur over an extended period of time
Section 4(f)	No Section 4(f) resources used
Transit	Reduced transit travel times for those using the streetcar compared to bus, would provide an additional transit option along the corridor, travel time expected to be 15 minutes one-way, other bus routes and the Detroit People Mover will continue to operate the same as today
Transportation Equity and Environmental Justice	Streetcar improves public transit service and provides greater mobility options for the transit dependent community, is consistent with the City of Detroit Master Plan, provides transit connections to existing and planned economic development area, and has the potential for future transit and economic development

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Appendix C

Mitigation and Monitoring Commitments

The Federal Transit Administration (FTA) and the Michigan Department of Transportation (MDOT) commit to the mitigation and monitoring commitments summarized in Table 1, “Measures to Mitigate Environmental Impacts.” These commitments are from the Woodward Avenue Light Rail Transit (LRT) Environmental Impact Statement (EIS) and its supplementing document, the Woodward Avenue Streetcar Supplemental Environmental Assessment (EA). See these documents for complete descriptions of impacts and proposed mitigation measures. The detailed description of commitments in these documents remains in effect. Table 1 is included to facilitate fulfillment of these Project commitments. It is MDOT’s responsibility to ensure all commitments are completed, including working with all appropriate entities as necessary (e.g., M-1 Rail, City of Detroit, etc.) and including commitments within contract specifications. These commitments may not be eliminated from the Project except by FTA’s written consent. Only the resources with mitigation commitments are listed.

TABLE 1: MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS

#	Area	Source	Impact	Commitment	Party	Timing
1.	Safety and Security (Non-Motorized)	Supplemental EA, 3.2	Bicycles on Woodward would continue to ride in the rightmost lane and would be adversely affected by curb-running tracks.	<p>Provide signage to cyclists indicating the danger of curb-running tracks.</p> <p>Provide bicycle facilities on the adjacent and parallel street, Cass Avenue.</p> <p>Provide wayfinding and directional signage along Woodward to inform of alternate routes available.</p>	MDOT, in coordination with City of Detroit	Design and Construction
2.	Transit Safety and Security	FEIS, 3.3.2	Enhance passenger safety and security.	<p>Include lighting and security systems at stations.</p> <p>In the event of an emergency, streetcar drivers will notify a dispatcher who will notify the Detroit Police Department or the cooperating security authority.</p> <p>Conduct informational and educational campaigns regarding streetcar prior to construction and operation.</p>	MDOT	Design and Construction
3.	Vehicular Operations	Supplemental EA, 3.4	Potential for turning-movement restrictions in six locations affecting transportation operations and travel speeds.	<p>Prohibit certain left turns. To improve streetcar travel time, transit signal priority would be used at all new signalized intersections or signals adding transit-only phases north of downtown.</p> <p>Investigate whether off-wire vehicle technology will be utilized allowing left turn movements at some of these locations.</p>	MDOT, in coordination with City of Detroit	Design and Construction

#	Area	Source	Impact	Commitment	Party	Timing
4.	Permits and Approvals	FEIS, 3.6	Several permits and approvals are required for the Project.	Negotiate Operating License Agreement	MDOT, in coordination with FHWA and City of Detroit	Design and Construction; must be completed prior to operation.
				Obtain Permit to Construct	MDOT, in coordination with City of Detroit	Prior to Construction
				Secure Utility/ Drainage Permits	Utility owners and operators, in coordination with City of Detroit	Prior to Construction
5.	Construction Effects on Transit	Supplemental EA, 3.6.1	Construction may affect bus routes and stops.	Re-route bus routes and/or move bus stop locations outside immediate construction zone due to a full or partial roadway closure. Maintain clear, accessible path from the sidewalk through the construction zone.	MDOT, in coordination with service providers	Construction
6.	Construction Effects on Transit	Supplemental EA, 3.6.1	Temporary detours or bus stop relocations may be necessary for buses and passengers.	DDOT and/or SMART will issue a Rider Alert and post at affected stops, on buses, at schedule distribution outlets, and on their Web sites. Post traffic detours for motor vehicles and bicycles, as needed.	MDOT, in coordination with service providers	Construction
7.	Construction Effects on Non-Motorized	Supplemental EA, 3.6.2	Construction may affect safety and security of traveling public.	Place construction fencing between construction zone and the adjoining sidewalk. Maintain a through path along the sidewalk. Stage construction so at least one	MDOT	Construction

#	Area	Source	Impact	Commitment	Party	Timing
				crosswalk at each intersection remains open. Place signage to guide pedestrian to available crossing locations.		
8.	Construction Effects on Parking	Supplemental EA, 3.6.3	Temporary loss of all parking along Woodward Avenue during construction.	There is adequate available parking along side streets and within garages during the closure of Woodward Avenue.	MDOT	Design and Construction
9.	Construction Effects on Parking	Supplemental EA, 3.6.3	One parking garage located off Grand River Avenue would be impacted by full closure of Woodward Avenue.	Convert Grand River Avenue to two-way between Griswold Street and Woodward Avenue, if Woodward is fully closed within Downtown	MDOT	Design and Construction
10.	Construction Effects on Vehicular Operations	Supplemental EA, 3.6.4	Removal of travel lane in each direction along some parts of the corridor during construction.	Maintain one travel lane in each direction and maintain left-turn lanes at signalized intersections. Direct motorists to an alternate route where a roadway may be closed. Prepare and maintain traffic plans. Coordinate deliveries via alternate times/locations during construction.	MDOT	Design and Construction
11.	Air Quality	FEIS, 4.2.6	Particulate Matter emissions caused by construction in a populated area.	Construction contracts require the use of diesel engine retrofit technology on diesel construction vehicles and diesel-powered equipment.	MDOT	Construction
12.	Air Quality	FEIS, 4.2.6	Fugitive dust during construction of the Project.	Adhere to State and local regulations regarding dust control (MDOT's Standard Construction Specification Sections 107.15(A) and 107.19).	MDOT	Construction
13.	Hazardous Materials	FEIS, 4.3.6	Proper due diligence necessary to avoid long-term effects from purchasing contaminated property.	Update Phase I ESAs and conduct Phase II ESAs on VSMF and TPSS sites.	MDOT	Prior to purchase and acquisition

#	Area	Source	Impact	Commitment	Party	Timing
				<p>Conduct BEA to comply with Michigan state regulations at time of purchase and acquisition.</p> <p>Follow BMPs and pollution prevention techniques to minimize potential exposure.</p>		
14.	Hazardous Materials	FEIS, 4.3.6	Contaminated materials may be present within the streetcar study area leading to potential exposure.	<p>Testing and proper removal and disposal of materials. Removal of contaminated soils, installation of vapor mitigation systems, installation of barrier(s) to eliminate direct contact with contaminated soil/groundwater.</p> <p>Conduct remediation plan in accordance with NREPA.</p>	MDOT	Immediately if/when contamination is found
15.	Historic and Archaeological Resources	Supplemental EA, 4.4.1	Visual adverse effects on historic resources.	<p>Implement mitigation as outlined in the Section 106 MOA.</p> <p>Design Project elements consistent with the corridor's historic context. Conduct design workshops with the SHPO and consulting parties for all elements of the Project with the potential to adversely affect any historic properties. Submit the design coming out of each workshop for SHPO comment or approval.</p> <p>Prepare NRHP nomination for the Woodward-West Palmer-Cass-West Kirby Historic District and First Federal Building.</p>	MDOT, in coordination with M-1 Rail	Design

