



ENVIRONMENTAL ASSESSMENT & SECTION 4(f) EVALUATION

Coolidge Terminal Replacement Project

Detroit Department of Transportation

Detroit, Michigan
January 25, 2023



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Coolidge Terminal Replacement Project

Environmental Assessment

Prepared by:

United States Department of Transportation
Federal Transit Administration

and

Detroit Department of Transportation (DDOT)

Pursuant to:

National Environmental Policy Act of 1969, as amended, 42 USC Section 4321 *et seq.*; Council on Environmental Quality regulations, 40 CFR Section 1500 *et seq.*; Federal Transit Laws, 49 USC Chapter 53; Environmental Impact and Related Procedures, 23 CFR Part 771, a joint regulation of the Federal Highway Administration and Federal Transit Administration implementing National Environmental Policy Act and Council on Environmental Quality regulations; Section 106 of the National Historic Preservation Act of 1966, 16 USC Section 470(f); Section 4(f) of the Department of Transportation Act of 1966, as amended, 49 USC Section 303; Section 6(f)(3) of the Land and Water Conservation Fund Act of 1965, 16 USC Section 4601-4 *et seq.*; Clean Water Act, as amended, 42 USC Section 1251 *et seq.*; Clean Air Act, as amended, 42 USC Section 7401 *et seq.*; Endangered Species Act of 1973, as amended, 16 USC 1531 *et seq.*; Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, 42 USC Section 4601 *et seq.*; Executive Order No. 12898 (Federal Actions to Address Environmental Justice in Minority and Low-Income Populations); Executive Order No. 13166 (Improving Access to Services for Persons with Limited English Proficiency); Executive Order No. 11988 (Floodplain Management); Executive Order No. 13985 (Racial Equity and Support for Underserved Communities Through the Federal Government); and other applicable federal laws and procedures.

This document also complies with all relevant laws and procedures of the State of Michigan.



Kelley Brookins
Regional Administrator
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January 25, 2023

Date of Approval



Mikel Oglesby, Executive Director of Transit
Detroit Department of Transportation (DDOT)

January 27, 2023

Date of Approval

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ABBREVIATIONS AND ACRONYMS

Abbreviation/Acronym	Definition
ACM	Asbestos Containing Material
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
APE	Area of Potential Effects
ASTM	American Society for Testing and Materials
Bgs	below ground surface
BMP	Best Management Practices
BSEED	Buildings, Safety Engineering, and Environmental Department
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
DAC	Disadvantaged Community
dBA	A-weighted decibels
DBA	Detroit Building Authority
DBE	Disadvantaged Business Enterprise
DDOT	Detroit Department of Transportation
DEGC	Detroit Economic Growth Corporation
DLBA	Detroit Land Bank Authority
DOT	Department of Transportation
DSR	Detroit Street Railway
DWSD	Detroit Water and Sewerage Department
EA	Environmental Assessment
EGLE	Environment Great Lakes and Energy
EJ	Environmental Justice
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration
FY	Fiscal Year

Abbreviation/Acronym	Definition
GHG	Greenhouse Gas
GIS	Geographic Information System
IPaC	Information for Planning and Consultation
ITE	Institute of Transportation Engineers
L _{dn}	Day-Night Average Sound Level
LEP	Limited English Proficiency
L _{eq}	Equivalent average sound
LOS	Level of Service
L RTP	Long Range Transportation Plan
LUST	Leaking Underground Storage Tank
L _v	Vibration Velocity Level
MMP	Materials Management Plan
MSAT	Mobile Source Air Toxics
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFA	No Further Action
NFR	No Further Remediation
NHPA	National Historic Preservation Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OCP	Office of Contracting and Procurement
PCB	Polychlorinated biphenyls
PCP	Pentachlorophenol
PPV	Peak Particle Velocity
RCRA	Resource Conservation and Recovery Act
READY	Regional Alternative for Developing Youth
REC	Recognized Environmental Condition
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SMP	Soil Management Plan
SVOC	Semi-Volatile Organic Compound
TIF	Tax Increment Financing
TRB	Transportation Research Board
U.S.DOT	United States Department of Transportation
USC	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service

Abbreviation/Acronym	Definition
USGS	United States Geological Survey
UST	Underground Storage Tank
VdB	Vibration Decibels
VOC	Volatile Organic Compound

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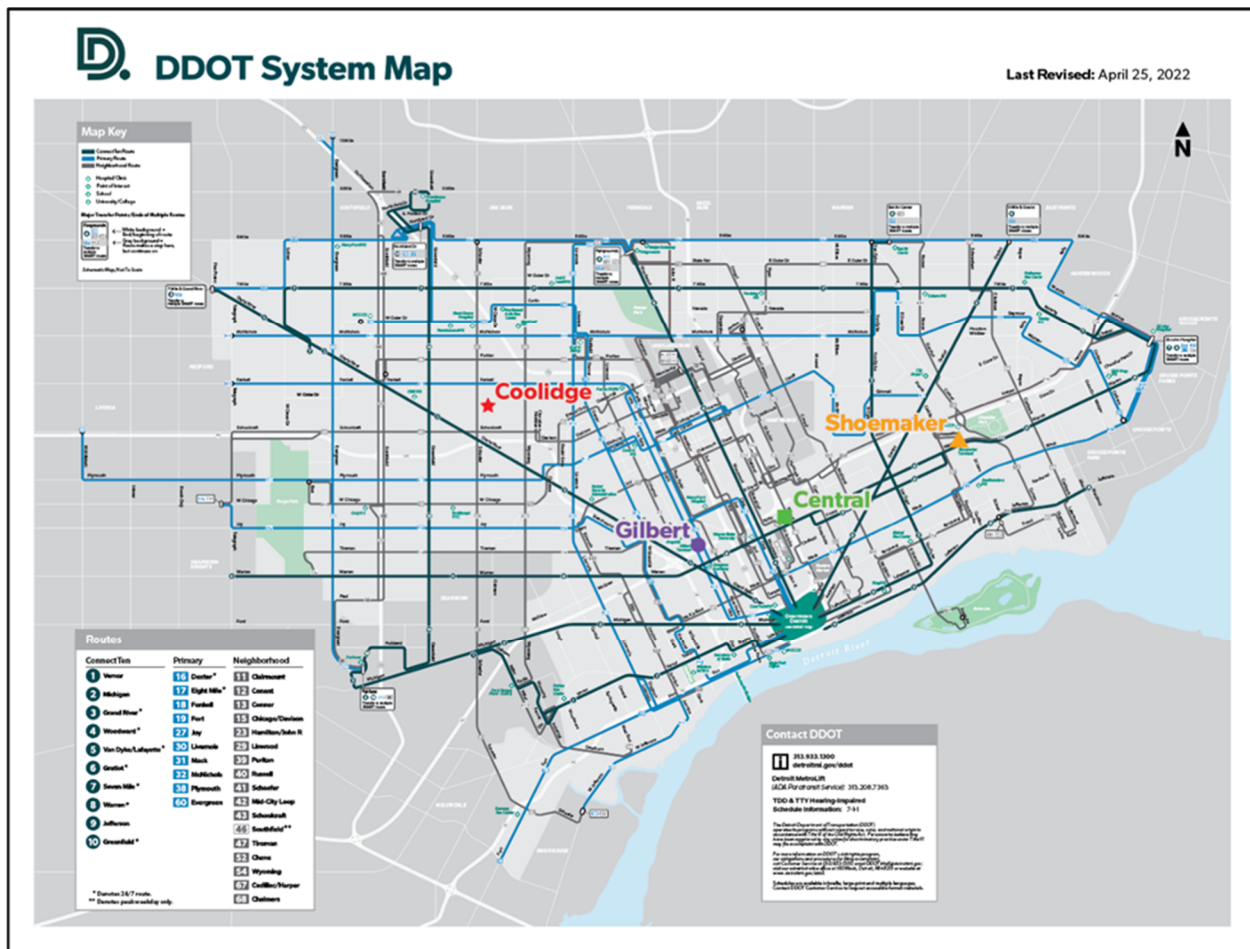
1. Introduction

The Federal Transit Administration (FTA), as the lead federal agency, and the Detroit Department of Transportation (DDOT), as the local project sponsor, jointly prepared this Environmental Assessment (EA) to assess the potential social, economic, and environmental impacts of the proposed Coolidge Terminal Replacement Project (Project) in Detroit, Michigan.

1.1 Project History

Historically, DDOT had four terminal sites across the City for bus storage, maintenance, and operations: Central, Gilbert, Shoemaker, and Coolidge, shown in Figure 1 below. Coolidge Terminal primarily housed bus operations in the west, while Gilbert Terminal and Shoemaker Terminal housed bus operations in the mid-town area and east, respectively. Central Terminal is in the mid-town area, somewhat centrally located between these three terminals and is primarily used for heavy overhaul services and some administrative activities.

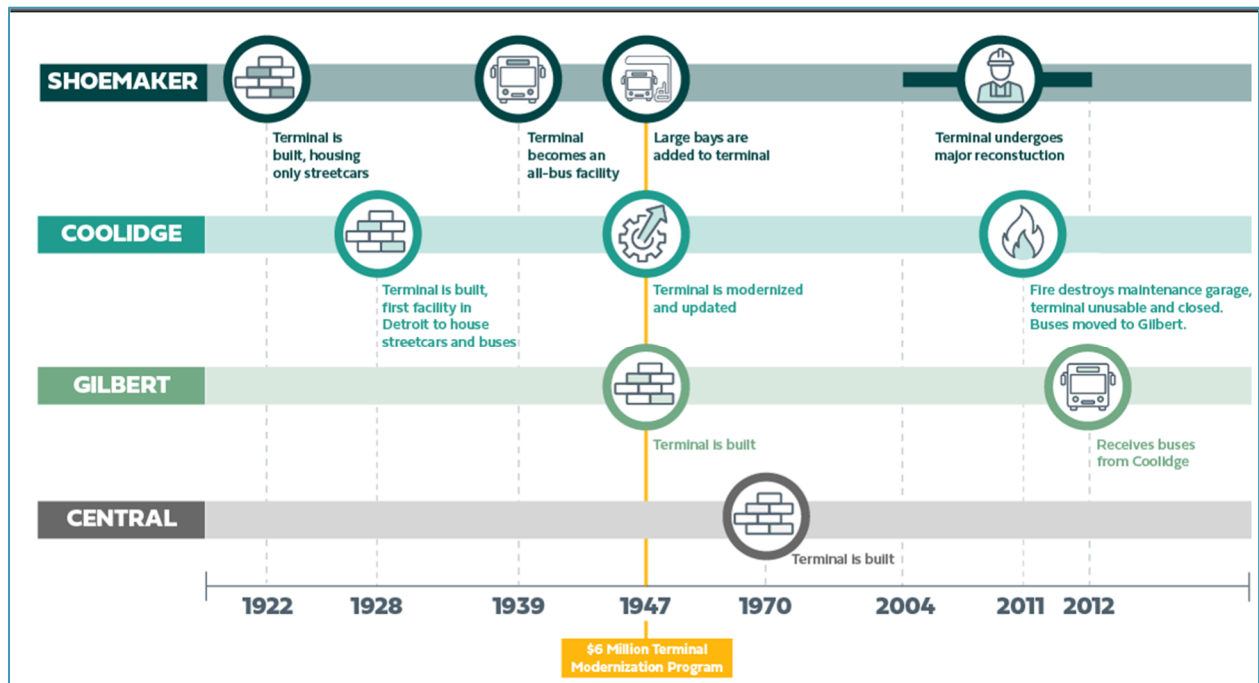
Figure 1: Detroit Bus Terminal Locations and Bus Routes (2022)



These terminals have been the backbone of Detroit’s public transportation system as far back as the 1920s, as described in Figure 2. Shoemaker Terminal was built in 1922 and initially housed streetcars before transitioning into an all-bus facility in 1939. Coolidge Terminal was built in 1928 and was the first facility in Detroit to house both streetcars and buses. In 1947, Coolidge Terminal was improved, large storage bays were added to Shoemaker Terminal, and Gilbert Terminal was constructed as part of a \$6 million dollar terminal improvement program, completing the transition from streetcars to all bus operations. Shoemaker Terminal underwent a major reconstruction project between 2004 and 2012. Central Terminal was constructed in 1970 and has always been used for heavy repair, facility maintenance and limited DDOT administration functions.

In December 2011, a fire destroyed the maintenance garage at Coolidge Terminal, rendering the entire terminal unusable. DDOT moved nearly 200 buses and operations from Coolidge Terminal to the remaining three terminals, primarily Gilbert Terminal. This move was not intended to be permanent, as the remaining terminals were already at capacity. However, plans to reconstruct Coolidge Terminal were halted when the City of Detroit declared bankruptcy in 2013.

Figure 2: DDOT Terminal Timeline



As described in Table 1, Gilbert Terminal currently stores and maintains 143 buses and Shoemaker Terminal stores and maintains 145 buses, while Central Terminal still provides heavy overhaul services for the entire fleet and administrative activities. However, Gilbert Terminal, having never been renovated, is no longer able to meet the needs of the DDOT bus fleet and is functionally obsolete due to its outdated site design, fleet restrictions, and inadequate safety and security. Nevertheless, DDOT has continued to maintain it due to limited availability elsewhere.

DDOT completed a facilities master planning effort in 2021 and determined that a new facility at Coolidge Terminal is needed to efficiently maintain and service DDOT’s current and future bus fleet and optimize the condition, usage, and performance of the City’s real estate assets. Doing so would allow DDOT to consolidate operations and maintenance of the Shoemaker and Coolidge Terminals on the east and west sides of the City, respectively; and discontinue all operations at the Gilbert Terminal. A new Coolidge Terminal would need to be large enough to accommodate the move of 143 buses from Gilbert Terminal, at a minimum. The proposed design and layout for Coolidge Terminal can accommodate 144 buses in the near term and the first phase, which is enough room to move buses and operations from Gilbert Terminal.

While the new Coolidge Terminal would house 144 buses in the near term, DDOT projects that space for 216 buses at Coolidge Terminal will be needed in the future to serve projected ridership and routes. Shoemaker and Coolidge Terminals are strategically located at opposite sides of the City and could support DDOT service for the foreseeable future. Central Terminal would remain to provide heavy overhaul services and limited administrative activities.