#	Area	Source	Impact	Commitment	Party	Timing
16.	Historic and Archaeological Resources	Supplemental EA, 4.4.2	Potential effects to archaeological sites within the Project corridor south of Grand Circus Park.	<p>Implement mitigation as outlined in the Section 106 MOA.</p> <p>Develop a program of construction monitoring in all portions of the streetcar corridor and passenger station locations that have the potential to affect elements of the pre-1805 city.</p> <p>Develop a preliminary data recovery plan before construction begins and submit plan to SHPO for approval.</p>	MDOT, in coordination with M-1 Rail	Design
17.	Noise	Supplemental EA, 4.5.6	Noise from construction activities would temporarily impact properties in the immediate vicinity, resulting in elevated noise levels for people in adjacent properties.	Comply with all State and local noise ordinances which would apply to construction.	MDOT	Construction
18.	Vibration	FEIS, 4.6.7	Construction of the Project may result in short-term increases in vibration levels at properties in the immediate vicinity of construction activities.	Conduct transfer mobility tests to confirm need for mitigation. Comply with all State and local ordinances. Include vibration control measures in construction specifications.	MDOT	Prior to Construction and Construction
19.	Land Use, Zoning, and Public Policy	Supplemental EA, 4.7.1	A TPSS may have visual impacts on surrounding land uses.	Context-sensitive design of the TPSS will mitigate the facilities' potential impacts on nearby residential uses.	MDOT	Design
20.	Neighborhood Character	Supplemental EA, 4.7.2	Potential construction effects on neighborhood activity patterns.	Include appropriate signage and notifications of roadway and sidewalk detours and closures.	MDOT	Design and Construction
21.	Community Facilities and Services	FEIS, 4.7.3	Construction would temporarily interrupt through-traffic and direct access to community facilities and services.	Include enhanced traffic signals, crosswalks, striping, signage, and notifications of road and sidewalk closures and detours during construction.	MDOT, in coordination with City of Detroit	Design and Construction

#	Area	Source	Impact	Commitment	Party	Timing
22.	Visual and Aesthetics	FEIS, 4.7.5	Construction would temporarily impact the visual environment.	Design project elements consistent with the corridor's historic context. Identify potential construction staging areas to minimize impacts.	MDOT	Design and Construction
23.	Utilities	FEIS, 4.7.6	The Project may affect a network of utilities below and above the roadbeds.	Conduct a thorough utility search to identify size, age, and location of utilities. Develop strategies to minimize impacts.	MDOT, in coordination with City of Detroit	Design and Construction
24.	Utilities	FEIS, 4.7.6	Some utilities may require relocation or restoration.	Coordinate utility relocation and protection with the City and the respective utility owner.	MDOT, in coordination with City of Detroit	Design and Construction
25.	Utilities	FEIS, 4.7.6	Temporary service disruptions are expected during construction.	Plan construction activities to minimize service outages. Notify affected users of any outages.	MDOT, in coordination with City of Detroit	Design and Construction
26.	Energy	FEIS, 4.7.7	Construction would increase indirect energy consumption.	Plan ways to conserve energy, focusing on recycling materials, using indigenous plants for landscaping, and applying BMPs for maintenance and energy efficiency.	MDOT, in coordination with City of Detroit	Design and Construction
27.	Construction Impacts	FEIS, 4.7.8	Project construction would use conventional techniques and take approximately 27 to 35 months.	Employ BMPs commonly used in the construction of streetcar systems; e.g., use fencing and security lighting around CSAs; concrete barriers and fencing along construction area; water/cover with tarps exposed surfaces and dirt/debris piles; use tarps on trucks hauling debris; maintain equipment and vehicle engine conditions; prohibit truck idling; use diesel engine retrofit technology; use grease and sediment traps and detention basins/ditches to control runoff; and	MDOT, in coordination with City of Detroit	Design and Construction

#	Area	Source	Impact	Commitment	Party	Timing
				notify businesses and residents of construction activities.		
28.	Roadways and Level of Service	FEIS, 4.7.9	Traffic re-routings and detours would be required along discrete alignment segments during construction and parts of Woodward Avenue would be closed south of Adams Street.	Re-time traffic signals at intersections to allow for additional time for vehicle travel. Develop and implement comprehensive Transportation Management Plan.	MDOT, in coordination with City of Detroit	Design and Construction
29.	Stormwater Management	FEIS, 4.7.10	Stormwater runoff may increase slightly. Wastewater may experience a temporary increase in dirt, debris, oil, grease, and soils as a result.	Obtain a NPDES permit. Adhere to approved sediment and erosion-control plans, including BMPs.	MDOT, in coordination with MDEQ	Design and Construction
30.	Environmental Justice	FEIS, 4.10.6	See above for description of Transportation, Air Quality, Hazardous Materials, Noise and Vibration.	See above for mitigation commitments for Transportation, Air Quality, Hazardous Materials, Noise and Vibration.	MDOT	Design and Construction
<p>Acronyms:</p> <p>BEA – Baseline Environmental Assessment BMP – Best Management Practices CSA – Construction Staging Area DDOT – Detroit Department of Transportation EA – Environmental Assessment ESA – Environmental Site Assessment FEIS – Final Environmental Impact Statement FHWA – Federal Highway Administration MDEQ – Michigan Department of Environmental Quality</p>				<p>MDOT – Michigan Department of Transportation MOA – Memorandum of Agreement NPDES – National Pollutant Discharge Elimination System Permit NRHP – National Register of Historic Places NREPA – Natural Resources and Environmental Protection Act SHPO – State Historic Preservation Officer SMART – Suburban Mobility Authority for Regional Transportation TMP - Transportation Management Plan TPSS – Traction Power Substation VSMF – Vehicle Storage and Maintenance Facility</p>		

Appendix D

Comments and Responses

The Project Team made the Supplemental Environmental Assessment available for public and agency review during a 30-day comment period from February 12, 2013 to March 14, 2013. During the public comment period, the team received 65 comments, which were divided into 135 unique comments. The unique comments are grouped into 23 categories; the responses are provided in the following table.

Comment	Topic	Comment	Response
1	Purpose and Need	The EA purpose and need should be different from the original EIS because it is not the same project. It is now just a local circulator for relatively slow, short-term travel.	The project will function as a circulator system; however, it still fits the purpose and need for the project. The purpose of the project is to improve public transit service, and provide greater mobility options for the Woodward Avenue corridor. It will improve transit equity among all travelers, improve overall transit capacity in the corridor, and improve linkages to major activity centers along the corridor. Since this is a permanent investment, it also supports the city's economic development goals and encourages reinvestment in Detroit's urban core. The need is based on strong existing bus ridership and large potential for ridership: a significant transit-dependent population along the corridor; overcrowding, reliability issues and lack of rapid transit alternatives with the current bus system; air quality benefits; and a focus by local policymakers to have transit improvements as a part of a more balanced and sustainable approach to future growth. This project is envisioned to be a single system within a program of larger and interconnected transit investments and supports possible future extension as well.
2		M-1 will just be a local circulator.	
3		Changes have occurred from the EIS: 1) degrades equity considerations; 2) doesn't connect people to Rosa Parks transit center; 3) doesn't provide a rapid transit alternative; 4) will not connect to the larger system.	
4		The streetcar's benefits are primarily economic development and stimulating new growth along the alignment rather than enhancing overall city wide transit capacity or region transit equity.	
5		Note that in transit-oriented development, transit comes before development.	
6		Transit and mobility concerns must be prioritized over private development needs.	
7		Need to get it right; don't need another version of the People Mover.	
8		Ask if the new system is giving people a reason to stay or a reason to leave.	
9		This is not the streetcar system of the 50s and 60s.	
10	Purpose and Need	Are we starving bus system for rail?	DDOT bus funds have not been allocated to the streetcar project. The streetcar is funded independently of the bus system.
11	Purpose and Need	Will provide a welcomed alternate to biking to work (GM), especially in the winter.	These comments speak to the need for the project, which is based on strong existing bus ridership and large potential for ridership: a significant transit-dependent population along the corridor; overcrowding, reliability issues and lack of rapid transit alternatives with the current bus system; air quality benefits; and a focus by local policymakers to have transit improvements as a part of a more balanced and sustainable approach to future growth.
12		Portland, Los Angeles, San Francisco, Cleveland, Chicago, Toronto, Vancouver all have transit.	
13		Transit helps for better air, less cars, less air pollution.	
14		This will provide alternate transportation for bus route 53, which is overcrowded.	
15		It currently takes me 1.5 hours to go from New Center to Southfield by bus, that's three hours a day, the time it takes to get to Chicago from here.	

Comment	Topic	Comment	Response
16	Purpose and Need	There should be a subway instead, from downtown to Fisher Building then to Ford Hospital and up to 8-Mile Road with underground stations at Ford Hospital, Wayne State University, and Fisher Building.	Grade-separated transit modes of subway or extension of the people mover were not considered feasible because of the large capital expense to build these types of systems is not cost effective for the forecasted ridership.
17		The best alternative is an expanded people mover running down Cass and John R serving all the institutions along the way, Wayne State, museums, tech town.	
18	Reliability/Travel Time	Frequency (running every eight to 12 minutes) and reliability are very important.	The streetcar service will operate on 7.5 to 8 minute headways during peak hours. The system will have designated station locations, level boarding, and pre-paid tickets. This reduces the amount of time needed for people to board the streetcar. The streetcar will operate mixed in traffic and as a result will travel at the speed of traffic, but it will have signal priority in some locations to allow the streetcar to travel the corridor more efficiently by stopping less frequently at signalized intersections. The number of stations serves the large number of activity centers along the route.
19		Prepaid level boarding also important.	
20		DDOT and SMART buses will interfere with and delay the streetcar.	
21		Plan to use it to get to work, but will reconsider if frequent delays.	
22		Transit-dependent students are frequently late for school.	
23		Employers aren't going to put up with someone being late because of problems with their transportation, especially if you live in the city and work in the suburbs.	
24		Needs to include fewer stops, center running and run faster than bus.	
25		Eliminate stops to reduce travel times, use buses for multiple stops.	
26		Slow travel times will deter use of the streetcar; extremely prompt towing of vehicles blocking the travel lane will be critical.	
27		I walked next to the Portland Streetcar and walked faster than the streetcar.	
28		Do they really think it will beat bus running curbside along with traffic?	
29	I travel by bus and I ride my bike. Sometimes I beat the Woodward Avenue bus from New Center to downtown in less than 15 minutes with my bike.		
30	Transportation Equity	There needs to be greater equity in transit spending.	There is no single project that addresses all transit needs of the City and the greater Detroit region. The streetcar project is an initial investment in transit for the region. It is envisioned to be a single system within a program of larger and interconnected transit
31		Care needs to be taken that Detroit doesn't end up with a two-tier transit system.	

Comment	Topic	Comment	Response
32		People of Detroit need transportation east to west; Woodward Avenue is the best served right now.	investments. As the streetcar project supports possible future extensions, there is the potential that future transit investments can be made.
33		Why do Lansing and Washington want to spend money on transit when the city is struggling financially and buses already serve the corridor and run empty?	
34		Unfair that this system will benefit Mr. Ilitch, Fox Town, DMC and downtown businesses, while I have to ride a broken down transit system. Money would be better invested in current DDOT system so we can all improve our quality of life and have the jobs we need to be able to go to a Tiger game.	
35		Detroit has let the automobile become the only reliable choice.	
36	Socioeconomic Impacts	Support a transit system that is fair and just to all residents in southeastern Michigan.	The streetcar is for all users; all users, including low-income and transit-dependent populations, will benefit from the transit service improvements. There are currently 27,000 residents and 140,000 jobs along the corridor with plenty of attractions including Comerica Park, Ford Field, Hart Plaza, Campus Martius, the Fox Theatre, the Fillmore, the DIA, the Detroit Public Library, Wayne State University, and Detroit Medical Center. The streetcar project will provide better access to these jobs and destinations.
37		Implication that a certain demographic needs its own transit system to separate it from other transit riders.	
38		What will be the socioeconomic makeup of the riders of this system versus what it would have been with the light rail system?	
39		The people in the pictures in the document are not kids, riding bikes or using mobility-assistive devices; rather the pictures show something different than what you see using Woodward Avenue today.	
40		Don't want this train; it is being built for Mr. Ilitch with taxpayer money.	
41	This is only being done to help some wealthy people.		
42	Socioeconomic Impacts	Reference land use policy, including Live Downtown and Live Midtown initiatives that maintain affordable housing opportunities for all parts of the community.	Over time, the potential increase in study area development densities and land values may adversely affect low- and moderate-income households near the stations, although the housing prices and rents are relatively low compared to the suburbs. This potential impact would likely be slow and mitigated through adherence to City and State policies that encourage a wide variety of housing types, including affordable and low-income housing. The <i>Detroit Mater Plan of Policies</i> supports affordable housing and the fundamental goal
43		Affordable housing needs to be addressed in the document. Can't wait until people are priced out of their homes.	
44		Link stations to affordable housing.	

Comment	Topic	Comment	Response
45		Since new transit developments increase property values, under Environmental Justice we need to make sure those values don't displace the people who need transit the most (gentrification).	of the <i>Greater Downtown Transit Oriented Development (TOD) Strategy</i> is the creation of Complete Neighborhoods and Districts defined as self-sufficient by virtue of interconnected transit and commercial environments and are surrounded by a diversity of housing types, services, and amenities.
46	Socioeconomic Impacts	There are proposals to work with corporations/institutions to purchase "passes." and eliminate shuttles to save money. How many jobs will be eliminated?	The existing shuttle services provided involve traversing the corridor and not necessarily overlapping the streetcar route. The streetcar could allow shuttle services to allocate resources differently, but it does not directly imply the shuttle services will be discontinued or anyone will lose their job. The mention of these shuttle services is intended to demonstrate that potential shuttle riders would have an additional choice to move up and down the corridor thus enhancing the economic viability along the corridor and offer some transit dependent passengers alternatives transportation to points along the corridor. Forecasting reflects economic benefit along the corridor, including job creation once the project is complete. In addition to the availability of trade positions when construction begins the project offers a direct increase in jobs for those associated with the transit industry in terms of drivers, porters, and mechanics to list a few.
47	Socioeconomic Impacts	Who will sponsor free or reduced fares for transit-dependent riders?	The project will comply with all government guidelines and fares for transit-dependent residents. The proposed fare for the streetcar reflects an average rate of other local transit providers. The Project Team will work with DDOT to assess how transit-dependent riders using DDOT services will mesh with the streetcar system.
48	Socioeconomic Impacts	Will there be similar programs for Wayne State students (ride free on U of M buses)? DDOT recently suspended free passes for low-income high school students. If free or reduced for college students should be for high schoolers too.	The Project Team will coordinate fare structure with area educational institutions. Many transportation entities offer their employees, customers and students the option to purchase volume passes at a discounted rate. The passes will not be free, but a discount rate for bulk will be offered for all educational institutions along the corridor.
49	Economic Development	Detroit needs rebuilding; what a fine time to do this 3.3-mile project. Detroit needs a 21 st century transit system.	Because the streetcar will be a permanent investment, it supports the city's economic development goals and encourages reinvestment in Detroit's urban core. The streetcar will connect major destinations, employment, educational and medical centers in the greater downtown area with neighborhoods, improve access for residents, workers, and visitors along the corridor and offer a new opportunity to live in a more walkable environment. See the <i>Greater Downtown TOD Strategy</i> in Appendix B of the Transportation Technical Report for additional information.
50		Support the project; the rail line will have a positive impact on quality of life for businesses and their employees in Greater Downtown.	
51		M-1 has already been a critical sales element for attracting new business to the area, and will continue to do so in the future.	
52		Enthusiastically support this exciting economic boost for Detroit's "main street."	
53		M-1 will enhance the city's potential for attracting new residents and retaining young talent, key economic divers for Detroit's future.	
54		M-1 will support the continuous growth of the Midtown, New Center and Downtown districts by leveraging additional economic	