Table 1: Current Use and Proposed Future Use for DDOT Bus Terminals

Terminal Use	Terminal			
	Coolidge	Gilbert	Shoemaker	Central
Current Use				
- Storage & Maintenance	0	143	145	0
- Heavy repair	NO	NO	NO	YES
- Operations/Administration	NO	NO	NO	YES
Future Use				
- Storage & Maintenance	144/216 (initial/full build)	0	145	0
- Heavy repair	NO	NO	NO	YES
- Operations/Administration	YES	NO	NO	YES

As part of this transition, the Coolidge and Shoemaker sites will require capital improvements to accommodate bus operations at each location. Eventually, the Gilbert Terminal would be closed, although a timeframe for this has not been established. This EA evaluates the improvements proposed for the Coolidge Terminal only, in accordance with the National Environmental Policy Act of 1969, as amended, 42 USC § 4321 et seq. and other related laws. Improvements at any other DDOT facility would be undertaken and funded separately from this Project but are referenced to provide context. Furthermore, since Coolidge Terminal is currently not in use, any other improvements to terminal facilities, route changes, or service improvements are not dependent on the Project to move forward.

1.2 Project Description

The proposed Project would construct an all-new terminal on the Coolidge site. The proposed Project would be phased to initially accommodate the move of 143 buses from Gilbert Terminal

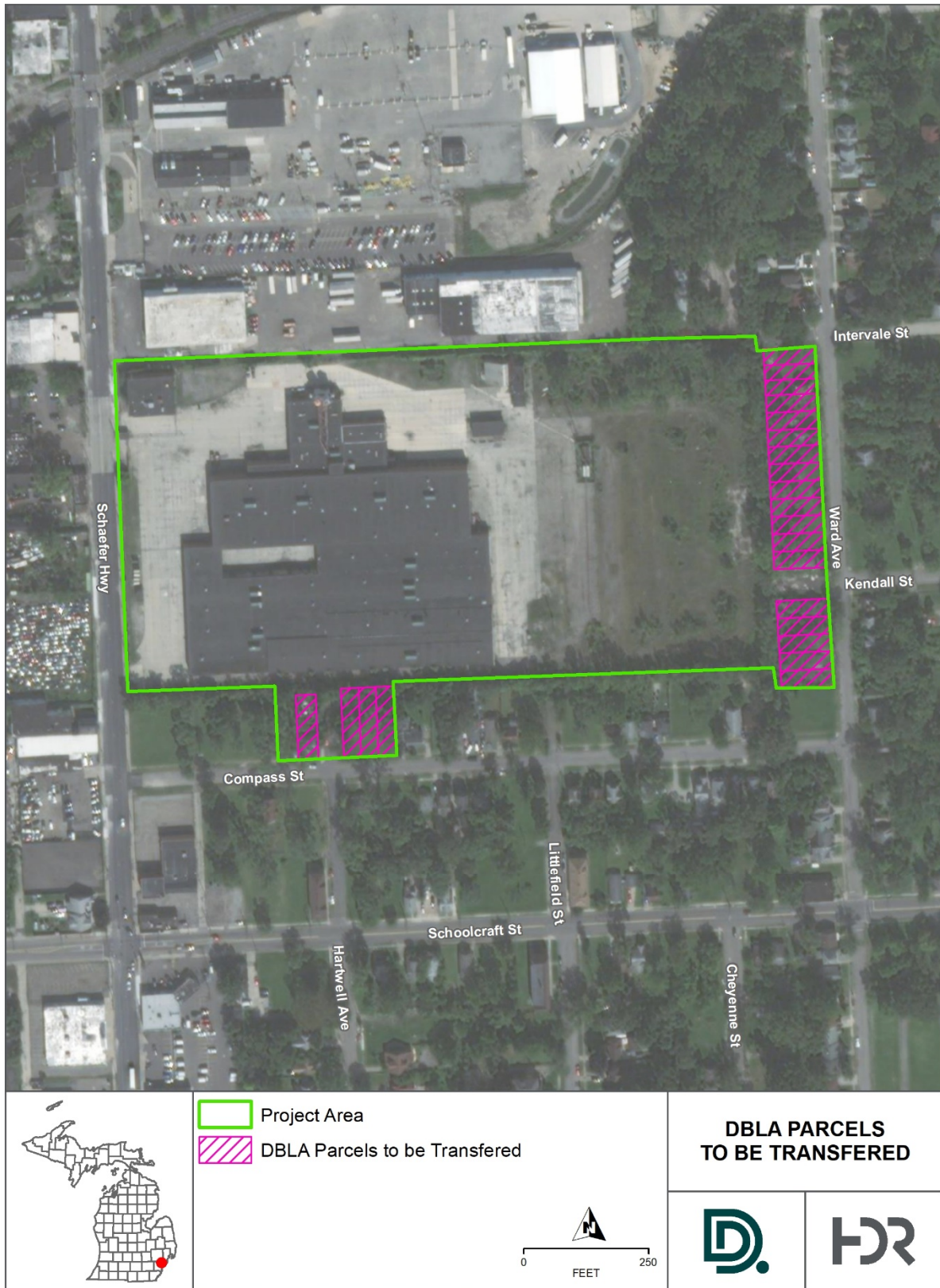
with the capacity to hold 144 buses, and the site is planned to accommodate expansion for a capacity of up to 216 buses in the future. Both 40' buses and 60' articulated buses will be stored and maintained at this facility, with 24-hour operations. The proposed Project would be constructed in two phases – the first phase, initial build for 144 buses, and the second phase, full build to accommodate 216 buses, as described in Table 2. A conceptual site plan is shown in Figure 3.

Table 2: Proposed Project Components

Component	First Phase Initial Build	Second Phase Full Build
Number of buses	144	216
Operations & administration	Yes	Yes
Bus driver support spaces	Yes	Yes - expanded
Number of employees	408	671
Employee parking	230	341
Visitor parking	15	15
Indoor bus storage	Yes – 144 buses	Yes – expanded to 216 buses
Coach services (fueling/charging, washing, cleaning)	Yes	Yes - expanded
Fleet maintenance (preventative maintenance, shops, parts storage)	Yes	Yes - expanded
Ancillary services for coach tires (supply, repair, recap, scrap)	Yes	Yes - expanded to include services for non-revenue vehicles also
Radio dispatch	Yes	Yes
Non-revenue vehicle repair (support vehicle storage, repair, service)	No - services will continue at Shoemaker and/or Central	Yes
Bus stop maintenance	No – services will continue at Shoemaker and/or Central	Yes

To accommodate all requisite facility operations, necessary stormwater management infrastructure, and meet City zoning ordinance and design requirements (such as setbacks, landscaping, and fencing), the construction footprint includes 36 adjacent vacant residential parcels that lie in the Happy Homes Subdivision to the east and south of the Coolidge Terminal site along Ward Avenue and Compass Street, respectively (Figure 4). These vacant properties are owned by the Detroit Land Bank Authority (DLBA). DLBA intends to transfer these properties to the City of Detroit specifically for the proposed Project. Removal of these vacant structures will also help to improve blighted conditions and the overall visual landscape in the project site.

Figure 4: Adjacent Vacant Parcels Required for Project

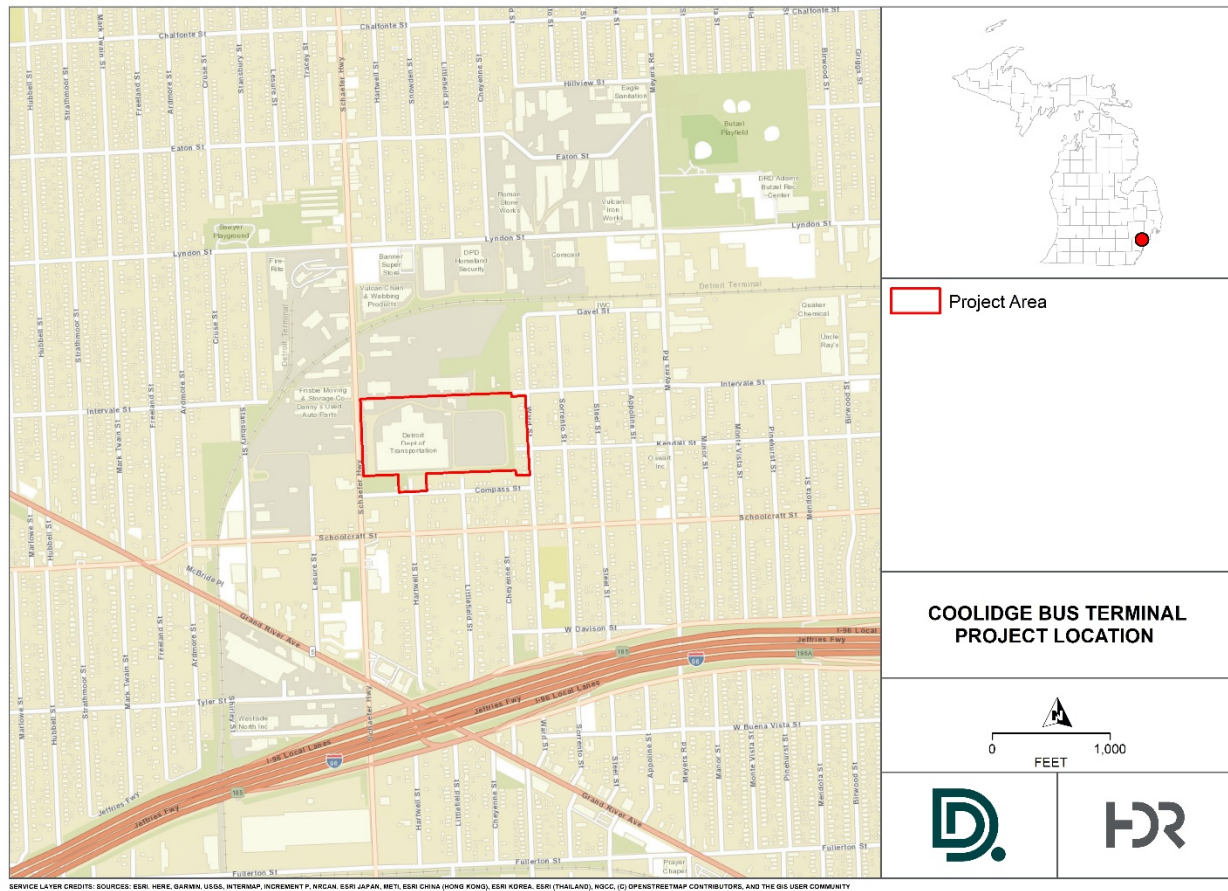


Background Source: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1.3 Project Location

The project site is north of I-96 Expressway, approximately ½ mile north of the intersection of Schaefer Highway and Grand River Avenue. It is nearly 8 miles northwest of downtown Detroit. The proposed Project will be primarily located on the existing Coolidge Terminal site at 14044 Schaefer Highway in Detroit, Michigan, with some adjacent vacant parcels as described above. See Figure 5.

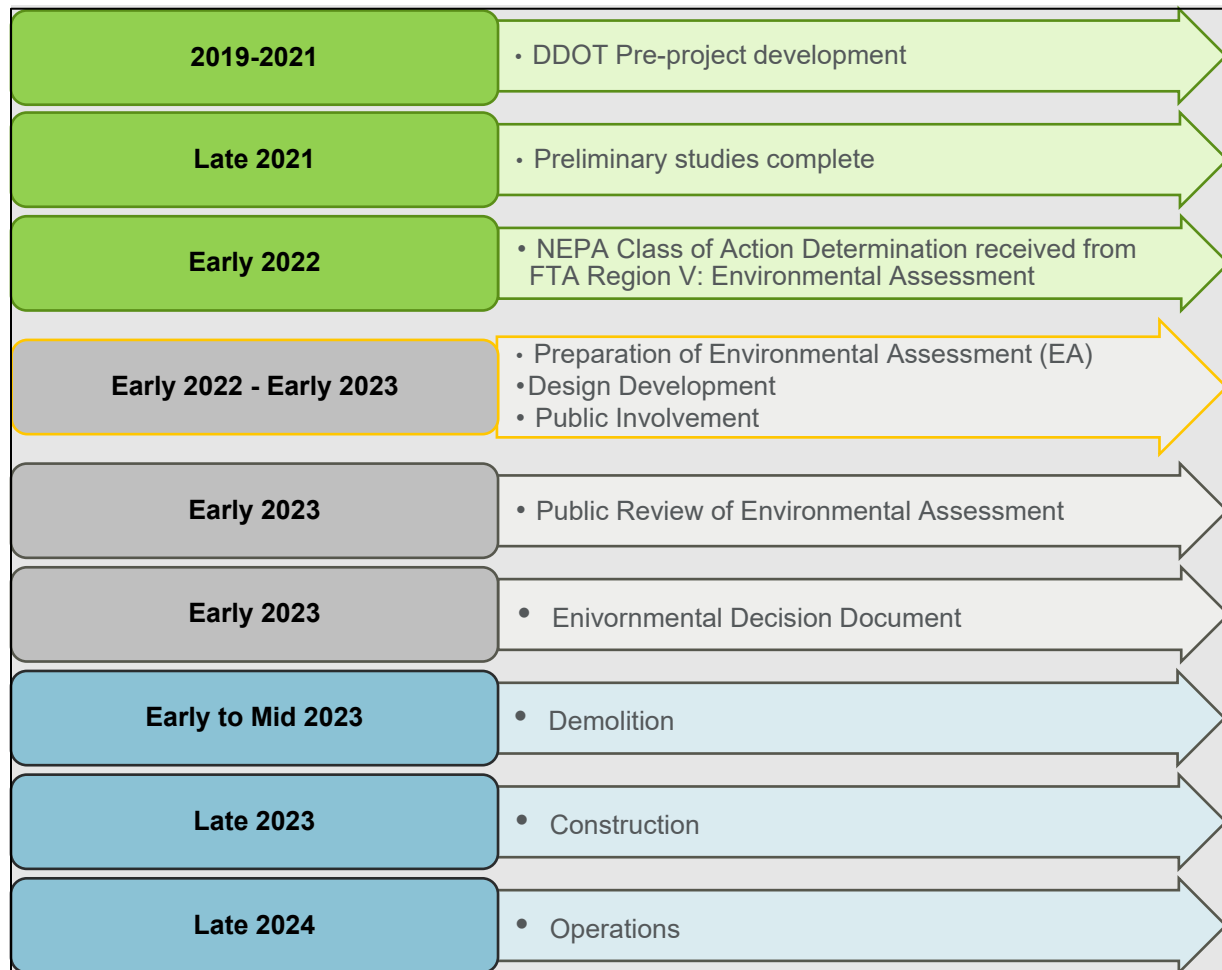
Figure 5: Project Location



1.4 Project Schedule

The EA process began in early 2022 and is anticipated to be completed in early 2023 with the issuance of a NEPA decision document. Demolition of the Coolidge Terminal will occur shortly after completion of NEPA. Construction is anticipated to begin in late 2023, with operations to begin in late 2024. The projected schedule is shown in Figure 6.

Figure 6: Project Schedule



1.5 Comments on the Environmental Assessment

A Notice of Availability of the Environmental Assessment will be published in the Detroit News, the Detroit Free Press, and Michigan.com on February 1, 2023 and on the [Coolidge Terminal Replacement Project | City of Detroit \(detroitmi.gov\) website](https://www.detroitmi.gov). Hard copies are available at the Chaney/Detroit Public Library, 16101 Grand River Avenue in Detroit, as well as at DDOT's office at 100 Mack Avenue in Detroit, and at the Federal Transit Administration Region 5 – 200 West Adams Street, Suite 320, Chicago, IL 60606. **Comments must be received by March 2, 2023.**

Comments on this EA may be submitted in writing or made orally at a public hearing for the proposed Project scheduled for February 16, 2023, at 5:00 p.m. at El-Beth-El Temple Church, 13922 Schaefer Highway, Detroit.

Written comments may also be sent to DDOT via email or US mail:

EMAIL: DDOTcomments@detroitmi.gov

US MAIL:

Coolidge Project Public Comment, Executive Director's Office
Detroit Department of Transportation
100 Mack Avenue
Detroit, MI 48201

Verbal comments should be provided via a court reporter at the public hearing, described below; or by calling (313) 933-1300 or 7-1-1 (TTY).

PUBLIC HEARING

DDOT will hold a public hearing to present the EA and solicit public comments on February 16, 2023, at 5: 00 p.m. at El-Beth-El Temple Church at 13922 Schaefer Highway. This hearing will include a presentation and DDOT staff will be available to answer questions. Comments on the EA may be made verbally to a court reporter or in writing during the public hearing. The hearing location is accessible to people with disabilities. The public hearing will also be streamed live via Zoom:

Zoom Meeting ID: 873 7373 3357, Call-in Number: 1(312) 626-6799

Link: <https://cityofdetroit.zoom.us/j/87373733357>

Following the close of the comment period, FTA and DDOT will consider the comments submitted. Based on the information contained in the Environmental Assessment and comments received, FTA will determine whether the Project would have a significant effect on the human environment that would warrant preparation of an Environmental Impact Statement. If FTA decides that there are no significant effects, it will issue a Finding of No Significant Impact. The determination will be made available to the public and all who submit comments on the EA.

The following persons may be contacted for additional information regarding this document:

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2. Purpose and Need

The existing Coolidge Terminal is currently non-operational due to damage sustained during a fire in 2011. As a result of the fire, DDOT moved bus storage, maintenance, and operations from Coolidge Terminal to Gilbert and Shoemaker Terminals. Today, DDOT operates 37 regular bus routes¹. One hundred and forty-three (143) buses are stored and maintained at Gilbert Terminal, which is located in the mid-town area, and are used for 19 of the 37 routes. The remaining 145 buses in the DDOT fleet are stored and maintained at Shoemaker Terminal on the east side of the City and used for the remaining 18 routes. Eleven routes serve the west side. Ten originate at Gilbert, and one originates at Shoemaker. All of the existing “non-standard” buses, including the 60’ articulated buses (approximately 25% of the fleet), low-floor buses, and buses that use alternative fuels, such as electric or hybrid, must be stored and maintained at Shoemaker Terminal, as Gilbert Terminal does not have compatible infrastructure for these vehicles.

Central Terminal does not store any buses but is used for heavy repair and overhauls. DDOT expects this to continue for the foreseeable future.

2.1 Project Purpose

The purpose of this Project is to construct a facility to balance daily bus operations across the City and meet current and future storage, operations, and maintenance needs of DDOT’s fleet. Upon completion of the Project, DDOT will decommission the Gilbert Terminal by removing what they can re-use at other facilities, shutting down all power, and ceasing all operations. At this time, DDOT has not determined the future of the Gilbert Terminal after it is decommissioned.

2.1.1 Balance Bus Operations

Gilbert Terminal is approximately 6 miles southeast of Coolidge Terminal at 5600 Wabash Street, in the mid-town area. Shoemaker Terminal is located at 5149 St. Jean Street, approximately 13 miles east of the Coolidge Terminal. Today, all of the western bus routes pull in and out of Gilbert Terminal or Shoemaker Terminal, causing approximately 10% additional deadhead, non-revenue travel time, on average². All non-standard bus storage and maintenance needs, such as that for 60’ articulated buses, low-floor buses, and buses that use alternative fuels, including electric or hybrid, take place at Shoemaker Terminal. This results in an unbalanced and inefficient system. Consolidating all western and west-central bus storage, operations, and maintenance functions at a new Coolidge Terminal, and all eastern and east-central bus operations at Shoemaker Terminal, would result in a more balanced and efficient system across the City.

¹ Effective April 25, 2022.

² Per information gathered by DDOT Service Development & Scheduling Division, 1/17/23

2.1.2 Meet Current and Future Bus Storage, Operations and Maintenance Needs

DDOT currently stores and maintains 143 buses at Gilbert Terminal and 145 buses at Shoemaker Terminal. Although Central Terminal is still in use, it is only used for major repairs and overhauls, not for bus storage or daily maintenance.

In 2021, DDOT examined its facility space needs to determine the amount of space needed to support a projected fleet of 216 buses for western routes, including 40' standard coach, 60' articulated, and electric and/or hybrid (diesel/battery) buses. Extensive interviews were conducted with various DDOT personnel responsible for the operation and maintenance of the DDOT fleet as part of the master planning facilities effort. The application of planning ratios³ to vehicle quantities was then used to calculate the number of repair bays required to maintain buses. These same space standards were also applied to the requisite offices, shops, storage areas, bays, and vehicle parking areas. DDOT determined that none of DDOT's existing terminals would be able to accommodate future space needs in a cost-effective manner.

Due to its outdated infrastructure and state of disrepair, the Gilbert Terminal cannot easily service or store many buses within DDOT's existing fleet and cannot be expanded to accommodate future needs. Further, Shoemaker Terminal is the only terminal that can store and handle all regular service and maintenance for non-standard buses (described previously). DDOT concluded, as referenced in the master planning facilities effort, that a new facility would be able to fulfill these needs for the standard and non-standard buses that serve the western and west-central part of the City, freeing up Shoemaker Terminal to focus on the buses that serve the eastern and east-central part of the City.

It should be noted that DDOT is currently undertaking a Comprehensive Operations Analysis (COA), which is branded "DDOT Reimagined." For reasons stated previously, the replacement of the Coolidge Terminal is needed and must be completed due to inadequate DDOT terminal infrastructure. It is independent of the COA and must be done, regardless of any route changes that may occur as a result of the network redesign.

The COA is a separate planning analysis and not connected to the Coolidge Terminal Project that began in Summer 2021 and is expected to be completed by the end of 2023. The outcome of the COA will be a redesigned bus network that serves the current and future travel needs of transit passengers in Detroit. The COA aims to improve operating safety, efficiency, and reliability by eliminating service network practices and designs that are inefficient, ineffective, and potentially unsafe. For example, the streamlining of a route by keeping it on a major corridor with improved pedestrian access rather than deviating into a neighborhood with narrow, slow streets helps meet all three objectives. DDOT expects that implementation of any network/route changes would begin in 2023.

³ Space planning ratios were derived from data and space utilization information gathered from numerous other successful bus maintenance facilities analyzed throughout the country over a 25-year period.

The COA will be implemented before the Coolidge Terminal is constructed. DDOT began rolling out COA changes in conjunction with post-Covid service restoration in June 2022 and will continue with each regular service change throughout 2023. Infrastructure based implementation will happen when those efforts are complete (e.g., new hubs).

As DDOT develops the COA, they are assuming the use of the Gilbert Terminal, until the new Coolidge Terminal is operational.

2.2 Project Needs

Gilbert Terminal currently stores and maintains 40' standard buses that serve the mid-town, west and west-central side of the City, while Shoemaker stores and maintains standard buses for the east and east-central side, as well as all non-standard buses. However, Gilbert Terminal, having never been renovated, is no longer able to meet the needs of the DDOT bus fleet and is functionally obsolete due to its outdated site design, fleet restrictions, and doesn't meet current best practices for safety and security. Further, a physical conditions assessment completed as part of the facilities master planning effort by DDOT in 2021 showed structural issues, severe deterioration and code compliance issues at both Coolidge and Gilbert Terminals. The Gilbert Terminal is at the end of its useful life and must be decommissioned. At this time, DDOT has not determined the future of the Gilbert Terminal after it is decommissioned.

The location of Gilbert Terminal in the center of the City is also not conducive to efficiently serving the western bus routes.

The Project is needed for the following reasons:

2.2.1 Improving Transit Operations

- Current transit operations are unbalanced and inefficient across the City. DDOT has eleven western routes that serve the City with no nearby terminal. Ten of the eleven routes operate out of Gilbert Terminal, which is an additional 6 miles away from the Coolidge Terminal. The remaining route operates out of Shoemaker Terminal, which is 13 miles away from the Coolidge Terminal.
- Current garage deadhead times (the time a bus travels outside of revenue service) for western routes are on average approximately 10 percent⁴ longer than necessary, resulting in more driving time, fuel loss and inefficiency.
- The absence of a working terminal in the western portion of the City results in slower incident response time from DDOT during times of need, such as inclement weather or if a bus breaks down.

2.2.2 Accommodating Current and Evolving Fleet Needs

- Current terminals do not have enough spaces to adequately store or maintain 60' articulated buses efficiently. DDOT projects that ultimately, 36 60' articulated buses and 162 standard

⁴ Per information gathered by DDOT Service Development & Scheduling Division, 1/17/23

40' buses will be needed to serve the western portion of the City. This equates to the length and space needs of 216 standard 40' coach buses to serve the western part of the City.

- Current terminals do not have enough space or infrastructure to adequately maintain buses with low-floor boarding.
- Without a significant investment, DDOT's current terminals will not be able to serve DDOT's future fleet as the number of alternative-fueled buses, including electric buses, gradually expands to meet the long-term goal of a full transition to a zero emissions bus fleet.

3. Alternatives

This section summarizes the alternatives for the proposed Project. One Build Alternative has been carried forward for evaluation in this EA.

3.1 Alternatives Evaluation

DDOT began studying different alternatives at the Coolidge Terminal site as far back as 2019. Workshops were held with various DDOT departments to examine DDOT's overall goal to move the existing 143-bus operations and maintenance facility functions currently performed at Gilbert Terminal to the Coolidge Terminal site. DDOT and its design team undertook a facilities master planning effort in 2021 that assessed and considered the physical condition of the four DDOT terminals (inclusive of the Coolidge Terminal even though it is currently not operational.)

Staff from DDOT's Maintenance, Operations and Administration departments identified the space and programming needs and functional requirements that needed to be met with any improved facility at the Coolidge site. Of primary importance was that any new or improved facility must have enough space to store and maintain at least 143 buses in the near term and be able to expand to up to 216 buses in the longer term. Knowing that the Coolidge Terminal complex was considered eligible for listing on the National Register of Historic Places, alternatives that re-used some or all of the existing buildings was considered.

DDOT worked with the design team to develop concepts that included re-use of the existing Coolidge Terminal buildings (or at least some of them), as well as building an all-new facility.

DDOT and the design team evaluated the pros and cons of various alternatives. The factors used in this analysis were weighted fairly equally (10 to 15 percent for each) and included the ability to re-use buildings; ability to expand in the future; site circulation; efficiency of layout; adjacency of functional uses; scheduling of maintenance activities; cross circulation; safety and security; and snow removal.

Further information can be found in Appendix A.

3.2 Alternatives Eliminated from Further Study

3.2.1 No Build Alternative

The No Build Alternative is defined as maintaining current operations with no improvements. The No Build Alternative cannot provide the adequate space needed to store and maintain DDOT's existing or future bus fleet for the western side of the City. DDOT must rely on the functionally obsolete and deteriorated Gilbert Terminal to store, service and maintain standard buses, and upon the Shoemaker Terminal to store, service and maintain non-standard buses, such as 60' articulated buses and those that use alternative fuels. Continued reliance on the existing facilities results in unbalanced operations and inefficiencies. Therefore, the No Build Alternative does not meet the purpose and need for the proposed Project.

3.2.2 Re-use of Existing Coolidge Buildings

DDOT examined the feasibility of reusing the existing Coolidge Terminal buildings to meet the purpose and need of the proposed Project. The location and configuration of the existing buildings on the site do not allow enough space to support the programming needs of a 216-bus program in terms of capacity and would not achieve the functional and operational layout that is needed to accommodate current and future vehicles and equipment with optimal bus circulation.

Further, the physical condition assessment completed by DDOT as part of the facilities master planning effort revealed many structural issues, damage, and deterioration from the 2011 fire and ensuing vacancy, and violations of Americans with Disabilities Act of 1990 (ADA) compliance and local fire code requirements. Based on the inability to meet the space and programming needs, the inability to expand, and the current condition of the buildings, DDOT determined this alternative would not meet the purpose and need for the proposed Project. Therefore, this alternative was not carried forward.

3.2.3 Hybrid of New Buildings and Re-use of Existing Buildings

DDOT further evaluated options that would re-use or renovate some of the buildings, including the Coach Services/Maintenance/Bus Storage building and the Operations Building, supplemented with new building construction.

While this alternative could better meet the space needs required to support 216 buses, other factors such as circulation, adjacency of functional uses, scheduling of maintenance activities, and cross circulation were not met. Therefore, this alternative was not carried forward.

3.3 Alternative Advanced for Further Study

3.3.1 Full Replacement of Coolidge Terminal

After concluding that that it was not feasible to salvage and reuse any of the existing Coolidge buildings in order to meet the [purpose and need for the proposed Project, DDOT considered the full replacement of the Coolidge Terminal with an entirely new facility. DDOT developed several conceptual site layouts for a single terminal at the existing Coolidge site that could accommodate the initial move of 143 buses from Gilbert, and a future 216 bus program. Based on today's design standards and fleet needs, DDOT determined that one single site must be able to ultimately serve 216 buses. The full future buildout is included as part of this analysis.