Comment	Topic	Comment	Response
		development opportunities and creating a better sense of place and safety.	
55		Better connecting people to the attractions, retail, businesses and neighborhoods will result in positive economic impact and improve the urban experience for residents and visitors alike.	
56		Excited with the promise this project embodies to enhance the revitalization of midtown neighborhood and redevelopment along Woodward Avenue.	
57		Project met with a great deal of excitement and anticipation among business leaders throughout the city.	
58	Project Scope	Explore including Grand to Delaware, or as far north as possible to provide easier access to New Center and 3,000 residents.	There is no identified funding to increase the project scope and limits at this time. The project supports possible future extensions north of the route termini including other rapid transit options, as well as a possible light rail transit (LRT) route consistent with the Woodward Avenue LRT FEIS. For those wishing to go further north along Woodward Avenue, north of Grand Boulevard, there are SMART and DDOT buses that operate along the route.
59		Needs to connect to the North End community.	
60		The citizens of Highland Park are waiting for a system that ultimately serves them.	
61		It needs to go all the way to the fairgrounds; it's unfair to limit it.	
62		For the plan but would like to see it go from Woodward to Hoover line, to 8-Mile and then after that to the Gratiot line and then after that the Jefferson line, after that, the Michigan or run east to west across town to 7 Mile and 6 Mile.	
63		When can we expect this to go from Detroit to the Capital (Lansing)? If it is not in the plan, how do we get it in there?	
64	Connectivity	Needs to be integrated into a larger transit plan and not be a stand-alone project that provides redundant services to a small area.	The Southeast Michigan Council of Governments (SEMCOG) is currently studying additional transit options along Woodward Avenue from Downtown Detroit to Downtown Pontiac. The streetcar is being incorporated into that analysis, which includes the possibility of shared stations, extensions, or parallel routes adjacent to Woodward Avenue. The Woodward Avenue Transit Alternatives Analysis (AA) is considering different modes and alignments along Woodward Avenue. The AA has been coordinating with the streetcar and will continue to do so. Additional information can be found on the SEMCOG webpage (http://www.woodwardanalysis.com).
65		Usefulness of M-1, due to lack of connectivity to the larger system, is difficult to for current system users to comprehend.	
66		EA needs to more effectively define the streetcar's role in the regional system.	
67		How will regional transit authority interact with this project in terms of support, endorsement, funding?	
68		Effective regional transit is crucial to the wellbeing of suburban communities.	
69		It is a bad idea to have a trolley car system run with bus rapid transit; it is a bad investment that will only make our current system more	

Comment	Topic	Comment	Response
		dysfunctional. And clog up downtown with construction at a time when it is bouncing back.	
70	Connectivity	Show likely function of circulator complementing rapid transit and connecting to DDOT, SMART and proposed Ann Arbor-Detroit commuter rail service and intercity high-speed rail service.	The streetcar provides transit connectivity from the Amtrak station and Wolverine line to the People Mover and Downtown Detroit. It also supports future extension to the north, including other future rapid transit options. Existing bus service will not be significantly affected by the project. For example, DDOT Route 53 (Woodward Avenue) will continue to operate as before. Route 53 service will continue with 10 minute headways along the corridor during the day and 15 to 30 minute headways after the evening rush hour. DDOT and SMART transit stops along Woodward may be reviewed during design of the project to determine possible consolidation or relocation of bus stops, if warranted by streetcar service.
71		The EA did not adequately address how the streetcar will impact other forms of transit that use Woodward and extend beyond the limits of the streetcar.	
72		We don't want to create a transportation system like Baltimore where they have five different modes but they don't communicate.	
73	Connectivity	Unsure how fares will mesh with DDOT.	The fare transfer structure between the streetcar and the Detroit People Mover, DDOT and SMART will be determined during design of the project. The Project Team is committed to integrating the streetcar fare structure with other transit providers.
74		How will transfers be handled? Where is the plan?	
75		Provide for passes to transfer between DDOT/SMART and the streetcar.	
76	Connectivity	Four-block distance between streetcar station and Rosa Parks station is unreasonable connectivity.	The streetcar system would support a future extension to the Rosa Parks Transit Center. There are a couple of ways to access Rosa Parks Transit Center from the streetcar. One way would be to walk three blocks along Michigan Avenue from the Campus Martius station. Another option would be to transfer to the Detroit People Mover at the Grand Circus Park station and then get off at the Times Square People Mover Station to access Rosa Parks Transit Center. The Detroit People Mover is a downtown circulator system designed to complement other transit systems within and connecting to Downtown Detroit.
77		Bypassing Rosa Parks, a \$23 million investment of state and federal money, sends the message that we are still not serious about developing a complete and integrated transit system.	
78	Connectivity	Envision workers, residents, and visitors linking from the 3.3 mile transit line to 5.5 miles of Riverwalk, parks, pavilions and green space along the Detroit River.	The project will improve linkages to major activity centers along the corridor, including the Detroit Riverwalk.
79	Alignment	Train needs to run entirely in the center lane because bikes should run along curbs, cars park on the side of the road, it will tie in better with rail expansion to the north, and current streetcar configuration is slower than light rail.	Side-running streetcar service provides many of the same benefits as median-running with dedicated stations, level boarding, pre-paid ticketing, and transit signal priority. The motor vehicle operations of the corridor and driveway access to businesses and other destinations will not be affected by the side-running alignment. A median-running alignment would require left-turns and U-turn movements to be made at designated signalized intersections and the roadway width would not allow for buses and trucks to make this U-turn movement. Side-running service allows motor vehicles to make direct left-turn movements between signals and does not take away any traffic lanes. The side-running alignment also
80		Was very excited with the center running streetcar concept. This is a circulator route that cannot directly connect or be expanded outward.	
81		The curb-running design is not keeping with national and international best practices for transit.	