3.4 Preferred Alternative (Build Alternative)

The full replacement of Coolidge Terminal is the Preferred Alternative (Build Alternative). Given the amount of funding available for the proposed Project, and the immediate need to move 143 buses out of the Gilbert Terminal, DDOT decided to phase the construction of the proposed project. This phased approach allows DDOT to close and decommission Gilbert Terminal upon completion of the first phase of construction at Coolidge and offers the ability to expand the facility to accommodate the equivalent of 216 standard buses (36 articulated buses and 162 standard buses) in a second, future phase as projected by DDOT.

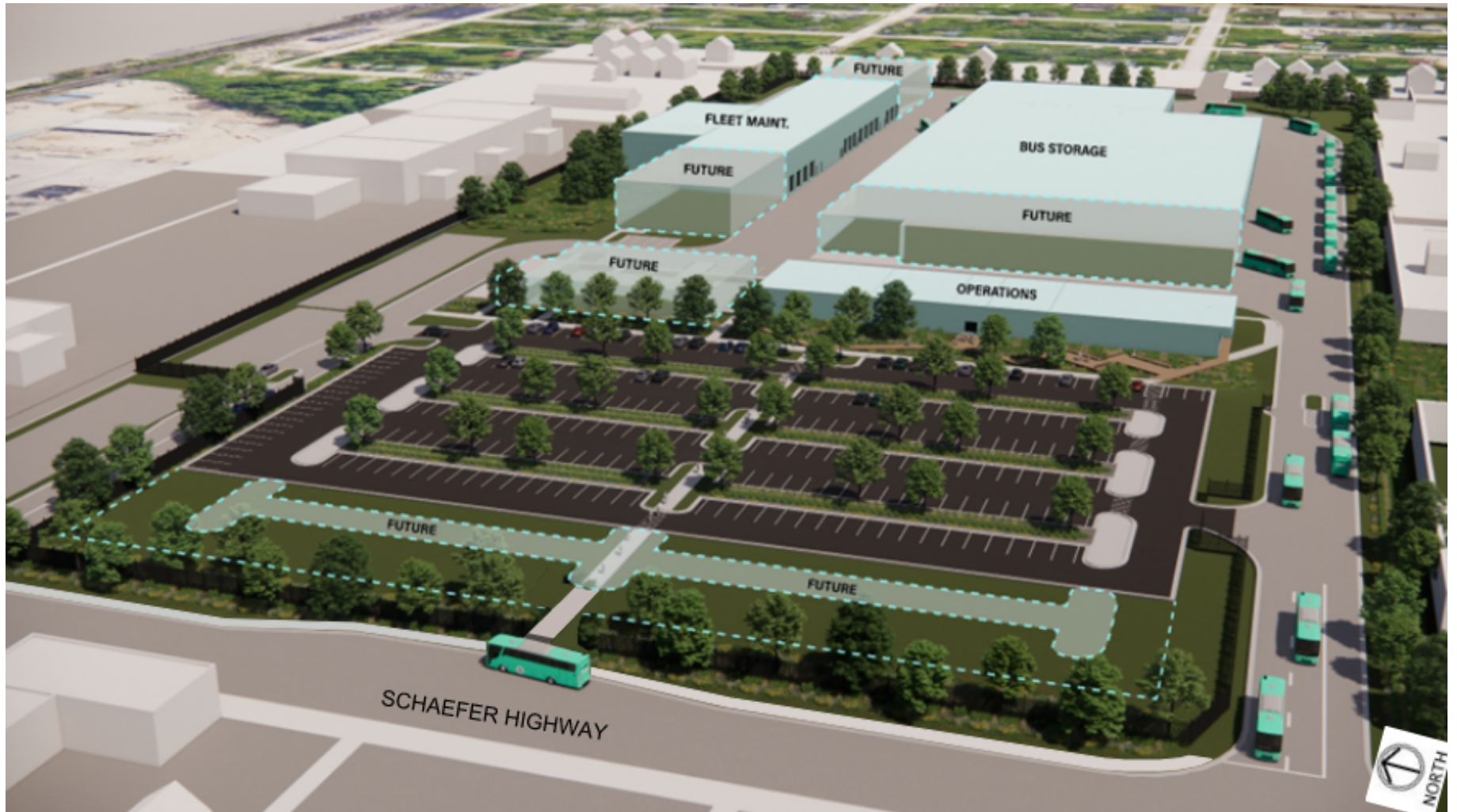
In the first phase of the proposed Project, the new Coolidge Terminal would accommodate 144 buses, which is enough room to move all of the buses currently stored at Gilbert Terminal. This facility would need 408 employees for 24 hour-operations, nearly 80 percent of them being bus operators. In the second phase, 671 employees would be needed for a 216-bus operation. The facility and site must be able to accommodate this level of operation and three shift changes over a 24-hour period. The current Gilbert Terminal has 284 employees as verified by DDOT Operations, Maintenance and Safety personnel.

The proposed facility would consist of three separate buildings with interdependent programs: Bus Storage, Fleet Maintenance, and Operations (see Figure 7). The three buildings are configured to integrate with and support the primary on-site bus circulation while providing functional adjacencies to one another. Other site improvements are described in the following pages.

The future expansion in the second phase would be accomplished by adding future bays to the main facility when the demand warrants, adding more employee parking, interior modifications to accommodate the additional employees and expanding ancillary buildings to store more parts where additional functions for non-revenue vehicles can be performed.

A site diagram of the first and second phases of the proposed Project is shown in Figure 7. The conceptual site plan is shown in Section 1.2. Both the site diagram and conceptual site plan show the future expansion of the second phase described above.

Figure 7: Site Diagram of First Phase and Second Phase (Future) for Coolidge Terminal Replacement Project



3.4.1 Coolidge Terminal Components

Bus Operations and Administration Building

Employees and visitors will access the site from Schaefer Highway. The Bus Operations and Administration building serves as the main point of entry to the buildings for employees and visitors arriving by car and is located adjacent to the east side of the parking area. Employees and visitors use designated pathways to enter the building. After entering this building from the parking lot, employees can continue to the Bus Storage and Fleet Maintenance buildings to the east via outdoor designated pedestrian pathways. The Transportation Station Workers office is located within the Operations and Administration Building with direct visibility of the south guard house and gate and main bus access drive. The single-story building provides staff, administrative, and training spaces for bus operators, dispatchers, and administrators. The bus operators' lobby faces south and opens onto an outdoor seating area, partially covered by a roof overhang and trellis. Skylights and clerestory windows provide natural daylighting and minimize energy use. A rendering of the building is shown in Figure 8.

Figure 8: View of the Coolidge Operations Building, looking east



Bus Storage / Coach Services Building

The Bus Storage building houses both the Bus Storage and Coach Services programs and is located directly to the east of the Operations and Administration Building. Buses enter from Schaefer Highway and access the Coach Services area at the rear of the building, and then circulate through the indoor storage area from north to south. The location and orientation of the building allows for future expansion to the west to accommodate all 216 buses.

The Bus Storage portion of the building includes dedicated parking for 144 buses with 24 parking stall bays measuring 27' wide x 128'-6" long and accommodating 6 buses per stall bay. Midway through the Bus Storage Building, two charging station rooms house the necessary equipment to charge up to 14 electric powered buses that are anticipated for DDOT's future 216-vehicle fleet.

The Coach Services portion of the building is dedicated to servicing and washing the bus fleet and includes a rainwater harvesting cistern as part of the wash program. Four buses can be washed simultaneously.

Fleet Maintenance Building with Parts Storeroom

The Fleet Maintenance Building and the Parts Storeroom are located parallel to the Bus Storage/Coach Services Building along the north side of the site. The Fleet Maintenance Building includes bus inspection and repair bays as well as additional administrative offices and staff areas.

The location and orientation of the Fleet Maintenance Building allows for potential expansion to the east and west as needed. This space could be used for heavy repair; for the expansion of the battery electric bus (BEB) deployment of DDOT's bus fleet, or another alternative fuel as DDOT determines is most appropriate. DDOT is currently testing electric vehicles to evaluate their performance. This pilot program will continue into 2023 and will allow DDOT to determine their future zero emissions transition plan, which would occur over time through small, incremental deployments. The Coolidge Terminal would be able to accommodate this transition in the future, as required.

Parking and Site Circulation

There are two entrances/exits off of Schaefer Highway. Employees and visitors access the site from the north vehicle entrance/exit. Employee and public parking are located in the west portion of the site off of Schaefer Highway. A five-foot sidewalk along Schaefer Highway and a bus stop in front of the site is also provided (Figures 3 and 7). Employees and visitors proceed on foot from the parking area to the Bus Operations and Administration Building to access the rest of the site.

To support the first phase of 144-bus operation, off-street surface parking for 245 automobiles would be constructed, including requisite accessible parking stalls and aisles. This includes 230 employee spaces and 15 visitor spaces. Parking stalls are approximately 9' wide x 20' deep. The lot would include pedestrian walkways and marked crossings and be landscaped according to City of Detroit ordinances and will be coordinated as part of the local permitting process. In addition, 37 spaces for DDOT's non-revenue vehicles would be positioned directly behind the Operations and Administration Building. This is more easily seen on the Conceptual Site Plan (Figure 3) in Section 1.2.

The employee parking lot would be expanded to the west and south to accommodate 341 vehicles to support the full buildout. The number of initial and future employee parking spaces considers three shifts over the 24-hour period of operation, and the overlapping of workers at shift changes.

Buses and delivery vehicles will enter and exit the site off of Schaefer Highway at the south entrance/exit and follow the two-way interior roadway. On-site bus circulation is generally organized with counterclockwise circulation, allowing for maximum visibility by DDOT personnel. Upon entering the site, buses proceed into the Bus Storage/Coach Services Building where they are fueled and washed and stored in their assigned interior parking spaces. After parking their

buses, drivers will walk west through the Operations and Administration Building to access outdoor designated pathways. When leaving the Bus Storage portion of the building, buses will use the same roadway and southwest access point to Schaefer Highway.

Utility Yard

The location of the proposed Utility Yard includes four existing 25,000-gallon underground storage tanks (USTs) dedicated to diesel fuel and one existing 10,000-gallon UST dedicated to unleaded gasoline. These existing tanks contain fuel, are inspected regularly, and are thought to be in good condition. The four 25,000 gallon tanks will be left in place and the fuel supply lines and pumps would be removed and replaced with new piping connecting to new fuel dispenser locations. The 10,000 gallon tank and associated piping will be removed in accordance with the UST Closure requirements per Michigan Administrative Code R29.2155.

An impressed current cathodic protection (ICCP) system was installed in August of 2021 to ensure the five USTs remain protected from corrosion to extend the service life of the system. To repurpose the existing tanks for the new fuel dispensing operation in the Coach Service building, the tank-top appurtenances will be replaced to modernize the system for increased performance. Due to the 1,200-foot distance between the Coach Services building and existing location of the USTs, each tank will include a new 5-HP submersible turbine pump mounted on it to supply fuel to the dispensing equipment.

A remote spill container will be set up in the delivery area to receive fuel. An overflow prevention valve will be installed at the fill connection to the tank. The gasoline tank will also include a vapor recovery line. The immediate area will be surrounded by bollards. All tank level and leak detection instrumentation will be monitored at a common panel which will provide inventory monitoring, level alarms, and leak alarms.

Stormwater Management, Landscaping, Perimeter Visual Barriers

The Coolidge Terminal drainage systems will be designed to include water quality planning, since stormwater contamination is possible due to spilling of oils, fuels, and cleaning fluids in previous years. The system will be designed to control flows that may have a high concentration of contaminants. Design plans would be reviewed and approved by the City of Detroit Buildings, Safety Engineering, and Environmental Department (BSEED) as well as the Detroit Water and Sewerage Department (DWSD).

Surface drainage of stormwater to bioswales occurs throughout the site, though primarily at the outer perimeter to allow adequate slopes to the bioretention at the outer edges. The entire system would be designed for detention, not retention, as the freeboard requirements are prohibitive, and the soils are likely not well-drained. All surface bioretention have concrete inlets for water to enter the system and will have rip rap to dissipate the energy.

In known areas of contamination, bioretention has been designed around them to manage contamination in place using a Due Care Plan. The Due Care Plan will be prepared in accordance with Part 201 of the Michigan Natural Resource Environmental Protection Act, 1994 Public Act 451. With this design, bioretention is located in between the certain brownfield zones and are connected by pipes running through the contamination, preventing its migration.

The main bus storage facility will collect roof water for daily bus washing needs. At the west entrance of the Bus Operations and Administration Building, a pedestrian pathway from the parking lot to the entrance will be constructed. There are areas of contamination here, so bioretention cells will be installed as well. The area will also be landscaped with trees, shrubs, plugs, and seed, which are essential for the bioretention zones to function.

Trees, shrubs, and grass are planned for the perimeter of the majority of the site, except on the far northwest end where the guardhouse and utility yard are located. The landscaping will provide a visual buffer to the residential areas to the east and south, as well as the frontage on Schaefer Highway. The parking lot will also be landscaped with trees and shrubs in accordance with City of Detroit zoning requirements.

The entire site will be secured with fencing or barriers for security purposes. Along the north edge, chain link fence will be installed. Along the west edge, decorative fencing is proposed. Along the east edge, an opaque privacy fence is proposed to shield the residential area. Along the south edge, a masonry or pre-cast concrete wall is proposed. Figure 9 shows examples of these fences and barriers, for illustrative purposes only.

Off-site Improvements

Street improvements along the Schaefer Highway frontage include removal and reconstruction of concrete curb and gutter, streetlights, driveway geometrics, and sidewalk. All work will be performed in accordance with the City of Detroit, Department of Public Works, City Engineering Division – Standard Specifications for Paving and Related Construction March 2009.

Space for Future Plant (Facilities) Maintenance, Non-Revenue Vehicle Repair, and Sign Shop

The remaining space will be allocated for the future development of additional facilities to serve the full buildout of the Coolidge Terminal. This includes a centralized location to maintain and repair various DDOT facility assets (HVAC rooftop unit components, bus stop shelters and benches, etc.); non-revenue vehicle repair and service; and the fabrication and assemblage of signs used throughout DDOT's system.

4. Environmental Resources, Impacts and Mitigation Measures

This chapter provides a summary of the anticipated effects of construction and operation of the No Build and Build Alternatives on the transportation, community and social, and physical and environmental resources within the study area. The chapter presents the existing environmental setting conditions as it exists today, a description of the major considerations and laws or regulations governing the analysis, methods used for evaluating the environmental impacts, and anticipated temporary construction and permanent environmental impacts from the No Build and Build Alternatives. Where adverse impacts are noted, measures to avoid or minimize impacts are discussed.

4.1 No Build Alternative

Under the No Build Alternative, the Project would not be constructed, and current operations would be maintained. The No Build Alternative would not provide the adequate space needed to store and maintain DDOT's bus fleet for the western side of the City and would rely on the functionally obsolete Gilbert Terminal. Continued reliance on the existing facilities results in unbalanced operations and inefficiencies. Under this alternative, the proposed Project's purpose and need would not be met.

Due to the current state of disrepair, deterioration and vacancy of the Coolidge Terminal and its contribution to blighted visual conditions in the area, DDOT has determined that it would need to demolish the Coolidge Terminal buildings even under the No Build Alternative due to safety and security concerns that were identified during the facilities master planning effort. The impacts of demolition would entail ground disturbance and temporary construction-related impacts such as dust; noise; risk of disturbing contaminated soils; impacts to vehicular traffic; and impacts to historic properties.

4.2 Build Alternative

4.2.1 Transportation

This section summarizes the existing transportation system and the potential impacts of the Project on the transportation system. For additional detail, see the *Traffic Technical Memorandum* in Appendix B.

Legal/Regulatory Context and Methodology

DDOT conducted a transportation analysis in compliance with National Environmental Policy Act of 1969 (NEPA) regulations (42 USC § 4321 et seq.) and the Bipartisan Infrastructure Law (Infrastructure Investment and Jobs Act) Act (Pub. L. 117-58). DDOT prepared a traffic impact study (TIS) in 2021 to assess impacts to nearby intersections that result from the Build Alternative. The study was based on the phased buildout of the Coolidge Terminal (both first and second phases). The facility is expected to be built and operational in 2025. At opening, the facility will accommodate 144 buses, with the ability to expand to 216 buses in the future. For

the purposes of this analysis, it is assumed that the facility will be expanded to full capacity by 2045.

An impact would be considered adverse if it resulted in reduced roadway capacity or increase in travel for motorized or non-motorized users. In the event of an adverse impact, DDOT identified measures to minimize or mitigate impacts to meet the guidelines of the jurisdictional agencies' policies.

Existing Traffic Conditions

Intersection operations are measured in accordance with the Highway Capacity Manual, 6th Edition and reported as Level of Service (LOS) using a scale of LOS A (best) to LOS F (worst). LOS is a measurement of vehicle delay during typical weekday peak hours (morning and afternoon) that reflects the experience of the motorist. LOS C and better is considered acceptable. LOS D on arterial streets can be acceptable in more urbanized areas.

The nearest major intersection is to the south at Schaefer Highway and Grand River Avenue. Grand River Avenue is a major arterial with 2017 Average Annual Daily Traffic of 16,171 vehicles. Schaefer Highway is a collector. The intersection is just north of Interstate 96. Historically, buses that accessed Coolidge used this intersection, and that is expected to remain the same.

Site traffic for the Coolidge Terminal is expected to peak in the early afternoon and late evening based on the number of employees and buses on site each hour. Therefore, the peak hours for the purposes of this study were determined to be 1:30 PM to 2:30 PM (Midday) and 8:00 PM to 9:00 PM (Evening). Twenty-four-hour traffic counts were collected on a typical weekday. The turning movement counts were collected at nine intersections shown in Figure 10. Traffic signal timing information was obtained from the City of Detroit Traffic Engineering Department (TED) and from the Michigan Department of Transportation (MDOT) for their respective study area intersections controlled by traffic signals.

Intersection capacity analyses were performed for the study intersections during the weekday Midday and Evening peak hours to determine their existing LOS using Trafficware's Synchro models that included the roadway network, lane configurations, traffic control plans, existing traffic volumes, heavy vehicle percentages and peak hour factors. All intersections operate at overall LOS C or better. See Table 3.

Environmental Impacts

No Build Alternative: Future Traffic Conditions

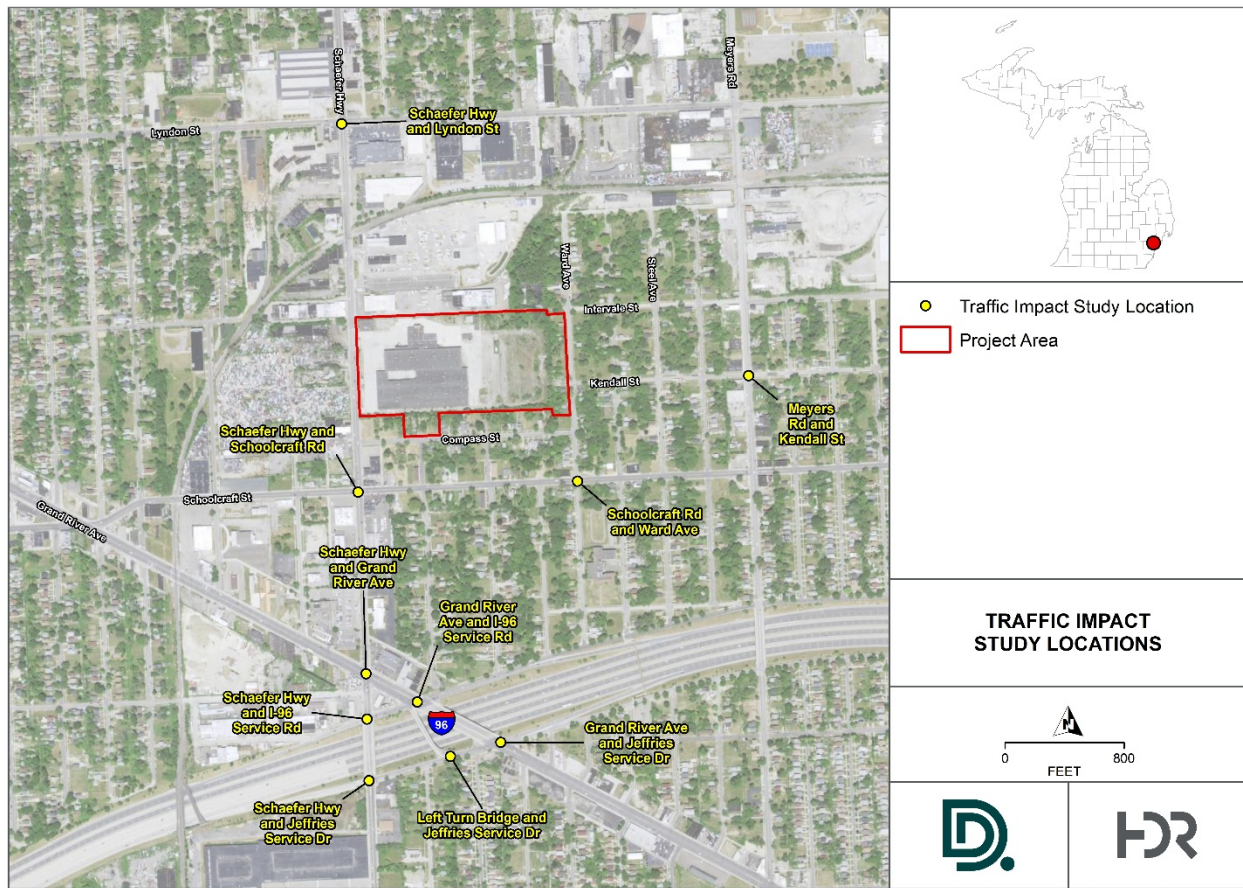
To properly determine if impacts are attributable to normal yearly traffic growth or the Project itself, DDOT analyzed the No Build Alternative traffic condition and the Build Alternative traffic condition for the Opening Year (2025) as well as the Build Alternative for the horizon year (2045). The Year 2025 No Build scenario Synchro models were developed based on one percent annual traffic growth rate at all nine intersections and the existing roadway geometries and signal timing plans. The analysis found that all intersections would operate at LOS C or better, with the exception of one movement at the intersection of Schaefer Highway and Grand

River Avenue. This one movement is expected to operate at LOS E in this future 2025 No Build scenario without the Coolidge Terminal, although the overall LOS at the intersection is B. See Table 3 for the capacity analysis results.

First and Second Phases of Full Build Alternatives: Future Traffic Conditions

Proposed access to the Coolidge Terminal site is on Schaefer Highway with two driveways – one for buses and one for employees. An emergency access driveway is proposed on the east side of the site aligned with the intersection of Ward and Kendall Avenues. This driveway would be gated and used in emergency situations only. No site traffic was assigned to the emergency access driveway. The proposed site plan is shown in Figure 3.

Figure 10: Traffic Impact Study Locations



Daily operations at the facility were modeled on an hourly basis and considered the number of employees and buses entering and exiting the site each hour. To determine the peak hours, employee site trips were generated based on the respective shift analysis for when the building comes on line and is opened in the first phase for 144 buses, expected in 2025; and for the second phase for 216 buses, expected in 2045. The Shift Analysis is described more fully in the following paragraphs, as well as in Appendix A: Traffic Study.

Bus trips out of Coolidge Terminal in the first phase were generated based on the current DDOT bus block schedule for the Gilbert Terminal. The green bars in Figure 11 represent when each “block,” or bus, is out of service (i.e., parked at the facility) and was used to estimate when each bus would enter or leave the facility. For the second phase horizon year of 2045, it was assumed that the number of bus trips during the peak hours would increase proportionally with the increase in the number of bus operators onsite, according to the Shift Analysis.

The forecasted employee and bus trips by hour are combined in the chart in Figure 12.

The hour with the highest intensity of trips (employee + bus) was found to be the hour during the mid-day shift change between 1:30 PM to 2:30 PM. The second highest hour is during the evening shift change between 8:00 PM and 9:00 PM. These are the two hours that are expected to have largest impact on traffic from the Project and, therefore, are the hours analyzed in this study.

Figure 11: First Phase (2025) Bus Block Schedule

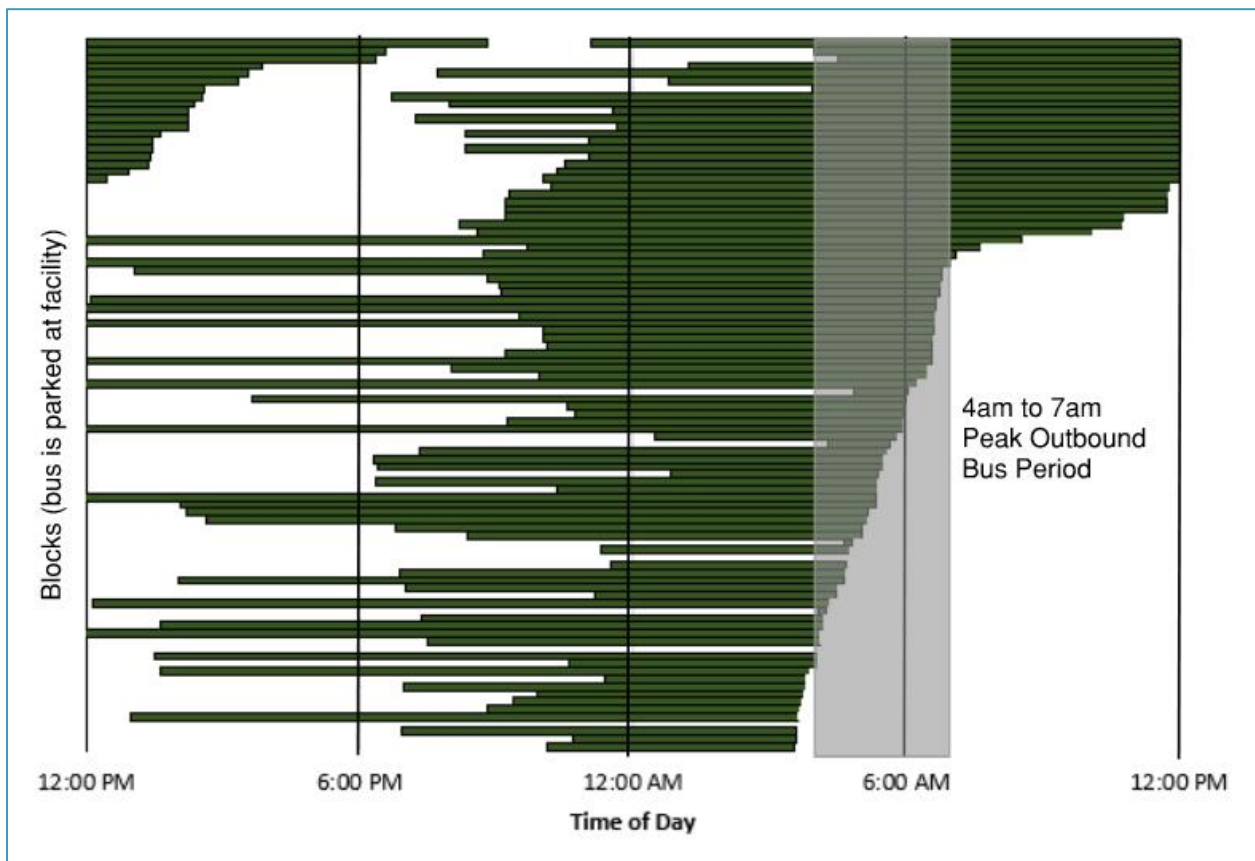
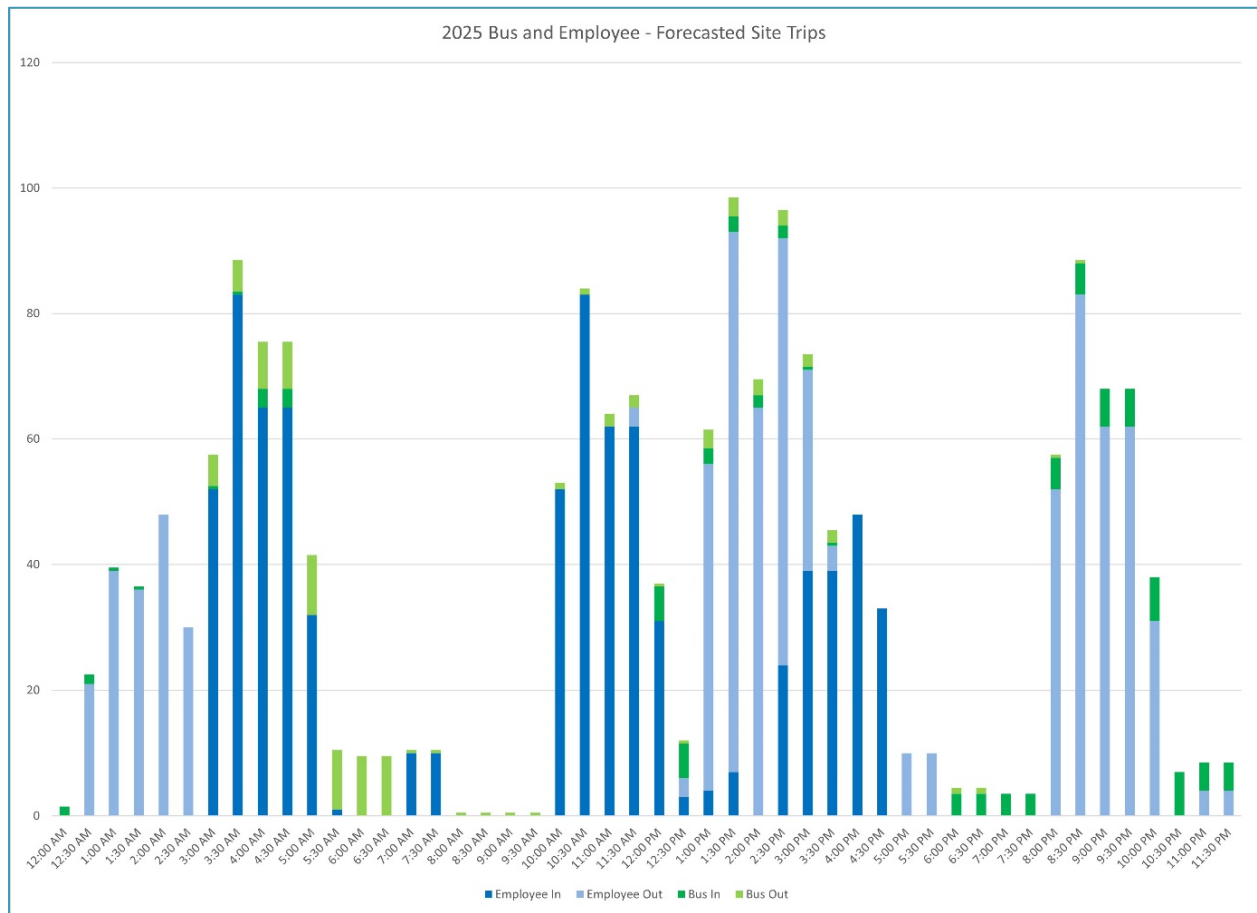