Comment	Topic	Comment	Response
82		The shared lane concept provides a lot of potential barriers.	has stations along the sidewalk that maximize the streetcar systems integration with pedestrian facilities in the right-of-way and transit oriented development. However, there is an adverse effect to bicyclists that is addressed in greater detail under the bicycle topic below. The project is envisioned to be a single project within a program of larger and interconnected transit investments and can support future system extensions.
83		Money would be better spent on current infrastructure unless system is center running and gets people where they need to go faster.	
84	Alignment	Side running is twice as expensive and center running.	The costs of side-running versus center running are not substantially different. There are some additional costs associated with side-running for the overhead catenary infrastructure, since support poles will be required on both sides of the street.
85	Bicycle	Michigan Vehicle Code requires bicyclists to ride as far to the right as practical. The rail flanges pose a serious safety hazard for bicyclists.	The side-running alignment would adversely affect bicyclists. Bicyclists will need to be cautious when crossing the streetcar tracks or coming in contact with the streetcar tracks so that their wheels do not catch the groove in the pavement for the streetcar wheel flange. Where the streetcar will be median or center-running, north of Burroughs Street, there will be no impact for bicyclists riding in the right-most lane. South of Burroughs Street, where the streetcar will be side-running, bicyclists will be encouraged to use the alternate route of Cass Avenue. In 2014, the City of Detroit will establish bike routes to Cass Avenue from Burroughs Street south to Lafayette Boulevard. Bike routes will extend east to Washington Boulevard, south to Larned Street and then east to the intersection of Woodward Avenue and Larned Street. Bike routes will consist of signage and/or striped lanes, as public right-of-way allows. Additionally, the Project Team will work with the Public Lighting Department and Public Lighting Authority to get the street lights functioning along this route. The Cass Avenue route parallels Woodward Avenue, one block to the west, and will tie into the Midtown Loop Greenway that is currently under construction. Signage will be used along Woodward Avenue to indicate the danger of curb-running tracks and inform bicyclists of alternate available routes. If bicyclists choose to ride with the side-running streetcar, they should ride between the rails or in the parking lane if it is available. There will be additional outreach during project design with non-motorized groups to educate the cycling community of this impact and discuss additional steps that can be taken to improve bicycle safety and mobility where streetcar tracks will be constructed.
86		There is a study that shows that there is a 300 percent increase in crashes when bicyclists and streetcars are involved.	
87		Planners in the U.S. and abroad report that center running or left running streetcars are strongly preferred for bicycle safety.	
88		Many recent transit projects in the country have dedicated bike and transit lanes.	
89		US DOT's policy statement says transportation agencies should give the same priority to walking and biking as to other transportation mode.	
90		Change the statement that curb-running alignment "could" to "would" adversely affect bicyclists.	
91		Who will pay for the liability from knowingly putting ruts in the pavement?	
92		This will force bicyclists from the curb to the middle of the street, incredibly dangerous.	
93		Mitigation of alternative bike routes is undefined in the document.	
94		Removal of John R bridge over I-94 affects viability of John R as viable alternate route.	
95	It is unrealistic to send bicyclists to alternate routes where the lights don't work at night and it is unsafe.		
96	Bicycle	There are only two bike racks on the light rail. Need to be more. Bike racks are often full on the buses.	The number of bicycles accommodated on each streetcar will be finalized during the vehicle procurement and will be maximized, taking into account all users of the streetcar including bicyclists, pedestrians, and people with disabilities.

Comment	Topic	Comment	Response
97	Complete Streets	Urge MDOT to modify the EA and make it compatible with the state Complete Streets policy.	<p>The project is compatible with the State Transportation Commission Policy on Complete Streets. There are a number of factors that determine what transportation facilities are considered for inclusion, including local context, Federal Highway Administration functional classification of the roadway, safety and mobility needs of all legal users, proportional costs of incorporating the complete streets facility compared to the overall project costs, existing or planned facilities in development on adjacent corridors or in the project area, and whether additional funding is available from federal, state or local resources. This historic route is classified as an urban principal arterial and as such serves the major centers of activity of urbanized areas, and the highest traffic volume corridors. The existing right-of-way does not allow for dedicated lanes for streetcar and bicycles, while maintaining the required level of service for vehicular traffic. Purchasing right-of-way and widening the roadway would be cost prohibitive since a majority of the corridor has building faces at the right-of-way line. Removal of all on-street parking was considered, but complete removal would impact businesses that currently only have on-street parking, would result in loss of revenue for the City of Detroit, and still does not provide the right-of-way necessary for dedicated bike lanes to be constructed adjacent to the streetcar tracks. Also, this does not address the conflict of bicyclists with the streetcar or pedestrians at stations. Safety concerns of bicyclists are recognized so facilities will be developed on the adjacent corridor of Cass Avenue, where the roadway classification, width, traffic volumes, and traffic speeds are in-line with AASHTO criteria for the addition of dedicated bike lanes. As part of the project, an informational and educational campaign will be implemented to teach drivers, pedestrian, bicyclists, emergency responders and buses how to safely interact with the streetcar once in operation.</p>
98		There need to be dedicated lanes for bicyclists and streetcars along Woodward.	
99		We are developing a system that flies in the face of Complete Streets, that's both obsolete and suboptimal using our money.	
100	Parking	Hope light rail will increase impromptu visits to the (art) museum and alleviate some of the parking issues that visitors experience all too frequently.	The project will improve linkage to major activity centers along the corridor, as well as parking structures.
101	Parking	People will park curbside no matter what.	Signing will designate where parking is prohibited along the route. A towing company will be on-call to remove any vehicle or buses that may break down or park in the streetcar lane in order to reduce any delays in service.
102	Parking	Our church fronts Woodward and proximity to streetcar could create noise problem. Hearses, funeral cars, and wedding party vehicles park along the curb. Prohibiting this could cause substantial problems.	On-street parking would be removed on one-side of Woodward Avenue will be determined in the design stage of the project. The Project Team will take this comment into consideration when determining which side will retain parking. If additional side-street parking is necessary, this will be coordinated with the City of Detroit and Municipal Parking. The noise of the streetcar operations is lower than the ambient noise of traffic during the daytime. As a comparison, the streetcar sound exposure level is estimated to be

Comment	Topic	Comment	Response
			52 decibels, whereas a bus is typically in the 80 to 83 decibel range.
103	Pedestrian Safety	Pedestrian refuge islands should be used to enhance crossing safety.	The streetcar is not expected to have any adverse impact on pedestrian safety. The number of signalized intersections increases between I-75 and Chandler Street/Delaware Street, thereby providing more opportunities for pedestrian crossings at controlled locations. Additional pedestrian safety measures will be evaluated during project design.
104		Consider additional measures to enhance pedestrian safety along the corridor in coordination with the project.	
105	Pedestrian Safety	The potential for crime has not been fully addressed. It is a problem with systems in Portland and Phoenix.	There will be an emergency phone and closed circuit security systems at all of the stations. A driver will be present on each of the streetcar vehicles and will have the ability to contact local law enforcement and/or other public safety organizations.
106	Mobility-impaired	Needs to coordinate with People Mover to connect to Rosa Parks Station for mobility-impaired individuals.	To connect to the Rosa Parks Transit Center using the People Mover, the rider would transfer to the Detroit People Mover at the Grand Circus Park station and then get off at the Times Square People Mover Station to access Rosa Parks Transit Center.
107	Mobility-impaired	Provide measures to protect the safety of blind and handicapped persons.	All streetcar stations and vehicles will be ADA accessible. Streetcar stations will have level boarding with the vehicle. Tactile warning strips will run along the length of the curb where the streetcar vehicle stops to indicate the proper distance to stand back from approaching or departing vehicles. Sounds and lights will indicate when the streetcar doors will open and close and there will be a driver on each vehicle manually operating the doors.
108		Don't see a plan for accommodating blind persons or others with mobility issues. Crossing the street to get to a station will be unsafe. This needs to be something that benefits everyone, not just a few.	
109	Operations	How long will the doors on the cars stay open to get on and off?	This will be determined during the design of the project. Pre-ticketing, level boarding, multiple doors will help minimize time at the stations. A trained driver on board each vehicle can manually operate doors to respond to passenger needs.
110	Operations	Service times need to extend beyond 10 p.m. due to public events.	The hours of service may be adjusted to serve special events and as demand conditions become better understood after service begins.
111		Favor 2:30 a.m. operations on weekends. Want to buy a house soon and would like to be able to drink downtown without driving home now and then.	
112		If it is meant to attract young people, why shut down operations at 10:00 p.m.?	
113	Ridership	What effect will relocating the Red Wings to the service area have on ridership projections?	If the Red Wings relocate in the transit corridor, their facility will be served as the other entertainment venues along the route. There will be increased streetcar service during large special events to handle additional ridership. Hours of service may also be adjusted to serve special events.
114	Ridership	Not sure you will get the ridership (5,500 per day) when the buses are only carrying 11,000 per day.	Preliminary estimates are around 5000-8000 riders per day dependent on whether there is a special event along the Woodward Avenue corridor. There are currently 27,000 residents and 140,000 jobs along the corridor with plenty of attractions/institutions. This list includes Comerica Park, Ford Field, Hart Plaza, Campus Martius, the Fox Theater, the Fillmore, the DIA, the Detroit Public Library, Wayne State University, Detroit Medical