Figure 12: Forecasted Site Trips



Generally, about 20 percent of employee traffic is expected to arrive and depart to the north of the site and about 80 percent to the south. Employee site traffic was assigned to each study intersection according to this model for each of the two peak hours. The distribution of buses to and from the site was developed based on the expected routes that this facility is expected to serve. DDOT assumes that the 19 routes that currently operate out of Gilbert Terminal and the one western route that operates out of Shoemaker today would operate out of Coolidge Terminal once it opens, for a total of 20 routes. Outbound and inbound buses were distributed to the starting or ending points of these routes and assigned to study intersections accordingly. The distribution of buses to and from their respective routes resulted in approximately 45 percent of buses traveling to and from the north of the site and 55 percent to and from the south. For this analysis, it was assumed that traffic signal timings would be updated to accommodate expected traffic volumes within the next 20 years.

The first phase 2025 scenario and the second phase horizon year 2045 scenario Synchro models were developed based on 1 percent annual traffic growth rate for the background traffic at all nine intersections, the existing roadway geometries, and optimized signal timing plans. The first phase 2025 scenario capacity analysis found that all movements at the study

intersections are expected to continue to operate at acceptable LOS. The second phase horizon year 2045 scenario capacity analysis found that all movements at the study intersections are expected to continue to operate at acceptable LOS except at the site bus driveway. During the mid-day peak hour (1:30 to 2:30 PM), the westbound left turn exiting the bus driveway is expected to operate at LOS E if controlled by a stop sign, even though the overall LOS of the intersection is A. This expected LOS E is the result of the type of vehicle using the driveway since buses are slower and require larger gaps in traffic to enter a free-flowing roadway than passenger cars. Only four buses are forecasted to be exiting the driveway and subject to this delay during this peak hour.

The Capacity Analysis results are shown in Table 3.

Table 3: Capacity Analysis Results: Overall LOS

Intersection	2021 Existing		2025 No Build		2025 First Phase		2045 Second Phase	
	Midday	Evening	Midday	Evening	Midday	Evening	Midday	Evening
Peak Hour								
Schaefer Hwy & Lyndon St	B	B	B	B	B	B	B	B
Schaefer Hwy & Schoolcraft Rd	C	B	C	C	C	C	D	C
Schaefer Hwy & Grand River Ave	B	B	B	B	B	B	B	B
Schaefer Hwy & I-96 Service Rd	B	A	B	B	A	A	A	A
Schaefer Hwy & Jeffries Service Dr	B	B	B	B	B	B	C	B
Grand River Ave & I-96 Service Rd	B	B	B	B	B	B	B	B
Grand River Ave & Jeffries Service Dr	B	B	B	B	B	B	B	B
Left Turn Bridge & Jeffries Service Dr	A	A	A	A	A	A	A	A
Schoolcraft Rd & Ward Ave	A	A	A	A	A	A	A	A
Meyers Rd & Kendall St	A	A	A	A	A	A	A	A
Schaefer Hwy & Coolidge Bus Dr ¹	N/A	N/A	N/A	N/A	A	A	A ¹	A
Schaefer Hwy & Coolidge Employee Dr	N/A	N/A	N/A	N/A	A	A	A	A

¹ The Westbound left turn movement operates at LOS E with 42.6 seconds of delay for buses, although the overall LOS is A.

Measures to Avoid or Minimize Harm

All intersections in the study area would operate at acceptable levels in the first phase 2025 and second phase 2045 scenarios. Both the bus driveway and the employee driveway from the

facility to Schaefer Highway would operate as a stop-controlled approach to Schaefer Highway in the first phase 2025 scenario. DDOT will monitor each of these two intersections to determine if a traffic signal is warranted in the future.

Prior to construction, a Traffic Control Plan (TCP) would be developed and implemented by DDOT during construction to manage vehicular and pedestrian circulation and access within and near the construction zone to minimize temporary traffic impacts. Both vehicular and pedestrian access to businesses and residences would be maintained during construction in accordance with the City of Detroit's Department of Public Works Standards for construction. DDOT would prohibit construction vehicles from using residential streets to access the site. During operation of the Coolidge Terminal facility, buses and all other vehicles would access the site on the west side via Schaefer Highway.

Transit, Bicycle and Pedestrian Travel Existing Conditions

Detroit DOT Bus System

DDOT provided 18.7 million trips in 2020. DDOT operates 37 regular bus routes⁵ as shown in Figure 1. For 19 of these routes, DDOT stores and maintains the buses at Gilbert Terminal, 10 of which serve the western part of the City. See Figure 13. The remaining routes and their buses, including one route that serves the western part of the City, are stored and maintained at Shoemaker Terminal on the east side of the City. There is an existing bus stop in front of the Coolidge Terminal that will be maintained during and after construction.

SMART Bus

SMART is Southeast Michigan's regional public transportation provider, serving Macomb, Oakland, and Wayne Counties. SMART provided 7.6 million trips in 2020. SMART is supported by federal and state funding, and local contributions through a transit property tax millage from opt-in communities and bus fares. SMART operates 55 routes throughout the region, some in Detroit itself, as shown in Figure 14. SMART buses are stored and maintained at Oakland Terminal in Troy, Wayne Terminal in Inkster, and Macomb Terminal in Clinton Township.

SMART Flex is a microtransit service launched by SMART in 2021. SMART Flex partners with local communities to provide on-demand rides to locations and bus services within the service area.

None of the SMART bus routes are affected by the proposed Project.

⁵ Effective April 25, 2022.

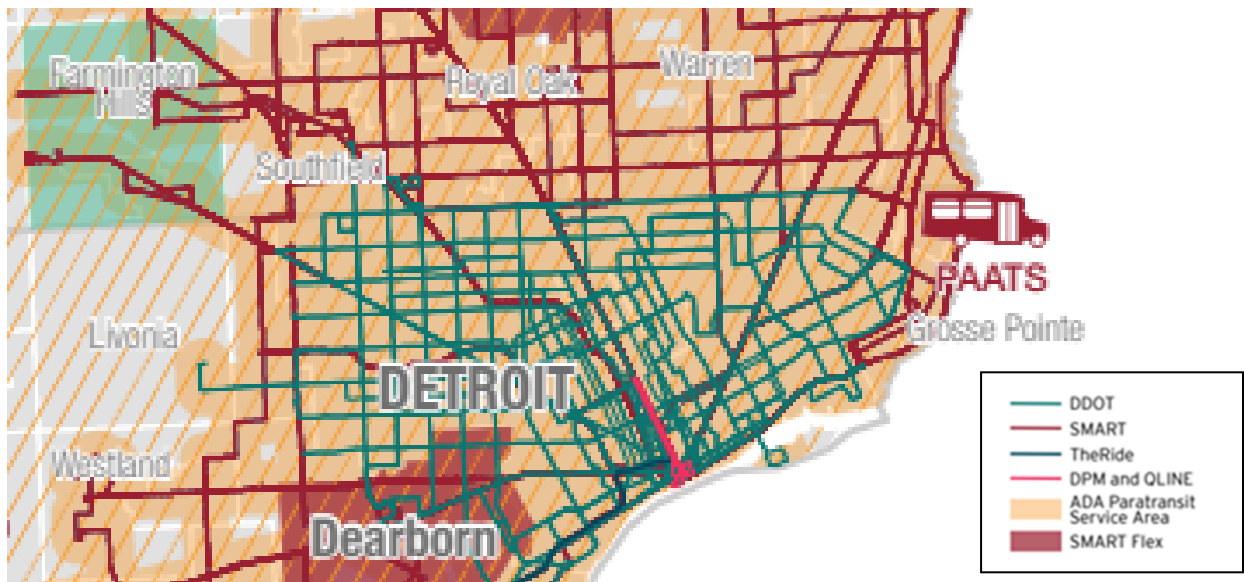
Amtrak stops at one station in Detroit on West Baltimore Avenue. In addition to Amtrak, the station is a stop for DDOT buses, SMART buses, and Q-Line. This station would not be affected by the proposed Project.

Other notable bus stations in Detroit include the Rosa Parks Transit Center on Michigan Avenue and the Howard Street Greyhound and Intercity Bus Station. The Rosa Parks Transit Center is the primary station for the DDOT bus system and is a stop on multiple SMART routes. Neither the Rosa Parks Transit Center nor the Howard Street Greyhound and Intercity Bus Station would be affected by the proposed Project.

The proposed Detroit New Center Intermodal Facility (DNCIF), a project to combine intercity bus stations with the existing West Baltimore Avenue Amtrak Station, would result in the current Howard Street Greyhound and Intercity Bus Station moving to the West Baltimore Avenue Amtrak station. The DNCIF project will not impact DDOT routes nor this proposed Project.

Figure 14 shows the various public transit providers in southeast Michigan and their relation to the DDOT system.

Figure 14: Public Transit Services in the DDOT Coolidge Study Area, 2021



Source: Regional Transit Authority of SE Michigan, ADVANCE 21

Bicycle and Pedestrian Travel

There are no existing bike paths or routes within the study area. Bicycle infrastructure is planned along Ward Avenue, which borders the eastern edge of the study area, as part of Detroit's Slow Streets network. The Slow Streets initiative will provide traffic calming measures to increase safety for alternative forms of transportation and is planned to be gradually phased in across the City over the next 10 years.

Pedestrian sidewalks are present on both sides of the road along Schaefer Highway, Ward Avenue and Compass Avenue.

Environmental Impacts

With the Build Alternative, all 19 routes and 143 buses that operate out of Gilbert would be moved to the Coolidge Terminal. The remainder of DDOT's route system and 145 buses would continue to be stored and maintained at Shoemaker, and Gilbert Terminal would eventually be decommissioned. Central Terminal would remain for major repairs and overhaul work.

In the second phase of the proposed Project that would accommodate 216 buses, DDOT would store and maintain them at the Coolidge Terminal, and Shoemaker would remain at 145 buses. There would be no impact to any transit schedules, as the change only affects the bus pull-out and pull-in operation. The proposed improvements would provide more balanced operations across the City. After construction is complete and Gilbert-based buses are moved to Coolidge, pull-out and pull-in times for the assigned routes would be adjusted to reflect the new terminal location. The existing sidewalk along the east side of Schaefer Highway would be rebuilt in the area where the Coolidge Terminal is located. Crosswalks in the two stop-controlled driveway locations on the site would be striped. The sidewalk would be ADA compliant. The Schaefer Highway sidewalk would connect with the pedestrian walkways that will be constructed on the Coolidge Terminal site as part of the proposed Project.

Measures to Minimize Harm

Prior to construction, the TCP described earlier would be implemented to minimize temporary impacts to traffic and pedestrians.

Pedestrian sidewalks along Schaefer Avenue adjacent to the site and across each site access drive would be maintained. Pedestrian access to the site would be provided separately from the vehicular access points and near the bus stop in front of the site. Fencing and landscaping at each of the site driveways would be designed such that drivers and pedestrians would be able to see each other approaching the intersection. Supplemental signs would be provided to warn pedestrians of the driveway and remind drivers exiting the facility to yield to pedestrians at the stop sign.

After construction is complete and Gilbert-based buses are moved to Coolidge, pull-out and pull-in times for the assigned routes would be adjusted to reflect the new terminal location at Coolidge.

4.2.2 Land Use and Zoning

This section reviews the compatibility of the proposed Project with existing and planned land uses, local planning goals and principles, and zoning regulations for the project site.

Legal/Regulatory Context and Methodology

DDOT is the transportation agency of the City of Detroit. The City of Detroit Planning Commission regulates land use planning, zoning regulations and proposed changes, and development review for the project site. DDOT conducted an analysis to determine whether the proposed Project would cause adverse land use impacts. This analysis included review of existing land use plans, zoning maps, and desktop observations of the project site to determine consistency of the proposed Project with the goals and policies presented in the City of Detroit's Master Plan of Policies (May 2021).