Comment	Topic	Comment	Response
			Center, and many more.
115	Ridership	What percentage of Wayne State students commute, what percent could be expected to use the streetcar and live in the Woodward corridor.	The Transportation Technical Report of the EA has additional information on the ridership, however, there is no data regarding the percentage of Wayne State students that commute. Wayne State University may have that data available.
116	Funding	Concerned that the money that is being invested privately actually came from a state grant during the Granholm Administration to spend on economic development. No disclosure on where the private money is coming from.	M-1 RAIL funding does not come from a state grant awarded during the Granholm Administration to spend on economic development. Additional information on where the private funds come from can be found in the M-1 RAIL Business Plan (http://www.m-1rail.com/wp-content/uploads/2013/02/Business-Plan-for-FTA.pdf).
117	Funding	The true cost of light rail is \$10 per ride. If you are charging \$1.50, who is going to pay the \$8.50...the taxpayers, just to benefit the Ilitches and others who are investing in it to make money.	Operations and maintenance costs are estimated to be \$5.1 million annually (in 2012 dollars). M-1 RAIL will operate and maintain the system for a period of up to 10 years, which is funded through fare revenues, donor revenues, and sales of advertising and naming rights. M-1 RAIL plans to donate the project assets and operating responsibility to a public agency, such as the recently formed Regional Transit Authority (RTA) after that.
118	Funding	Businesses should put up the money to build stations that serve them.	Station sponsorship is one of the private sector funding sources for the project. Businesses that commit funding can receive naming rights for stations.
119	RTA	Concerned that the Regional Transit Authority, which will eventually take over this streetcar, is creating a new level of government without taxpayers' approval. The Headlee Amendment says you cannot increase taxes without a vote of the people.	The recently formed RTA does not have authority to increase taxes without a vote of the people. Eventually the RTA will have its own website, but please see SEMCOG's webpage (http://www.semco.org/RTA.aspx) for additional information, including the Public Act creating the authority, in the interim.
120	Visual Effects	Care needed that stations don't block passenger views of buildings and storefronts.	Context sensitive design will be used for the stations, taking into account the adjacent businesses, visual sightlines and historic context in the corridor. The existing operations of Woodward Avenue will remain the same and impacts to the existing streetscape elements will be avoided where possible during construction.
121		Don't want to see Woodward turned into a freeway, needs to remain beautiful.	
122	VSMF	Locate the maintenance facility to best support community and economic development goals, and minimize visual impacts to surrounding neighborhoods.	The preferred site for the Vehicle Storage and Maintenance Facility (VSMF) was chosen due to its direct access from Woodward Avenue, separation from residential properties and overall consistency with the existing land use and zoning.
123	VSMF	What traffic studies have been done to address potential traffic problems related to the maintenance facility?	A microsimulation model was developed using VISSIM software to assess the impacts of the streetcar system on traffic. The streetcar vehicles will typically be exiting and entering the vehicle storage and maintenance facility during off-peak hours and with little frequency, so impacts to the traffic are minimal.
124	VSMF	The vehicle maintenance facility is not adequate in size to handle an expansion of service. Essentially the project will be stuck the way it is permanently.	The VSMF has capacity to add more vehicles for small expansion of service. Future extensions to 8 Mile Road and beyond would require construction of a larger facility that would likely be located further north of the proposed site.

Comment	Topic	Comment	Response
125	Construction	Need to consider impact of construction on smaller Woodward businesses.	Most likely construction will last one construction season in front of any given business. Construction along the whole corridor will last from summer 2013 until fall 2015. The Project Team will regularly communicate to impacted business as to the level and duration of the activities in their area. Efforts will be made to minimize disruptions to business along the corridor.
126		Mitigate effects of construction on businesses; fewer stations will do this.	
127	Construction	There needs to be some supplemental shuttle to help people get to their jobs during the Woodward Avenue construction. There also should be some grants or low-interest loans to help small businesses ride out the expected lull.	Construction impacts to existing transit will be closely coordinated with the providers. Re-routing of existing bus service and impacts at stations will be communicated through Rider Alerts. No grants or low-interest loans are currently available for businesses during construction, but this option can be further explored with the business community and local business organizations during design.
128	Construction	Utility relocation issues not adequately addressed in EA.	Utility impacts are addressed the same as the FEIS (Section 4.7.6). During design, the Project Team will conduct a thorough utility search to identify size, age, and location of utilities and then develop strategies to minimize impacts. Utility relocation and protection will be coordinated with the respective utility owner. Construction activities will be planned to minimize service outages. Affected users will be notified of any outages.
129	DBE	Hopeful that Detroit-based disadvantaged businesses will be targeted for this project.	Disadvantaged Business Enterprise (DBE) participation will be required on the project. The project uses Federal funds so the participation cannot be geographically restricted to Detroit business only. All firms listed in the Michigan Unified Certification Program (MUCP) database are eligible to participate as DBE's on the project.
130	Outreach	Need to see how public comments are incorporated into the decisions; it is the public's money and it's for the public.	Public outreach for the Supplemental Environmental Assessment has concluded. Public outreach will be extensive as the project advances into design and construction.
131		Suggest there be more innovative public outreach to get more people to hearings.	
132		Concerned that those north of the Boulevard have not been involved in this project. Outreach should have been stronger.	
133	Support	Thank you, Detroit, and all involved for making this light rail possible.	Comments noted.
134		Applaud the streetcar project.	
135		A signature project in the area that will transform the way we interact.	