Existing Conditions

The proposed Project is located within a corridor of industrial uses that follows a Conrail Railroad corridor roughly parallel and west of Schaefer Highway, which curves from a north-south alignment a block west of the Project site to an east-west alignment just north of the site, parallel to Lyndon Street. This corridor of heavy and light industrial uses, including the Coolidge site, is flanked by a much larger area of predominately single-family residential uses, many of which are currently vacant and owned by the DLBA. Thirty-six (36) of the vacant DLBA-owned parcels that are adjacent to the Coolidge Terminal property would be used for the proposed Project. Although there are currently structures on some of these parcels, they are vacant. Commercial and institutional uses are located along Schaefer Highway, Grand River Avenue, and other major roads shown in Figure 15.

The existing Coolidge Terminal is contained on and defined by a single 19.65-acre parcel owned by DDOT. The zoning on this parcel is M4 Intensive Industrial District. The description of the M4 district and a list of by-right uses is provided in the *City of Detroit Zoning Ordinance, Sec. 61-10-71 to 77*. Use as an active bus terminal is consistent with the M4 zoning.

The residential blocks immediately surrounding the Coolidge Terminal that are required for the Project are zoned R1 Single Family Residential. The City of Detroit's Current Master Plan for Future General Land Use shown in Figure 16 indicates that these blocks are planned for Light Industrial uses. This includes all the parcels adjacent to the Project site on the western half-block facing Ward Avenue and all the parcels along Compass Street south to Schoolcraft Road.

Environmental Impacts

The entire Project site is consistent with the future land use plan. The residential parcels needed for the Project would require re-zoning to the M4 use. DDOT, the Detroit Building Authority (DBA) and the DLBA will comply with the City of Detroit's zoning process and will apply for the necessary zoning change. Proposed zoning changes are subject to public review prior to the Planning Commission's approval.

Under the Build Alternative, the Project would return the existing, Coolidge parcel into a fully operational bus facility with 24/7 operations. The existing vacant single-family residential lots owned by the DLBA would be rezoned and then transferred to DDOT for the Project. The Project and the rezoning of residential parcels is consistent with the future land use plan.

The Project is not expected to have impacts to existing residences or businesses during or after construction, as most construction will take place on DDOT-owned property. There may be short-term traffic delays on adjacent roadways due to construction vehicle and truck traffic, but these would be temporary. No businesses or individuals would be displaced during construction.

Measures to Avoid or Minimize Harm

The need for rezoning for the proposed Project has been presented and discussed at the two public meetings for the proposed Project and would also be presented at the proposed Project's public hearing. The necessary zoning change would be subject to public review as part of the City's zoning process. DDOT, DBA and DBLA will comply with the City's zoning process. Correspondence with the City Planning Commission is included in Appendix C.

Figure 15: Existing Land Use

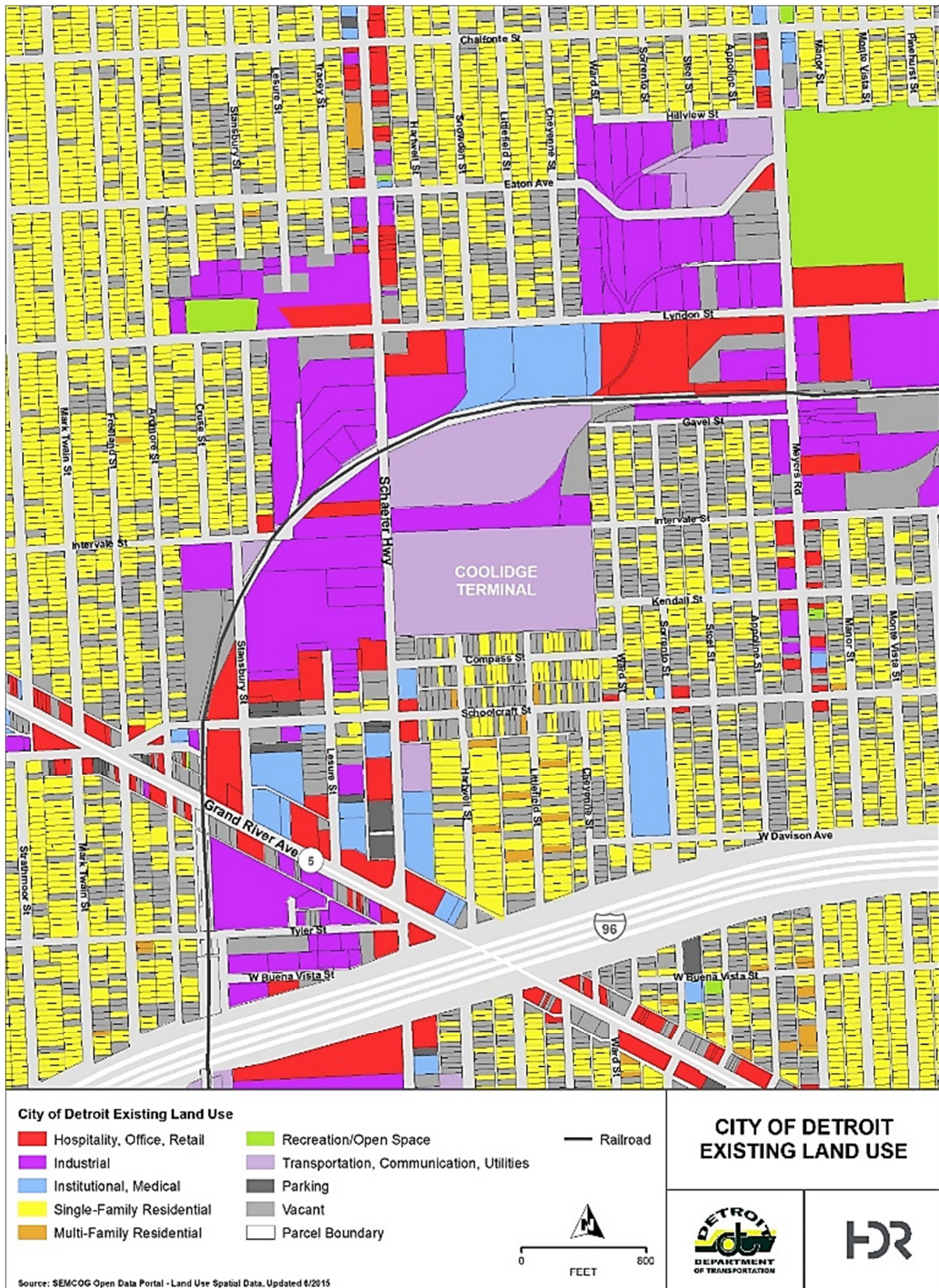


Figure 16: Future Land Use



4.2.3 Neighborhoods and Community Resources

This section discusses the proposed Project's impacts on the surrounding neighborhood, community, and businesses. The analysis considers the surrounding community character and cohesion; mobility; and community resources, such as schools, parks, and religious centers within the Study Area, which is a 0.25-mile buffer around the project site.

Legal/Regulatory Context and Methodology

Following the U.S. DOT Community Impact Assessment Manual (U.S. DOT 1996), the analysis considers the following types of impacts of the proposed Project:

- Community Character and Cohesion – Impacts from commercial and residential displacements and changes in land use, visual/aesthetics, noise levels, and population/demographics. Community character includes attributes and features that make the community unique. Community cohesion is a quality of a geographic area where segmentation of the area would reduce its desirability to current and future residents.
- Mobility – Overall community impacts of changes in transportation options, station access, travel patterns, parking, physical barriers, and access for emergency service providers.
- Community Resources – Impacts on key facilities in the Study Area that play an important role in shaping and defining the community, such as landmarks, parks, community centers, and other places that serve as focal points or provide community services.

The community and business impact analysis involves creating demographic and community profiles and identifying key community resources within the Study Area (previously defined as a 0.25-mile buffer around the project site). Key community resources include public facilities that fulfill a social function or provide services to a community, such as: schools, libraries, religious centers, emergency services providers, and recreational areas. Private facilities that provide services to a community, such as: private schools, hospitals, and nursing homes, may also be key community resources.

Impacts to businesses are evaluated by identifying commercial areas, existing multi-modal access, potential displacements, and potential impacts during and after construction. Mitigation measures are proposed to offset identified impacts, with an emphasis on community and transit-supportive solutions to address permanent and temporary construction impacts.

Existing Conditions

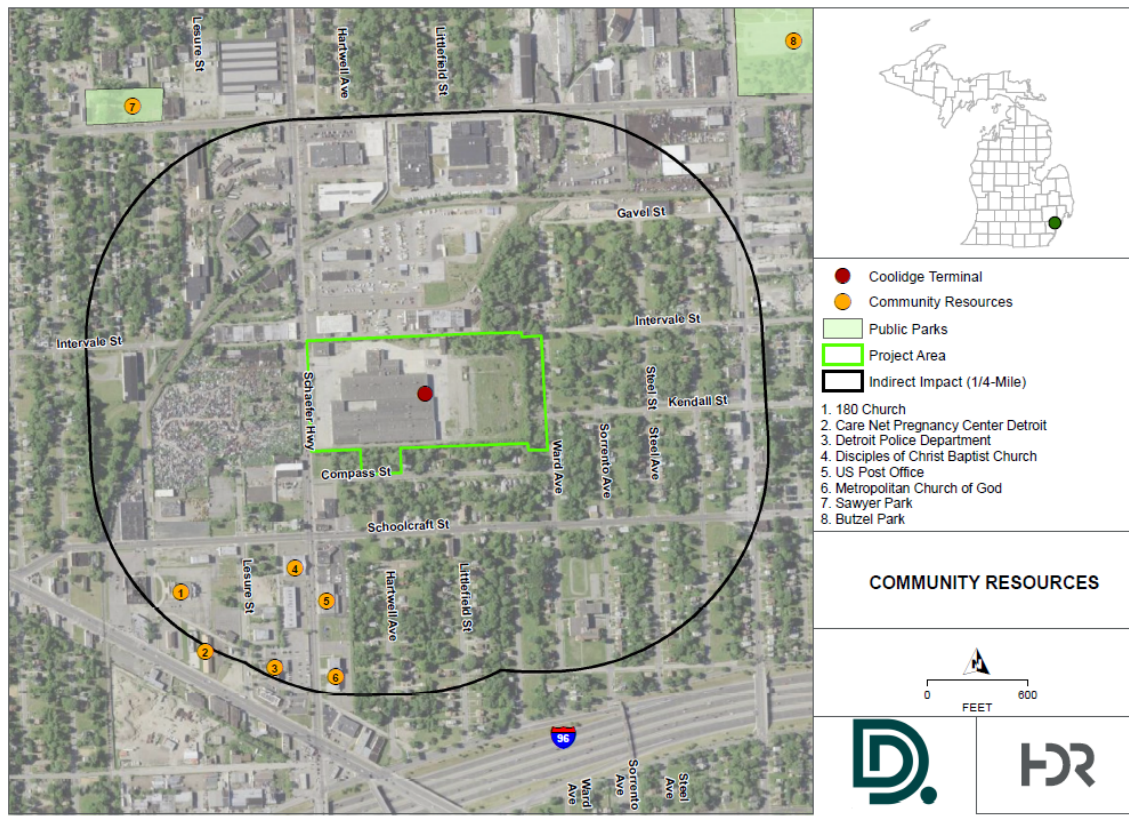
Table 4 provides a community profile of the area within a 0.25-mile radius of the Project site, the City of Detroit, and Wayne County. Community resources are listed and shown in Figure 17. All are located southwest of the Coolidge Terminal, near the intersection of Schaefer Highway and Schoolcraft Street. There are two parks located just outside the Study Area, and there are no schools.

Table 4: Community Profile for Study Area, City of Detroit, and Wayne County

Parameter	Wayne County	City of Detroit	Block Groups within 0.25 Mile of project site
Population (number of persons)	1,757,299	674,841	953
Households (number of households)	682,282	263,688	276
Employment Age 16+ (%) (employment/population ratio)	59	54	54
Minority (%)	50	88	98
Low Income (%)	28	42	44
Elderly (%)	15	14	15
Owner-Occupied Households (%)	62	47	44
Median Home Value (\$)	134,300	58,900	46,500
Average Household Size (number of persons)	2.51	2.46	2.63
Median Gross Rent per Month (\$)	901	866	824
Transit Dependent (%)	3	8	11
Average Commute Time (minutes)	26	28	31

Sources: U.S. Census Bureau 2019 ACS 1-Year Estimates

Figure 17: Community Resources



Environmental Impacts

There would be no commercial or residential displacements as part of the Build Alternative. The Build Alternative would not divide an existing community or interrupt community cohesion; rather, it would improve the condition of the existing Coolidge Terminal parcel, which contains several vacant buildings in varying states of disrepair, with new and improved buildings and landscaping.

The proposed Project does not contain any changes that would interfere with residents' ability to interact, participate in local organizations, or access and use public facilities. The proposed Project would be constructed on existing property owned by DDOT and parcels held by the DLBA and would not result in difficulty accessing and using public facilities.

The proposed Coolidge Terminal buildings would be compatible with the existing environment because they are of a similar scale to the existing structures. The new visual element would not substantially change the character of the community. The buildings would be designed to be visually compatible with the surrounding community.

There would be no change in access to businesses or community facilities within the Study Area. All traffic movements at the various traffic study intersections are expected to continue to operate at an acceptable LOS except at one exit from the project site itself, which would be mitigated through the use of traffic control.

Pedestrian sidewalks along Schaefer Avenue adjacent to the project site and across each site access drive would be maintained. Pedestrian access to the project site would be provided separately from the vehicular access points and near the bus stop in front of the site (west side). Fencing and landscaping at each of the site driveways would be designed such that drivers and pedestrians would be able to see each other approaching the intersection. Supplemental signs would be provided to warn pedestrians of the driveway and remind drivers exiting the facility to yield to pedestrians at the stop sign.

Noise from the 24-hour operations at the project site would primarily be confined to the buildings themselves and are not expected to reach thresholds that would cause harm, even during nighttime hours. Visual impacts are not expected as the proposed Project is designed with perimeter barriers, fencing, and landscaping consistent with applicable zoning, and lighting would be directed downward toward the site.

Construction activities associated with the Build Alternative could result in temporary impacts on the surrounding neighborhoods, communities, and businesses, including intermittent noise, vibration, dust, utility disruptions, detours, altered access to some businesses, visual and aesthetic changes from construction, construction vehicle emissions, and increased truck traffic.

Temporary detours, road closures, or traffic delays may occur but would have minimal impact on community resources because alternate routes would be provided in the immediate area to ensure access during construction.