Appendix E

Section 106 Amended Memorandum of Agreement

**AMENDED MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MICHIGAN STATE HISTORIC PRESERVATION OFFICE
REGARDING
THE WOODWARD AVENUE STREETCAR PROJECT
IN DETROIT, MICHIGAN**

WHEREAS, the Woodward Avenue Light Rail Transit (LRT) Project was abandoned after issuance of the Record of Decision; and

WHEREAS, the Federal Transit Administration (FTA) is proposing to provide funding to the Michigan Department of Transportation (MDOT) to construct the Woodward Avenue Streetcar Project from downtown Detroit north to near Chandler Street (the Project), and FTA has determined the Project to be a Federal undertaking subject to the National Historic Preservation Act, 16 USC §470 (NHPA); and

WHEREAS, the MDOT has agreed to act as project sponsor for the Project, which is substantially similar to Alternative B-3 as analyzed for the LRT Project; and

WHEREAS, M-1 Rail will fund, construct, and operate the Project for a period of years; and

WHEREAS, the FTA and the Michigan State Historic Preservation Office (SHPO) have, pursuant to Stipulation IV Administrative Provisions, Section E of the Memorandum of Agreement (MOA) enacted June 3, 2011, have agreed to amend the MOA to reflect the addition of the MDOT and M-1 Rail as invited signatories, and changes in project scope, Area of Potential Effects and effects; and

WHEREAS, this Amended MOA supersedes the MOA enacted June 3, 2011; and

WHEREAS, the City of Detroit was the project sponsor in the superseded MOA, and in this Amended MOA is no longer responsible for implementing the Project in accordance with the stipulations below; and

WHEREAS, FTA has determined that the Project would introduce elements that would result in adverse effects on the following five historic properties:

- the First Federal Building;
- the Grand Circus Park Historic District;
- the Col. Frank J. Hecker House;
- the East Ferry Avenue Historic District;
- the Woodward-West Palmer-Cass-West Kirby Historic District;

WHEREAS, the FTA has consulted with the SHPO about the Project in accordance with the regulation implementing Section 106 of the NHPA (36 CFR part 800); and

WHEREAS, the FTA notified the Advisory Council on Historic Preservation (ACHP) about the adverse effects of the Project, and the ACHP declined to participate in the Section 106 consultation for this Project (ACHP has been notified and FTA is awaiting a response); and

WHEREAS, the organizations and tribes listed in Exhibit 1 have been treated as consulting parties in the Section 106 review process in accordance with 36 CFR 800.2(c)(3); and

WHEREAS, the FTA, in consultation with SHPO, and the other consulting parties, determined the Area of Potential Effects (APE) for the Project pursuant to 36 CFR 800.4(a) (Exhibit 2), identified and evaluated the properties listed on, or eligible for listing on, the National Register of Historic Places (NRHP) within that APE pursuant to 36 CFR 800.4(b)-(d), and assessed the adverse effects of the Project on the identified historic properties in accordance with 36 CFR 800.5; and

WHEREAS, the various Section 106 determinations and evaluations and this Agreement were developed with appropriate public involvement (pursuant to 36 CFR 800.2(d) and 800.6(a)), coordinated with the scoping process, the process for public review and comment, and the public hearings conducted to comply with NEPA and its implementing regulations; and

NOW, THEREFORE, the FTA and the Michigan SHPO (collectively referred to as “Signatories”) agree that the Project will be implemented in accordance with the following stipulations.

STIPULATIONS

FTA will ensure that the terms of this Agreement are carried out and will require, as a condition of any approval of FTA funding for the Project, adherence to the stipulations of this Agreement. MDOT, the project sponsor, will take the lead in the implementation of each stipulation unless otherwise noted in the stipulation.

I. HISTORIC CONTEXT AND DESIGN

- A. The MDOT and M-1 Rail shall require in final design contract(s) for the Project, that any element of the Project that has the potential to visually affect any one of the historic properties listed in this Agreement be designed to be compatible with its historic context. The Project design shall not include or allow the placement of large advertising billboards above any station where it would visually affect any one of the historic properties listed in this Agreement. Following the project’s completion, the MDOT and M-1 Rail will not allow the addition of any vertical elements or rooftop structures.

- B. The M-1 Rail design team will include a historical architect who meets the Secretary of the Interior's Professional Qualifications (36 CFR Part 61) for that discipline. This historic preservation architect will guide all aspects of the compliance with this Agreement during design and construction of each Project phase with the exception of those related to archaeology under Stipulation III, and will make presentations to SHPO and generate all reports to SHPO required by this Agreement.
- C. The MDOT and M-1 Rail, or its design contractors, shall hold Project design workshops with the SHPO and consulting parties at approximately the 30%, 60%, and 90% stage of Project design for each phase of the Project to review and discuss proposed design plans for all elements of the Project with the potential to adversely affect any historic properties.
- D. The MDOT and M-1 Rail shall submit the design coming out of each design workshop prescribed in Stipulation I.C to the SHPO for comment or approval. If the SHPO does not respond to a submission of drawings within 21 days, the MDOT and M-1 Rail shall deem that the SHPO has approved that design.
- E. The historical architect working on the Project under Stipulation I.B shall be selected in consultation with SHPO and shall be responsible for assisting SHPO in all reviews and approvals required of SHPO by this Agreement.

II. NRHP NOMINATIONS

- A. The MDOT and M-1 Rail shall complete a NRHP nomination for the Woodward-West Palmer-Cass-West Kirby Historic District and First Federal Building, which have been determined eligible for listing in the NRHP. The nomination shall meet the standards and requirements of the NRHP and the Michigan SHPO. Final products for the nomination shall include the following: (1) two original copies of the nomination form; (2) photographs; (3) Site Plan; (4) one CD-R containing color images in tiff to be submitted to the National Park Service as part of the National Register nomination package (Images must be formatted and labeled and the CD-R labeled in accordance with the National Register's requirements), and one CD-R containing the same images in jpeg for the review board presentation; and (5) copies of all research materials. The NRHP nomination shall be developed in consultation with the SHPO by or under the direct supervision of the person who fulfills the Secretary of the Interior's Professional Qualifications (36 CFR Part 61) as an architectural historian.

III. ARCHAEOLOGICAL RESOURCES

- A. The MDOT and M-1 Rail will develop a program of construction monitoring in all portions of the streetcar corridor and passenger station locations that have the potential to affect elements of the pre-1805 city. This

includes all portions of the proposed project south of Grand Circus Park. Archaeological deposits at the Original Protestant Cemetery (20WN379) were encountered approximately 1 m (3.28 ft.) below grade. As such, all ground-disturbing activities reaching and/or extending beyond 0.6 m (24 in) below grade in the areas south of Grand Circus Park shall be monitored by a professional archaeologist who meets the Secretary of Interior's qualifications for that discipline (36 CFR Part 61).

- B. If unanticipated archaeological artifacts, structures, human remains, or other archaeological resources are encountered, the MDOT and M-1 Rail will: (1) stop work involving subsurface ground disturbance in the area of the find and, as determined by the professional archeologist, in the surrounding area where further subsurface finds can be reasonably expected; (2) notify the SHPO, and Indian tribes (if appropriate), about the discovery; (3) have the archaeologist investigate the discovery and recommend to SHPO either: (a) that construction be permitted to resume, or (b) that the discovery be further investigated and if MDOT and M-1 Rail determine, consultation undertaken, to determine if it is eligible for the NRHP. Construction may resume if the qualified archaeologist so recommends and SHPO agrees. Should SHPO fail to respond within 21 calendar days after receipt of the notification and investigation, the MDOT and M-1 Rail shall proceed in accordance with the qualified archaeologist's recommendation.
- C. If the qualified archaeologist recommends further investigation of the discovery, an expedited process shall be followed in accordance with 36 CFR 800.13(b) which: (1) determines the eligibility of the archaeological resource; (2) if the resource is deemed eligible and SHPO agrees, determines the extent of the resource affected by the Project; (3) considers Project changes to avoid an eligible archaeological resource, if feasible; (4) develops a data recovery plan if the resource is not avoidable; (5) executes the data recovery plan for the resource; and (6) curates the results. Details of these activities shall be expeditiously developed and executed by the qualified archaeologist in consultation with SHPO. SHPO's failure to respond within seven days of any written request for comment or concurrence shall be deemed concurrence.
- D. The MDOT and M-1 Rail shall develop a preliminary data recovery plan before construction begins and must submit that data recovery plan to SHPO for approval before construction may begin.

IV. ADMINISTRATIVE PROVISIONS

- A. Implementation Schedule. The MDOT and M-1 Rail shall develop a schedule for the implementation of the provisions of this Agreement (schedule should be developed before construction begins and included as an attachment to the Agreement). The schedule will include milestones for completion of

deliverables and will be posted on the Project website. The MDOT and M-1 Rail will update the schedule, as necessary, and will include an up-to-date schedule in each monitoring report required by Stipulation IV.C below.

B. Dispute Resolution

1. In the event SHPO objects in writing to any design or submission presented pursuant to this Agreement within the timeframe specified in this Agreement or, if no timeframe is specified, within 21 calendar days of its receipt, the FTA will consult further with SHPO to seek resolution. If either the FTA or SHPO determines that SHPO and the FTA cannot resolve the objection, FTA will invite the ACHP to review all documentation relevant to the dispute, including FTA's proposed resolution. The FTA will prepare the documentation about the subject of the dispute required by 36 CFR 800.11(g) for transmittal by FTA to ACHP with FTA's proposed resolution. ACHP is expected to provide its comments to FTA within 30 days of receipt of the documentation. FTA will then take these comments into account in reaching a final decision concerning the dispute. If ACHP fails to respond within the 30-day period, then FTA will assume that ACHP has no comment and proceed with its final decision.
2. Should the SHPO or the FTA object in writing within 30 (thirty) days to any action proposed pursuant to this Agreement, the FTA shall consult with the objecting party to resolve the objection. If the FTA determines that the objection cannot be resolved, the FTA shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council). Within 45 (forty-five) days after receipt of all pertinent documentation, the Council will either: (1) provide the FTA with recommendations, which the FTA will take into account in reaching a final decision regarding the dispute; or (2) Notify the FTA that it will comment pursuant to 36 CFR 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by FTA in accordance with 36 CFR 800.7(c)(4) with reference to the subject of the dispute.
3. This process for resolving disputes will pertain only to the subject of the dispute. The responsibilities of the Signatories to implement all actions pursuant to this Agreement that are not affected by the dispute remain unchanged.
4. The parties agree that no liability, either legal or administrative shall attach to the City of Detroit as a result of its participation in this Agreement as an invited signatory.

C. Monitoring and Reporting

1. Any Signatory to this Agreement may request in writing, at any time, a review of the implementation of the terms of this Agreement. Such review shall take place through a meeting or a conference telephone call within two weeks of the request unless extended for good cause.
2. Quarterly & Semi Annual Reports: During the final design and construction of the Project, a meeting or conference call between the SHPO and the MDOT and M-1 Rail shall be held on a quarterly basis for the first year following the implementation of this Agreement. If, after the first year, it is determined that semi-annual meetings would be sufficient, the meetings shall be held every six months. If it is determined that quarterly meetings are beneficial, then the parties shall continue to meet every three months. During the final design and construction of the Project, the MDOT and M-1 Rail shall report every three months to the other Signatories through a meeting, a conference call, or a written memorandum, the status of the implementation of this Agreement.
3. A report shall be posted on the Project's public website and shall include any scheduling changes proposed, any problems encountered, and any disputes or objections received during efforts to carry out the terms of the Agreement. Sensitive information about the location of archaeological resources or traditional cultural resources shall be withheld from the written reports.
4. The SHPO may monitor activities carried out pursuant to this Agreement at the SHPO's discretion upon reasonable notice.

D. Emergency Situations: Immediate rescue and salvage operations conducted to preserve life or property are exempt from the provisions of Section 106 of the NHPA and this Agreement. In the event that an emergency situation should occur during the Project, FTA shall follow the provisions of 36 CFR 800.12. The FTA will provide an incident report to the SHPO detailing any effects to historic properties as a result of said operations.

E. Amendments of this Agreement:

1. This Agreement may be amended when such an amendment is agreed to in writing by all Signatories. Any signatory to this Agreement may propose to the other Signatories in writing that it be amended, whereupon the Signatories will consult in accordance with 36 CFR 800.6(c)(7) to consider such an amendment.
2. The amendment will be effective on the date a copy signed by all of the Signatories is filed with the Advisory Council.

F. Termination

1. This Agreement will terminate upon completion of construction of the Project or 5 years after it was submitted to the ACHP, whichever occurs first.
 2. Any signatory to this Agreement may terminate it by providing ninety (90) days written notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the FTA will comply with 36 CFR Sections 800.3 through 800.13 with regards to the undertakings covered in this Agreement.
 3. The signatory proposing to terminate this Agreement shall so notify all Signatories in writing to this Agreement explaining the reasons for termination and affording at least sixty (60) days to consult and seek alternatives to termination. The Signatories shall then consult.
 4. Should such consultation fail, the FTA or the SHPO may terminate the Agreement by so notifying all Signatories in writing. Should this Agreement be terminated, the FTA shall either: (a) consult in accordance with 36 CFR § 800.6 to develop a new Agreement; or (b) request the comments of the Council pursuant to 36 CFR § 800.7. Upon termination of the Agreement, FTA may cancel its involvement in the project and recover all FTA funds dedicated to the project.
- G. Execution of Counterparts. This Agreement may be executed in one or more counterparts each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Signed signature pages may be transmitted by facsimile or email, and any such signature shall have the same legal effect as an original.

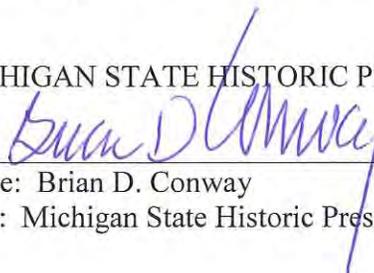
EXECUTION of this Memorandum of Agreement by the FTA, the MDOT, M-1 Rail, and the Michigan SHPO, the submission of documentation and filing of this Memorandum of Agreement with the ACHP, pursuant to 36 CFR 800.6(b)(1)(iv), and implementation of its terms evidence that FTA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

Signatories

FEDERAL TRANSIT ADMINISTRATION

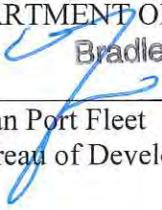
By:  Date: 3-28-13
Name: Marisol Simon
Title: FTA Regional Administrator

MICHIGAN STATE HISTORIC PRESERVATION OFFICER

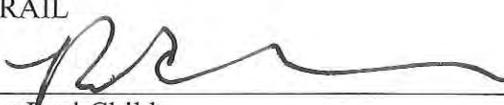
By:  Date: 3/22/13
Name: Brian D. Conway
Title: Michigan State Historic Preservation Officer

Invited Signatories

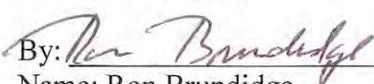
MICHIGAN DEPARTMENT OF TRANSPORTATION


By: _____ Date: 3-19-13
Name: Mark A. Van Port Fleet
Title: Director, Bureau of Development

M-1 RAIL

By:  Date: 3/18/13
Name: Paul Childs
Title: Chief Operating Officer, M-1 RAIL, a Michigan nonprofit corporation

CITY OF DETROIT

By:  Date: March 18, 2013
Name: Ron Brundidge
Title: Director of Department of Public Works