Measures to Minimize Harm

Before construction, DDOT would communicate with neighborhoods and businesses to prepare for construction. In addition to mitigation outlined in other sections and obtaining and complying with necessary permits and approvals, DDOT would manage construction stages with the

contractor as required to maintain access and provide alternate access to businesses and residences, if necessary. During construction, the Project contractor would implement best management practices (BMPs) including the U.S. Environmental Protection Agency (USEPA) construction emissions control checklist as well as:

- maintenance of traffic and access to businesses;
- erosion and dust control;
- maintenance of equipment; and
- noise and vibration monitoring.

DDOT would work with the City of Detroit and emergency response providers to ensure safe mobility would be maintained within and near the project site, including reasonable traffic plans, safe pedestrian-friendly crossings, and accessibility to adjacent businesses.

4.2.4 Acquisitions and Relocations

This section describes the expansion needed for the proposed Project, including the transfer of 36 adjacent parcels along Ward Street and Compass Avenue from the DLBA.

Legal/Regulatory Context and Methodology

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (“Uniform Act,” 42 USC § 4601, et seq.), mandates that relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced as a direct result of any project undertaken by a federal agency or with federal financial assistance. An impact is considered adverse under NEPA if housing, people, and businesses are displaced as a direct cause of the proposed Project.

Existing Conditions

The proposed Project would primarily be located on the existing Coolidge Terminal site owned by DDOT at 14044 Schaefer Highway. Thirty-six adjacent properties to the east and south are required to accommodate the proposed Project needs shown in Figure 4 in Section 1.2. These properties are currently vacant (although some do contain vacant structures) and owned by the DLBA, who has agreed to transfer the parcels to DDOT. No displacement of legal owners or tenants would occur.

The proposed Project also requires that portions of three streets that currently dead-end into the Coolidge Terminal site be vacated: Intervale Street, Kendall Avenue, and Hartwell Avenue. There are no traffic or pedestrian movements on the portions that would be vacated. All are owned by the City of Detroit.

Environmental Impacts

Transfer of the DLBA-owned properties to DDOT would require approval by City Council.

Regarding the street vacations, no traffic or pedestrian impacts are expected since the streets dead-end into the Terminal today and do not carry traffic. DDOT has consulted with the Department of Public Works and would vacate the specified streets in accordance with the Department’s requirements.

Measures to Avoid or Minimize Harm

There would be no adverse impacts related to land acquisition as the parcels needed for the proposed Project are publicly owned and vacant; therefore, no avoidance, minimization, or mitigation measures are required. Since there is no vehicle or pedestrian traffic on the streets to be vacated, and they dead-end into the Terminal today, no avoidance, minimization or mitigation measures are needed.

4.2.5 Economics

This section provides an overview of potential economic effects from the replacement of the Coolidge Terminal with an all new facility, as proposed in the Build Alternative.

Legal/Regulatory Context and Methodology

FTA's draft *Guidelines for Preparing Environmental Assessments* (UMTA C 5620.1) and Environmental Resources Guidance identifies an economic development impact as one that could occur if the proposed Project causes:

- Direct or indirect taxation changes, or
- Substantial displacements of businesses and individuals, defined in this analysis as those of a magnitude that would preclude relocation in the immediate area because of a lack of available real estate, disruption of business activities, or impacts that would influence regional construction costs.

DDOT reviewed the economic impact of the proposed Project from a qualitative perspective. An assessment has been prepared which focuses on the energy efficiencies gained by implementing the proposed Project.

Existing Conditions

The proposed Project would be constructed on existing DDOT property and parcels currently owned by the DLBA. The proposed Project parcels are all currently tax-exempt.

As described in the Introduction, the Gilbert Terminal, where the west side buses are currently stored and maintained, was built in 1922 and last renovated in 1947. The Facility Conditions Assessment conducted as part of the facilities master planning effort in 2021 found that in general, the Gilbert Terminal is not energy efficient. DDOT has maintained Gilbert Terminal to the extent possible given budget constraints, but it has come to the end of its useful life and to meet today's energy and building standards, the entire facility would need to be rebuilt or undergo a major renovation. However, doing so would still not solve DDOT's programmatic needs for bus operations (space needs, clearances, circulation, dispatching, employee parking, etc.). Nevertheless, DDOT has continued and will continue to maintain it due to limited availability elsewhere, until the Coolidge Terminal is replaced. The Gilbert Terminal building components are rated as poor or marginal. The heating and ventilation are over 30 years old, at the end of its useful life, and would need to be completely replaced. The lighting throughout the facility is dated and not energy efficient and also needs to be completely replaced. Most of the equipment observed was outdated and in worn condition. The building retains the original single pane windows, many bricks were missing and at least 20 percent of the building needed

tuckpointing. DDOT estimates that it would cost approximately \$50 million over a ten-year period to repair or replace these inefficient and deteriorating systems and components⁶.

DDOT is evaluating the Electric Vehicle (EV) pilot program for success rates before the fleet transitions. The Gilbert Terminal cannot currently maintain or service electric buses, so all must be stored and maintained at the Shoemaker Terminal. Electric buses are typically less expensive to maintain than traditional fossil fueled buses. As DDOT's electric bus fleet is expected to grow, the ability to reduce future fossil fuel costs as well as maintenance costs would be lost, since expansion at Gilbert Terminal is cost prohibitive.

The Coolidge Terminal is currently a vacant site and therefore, no activity is taking place that would generate electricity or energy.

Environmental Impacts

The proposed Project would not cause an economic development impact based on the guidance above. The proposed Project would not generate revenue for DDOT, and DDOT, as a public agency and department of the City of Detroit does not pay tax on its properties.

The proposed Project would not displace any businesses nor individuals. Further, the proposed Project is not the type that would induce or attract new development.

Generally speaking, an all-new, energy efficient terminal on the existing Coolidge site could have economic benefits to DDOT's energy costs. Several elements have been included in the design for maximum energy efficiency.

Building Envelope

A building envelope is the separation between the exterior of a building and its internal environment. Current energy codes require increased envelope performance requirements, which makes buildings more insulative. This would result in less energy loss through the building envelope at the new Coolidge Terminal.

Building Mechanical Systems

The proposed Project would include various HVAC elements that would increase energy efficiency.

- In-Floor Radiant Heating System – The Fleet Maintenance Building maintenance bay and storage areas would be heated by an in-floor radiant heating system. This system would provide increased efficiency compared to heating the space with a traditional make-up air or air handling unit system. Where an air handling unit must heat the entire space volume with air mixing, a radiant floor system primarily heats the occupied zone (6 to 8 feet above finished floor), and natural thermal buoyancy results in heat rising to the upper volume. Make-up air units would still be utilized in the spaces to provide code-required ventilation, but air would only need to be heated slightly above neutral space temperature.

⁶ 2021 dollars without escalation

- Heat Recovery Sections in Make-up Air Units – 100 percent outdoor air make-up air units would include heat recovery devices (fixed plate or heat wheel), which would allow exhaust air to partially heat the incoming outdoor air prior to entering the building.
- Condensing Boilers – The Fleet Maintenance Building would utilize a condensing boiler system, which allows for 10 to 15 percent greater efficiency on average compared to non-condensing boilers.
- HVAC Controls – HVAC controls would include temperature setback, which would allow the space heating and cooling temperature to fall or rise above normal setpoints during unoccupied hours.

Plumbing Systems

- Rainwater harvesting – Rainwater would be collected and stored from the roofs of the Bus Storage and Coach Services structure. Water would then be treated for use in the vehicle wash systems, reducing the amount of fresh water required.
- Low-flow plumbing fixtures – water closets, urinals, lavatory sinks, and showers would all be of the low-flow type to conserve potable water use.

Lighting Systems

The facility would utilize light-emitting diode (LED) source lighting throughout. LED lighting is the most energy efficient light source currently available. All LED lamps require a “driver” for their operation. LED drivers are provided with dimming capabilities. This opens many control options to further enhance the energy efficiency of the LED lamps. In addition to the use of lighting control panels/light schedules, occupancy sensors, and vacancy sensors, all rooms would be designed with dimmers for the LED luminaires. The dimming capability allows the LED light source to easily tie into day light harvesting systems. The use of occupancy sensors in exterior parking and site lighting systems allows for a reduction in the lighting levels when no motion is detected. In this scenario the lights would operate at full brightness, after a predetermined time of no motion, the lights would dim to 25 percent of their design lighting levels. Upon detection of motion, the lights would return to their design levels.

Alternate Fuel Bus Infrastructure

DDOT’s intent is to transition to a zero-emissions program. This would reduce the carbon footprint from vehicle emissions, with a greater reduction as the number of zero emission buses in the fleet grows. Additionally, electric bus or other alternative fuel infrastructure would save money by reducing fossil fuel costs as well as maintenance costs, as they are typically less expensive to maintain than traditional fossil fueled buses. DDOT is currently conducting a feasibility and appropriateness study of battery electric buses, but it has not yet determined which fuel source is best for its entire fleet.

Measures to Avoid or Minimize Harm

Incorporation of energy-efficient elements into the proposed Project would reduce DDOT’s daily operational energy costs, resulting in a positive economic benefit.

4.2.6 Visual Resources

This section discusses the physical improvements of the proposed Project that would result in changes to the surrounding visual environment within the project site.

Legal/Regulatory Context and Methodology

NEPA requires federal agencies to examine the impacts of federal actions on visual resources. In addition, Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (54 USC 300101 et seq.) and its implementing regulations, 36 CFR Part 800 requires that federal agencies take into consideration the effects of their undertakings on historic properties. Section 4(f) of the U.S. Department of Transportation Act of 1966 also requires that visual impacts be considered to protect public and private historic sites, public parks, recreational areas and wildlife and waterfowl refuges (49 U.S.C. § 303 and 23 CFR Part 774).

For the purposes of this analysis, DDOT assessed visual and aesthetic impacts first by identifying the project site's visual resources, including sensitive views, categories of potential viewers of both non-Project-related existing and potential future visual resources, and any Project-related changes to important visual features.

Visual resources are prominent features such as parks and open spaces; landmark structures or districts; and natural resources such as vegetation, wetlands, and other natural features within the proposed project site. Such resources define the overall visual quality of an area and the context for determining potential visual impacts of a proposed project. The evaluation focuses on whether and how the proposed project site's visual quality would be altered with the proposed Project and whether any anticipated change would be generally positive or would degrade the existing essential visual character or context of the surrounding community areas.

NEPA does not identify thresholds for visual impacts. For the purposes of this analysis, an impact would be adverse if it resulted in one of more of the following:

- A substantial change in the community's visual character that would degrade the existing visual character or quality of a site and its surroundings;
- A major incompatibility with the context or character of the area (that is, a project feature would contrast strongly with its surroundings);
- Incompatibility with community goals; or
- Extensive remodeling of buildings or their surrounding area that are not compatible with the character of the area.

Information for this evaluation was drawn from aerial photographs, Google Earth, photographs of the proposed project site, field observation, and cultural resource reports for this Project. The visual impacts of any Project-related changes were compared to the existing terrain and viewshed to determine if mitigation should be proposed. Mitigation measures are identified where it is determined that adverse visual impacts would be likely.

Existing Conditions

The site itself, and the buildings on it, are in a state of blight and disrepair. Although there is a visual barrier (a wall) on the sides that abut residential parcels, the wall itself is in disrepair and the site is visible from Schaefer Highway with approximately 640 feet of frontage. Schaefer

Highway itself is visually unattractive in this area, as it is lined by numerous utility poles with overhead wires. A large automobile scrapyards and used parts operation sits across the street (west) from the site, behind corrugated sheet metal walls.

The O.H. Frisbie Moving & Storage building is located at 14225 Schaefer Highway just to the south of the Coolidge site and across the street. As part of Section 106 consultation for this Project, it was determined eligible for listing in the National Register of Historic Places (NHRP) under Criteria A and B for local significance in the areas of commerce and industry. The Coolidge property itself is also eligible for the NHRP. No historic districts or potential historic districts have been identified. See Section 4.2.7, Cultural Resources, for more information.

The Happy Homes subdivision is located adjacent to the project site on the east and south sides. The neighborhood is undergoing transition, with a substantial portion of the homes sitting vacant. Many of the properties in this area, including those owned by the DLBA that will be transferred for this proposed Project, are vacant and extant houses show signs of neglect, such as disrepair and overgrown vegetation. The City's plans call for the areas immediately adjacent to Coolidge Terminal to become light industrial.

Environmental Impacts

The Coolidge Replacement Terminal would be visible from Schaefer Highway with an improved frontage shown in Figure 18. Though the new frontage would constitute a high visual change (on a scale of low, medium high) to O.H. Frisbee Moving and Storage building across the street it does not rise to the level of adverse.

Figure 18: View of Proposed Coolidge Terminal, Looking East



New structures on the site are unlikely to present any adverse visual impacts to the surrounding properties on Schaefer Highway or the traveling public. It is expected that the Project would improve the visual quality of the area through removal of several vacant buildings in varying states of disrepair and by introducing a new improved facility that is consistent with future land use plans.

The Build Alternative may block or alter views to the west and north from adjacent viewers to the east and south. The visual changes would be most perceivable to the residents of Happy Homes subdivision, as the location is directly adjacent to the project site. Although the proposed Project is replacement and improvement of existing transit infrastructure, the overall visual character and atmosphere of the project site would be a high contrast change but an improvement due to the proposed landscaping improvements.

The structures would be constructed according to the City of Detroit zoning standards and would include new visual barriers, fencing and landscaping around the Coolidge to minimize impacts to surrounding residential properties. These barriers and landscaping would minimize the effects of bus and automobile lights, and facility lights would be designed to direct light towards the facility and site. The proposed Project design would comply with the applicable local ordinances regarding nighttime lighting, and after a predetermined time of no motion, the lights would dim to 25 percent of their design lighting levels to conserve energy.

Construction of the proposed Project would result in temporary impacts on the surrounding visual environment because of construction work zones and equipment. Construction would primarily take place within the existing Coolidge Terminal site and on property acquired for the proposed Project. Construction would be for a limited duration.

Measures to Avoid or Minimize Harm

The proposed Project would not result in permanent adverse visual impacts to the visual character or aesthetics of the area; therefore, no avoidance, minimization, or mitigation measures would be required.

4.2.7 Cultural Resources

This section provides an overview of the potential cultural resource effects of the Coolidge Terminal Replacement as proposed in the Build Alternative. More information can be found in the *Architectural Resources Investigation for the Coolidge Terminal Replacement Project* (HDR 2022) in Appendix D.

Legal/Regulatory Context and Methodology

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (54 USC § 306108 et seq.), and its implementing regulations at 36 CFR Part 800, requires federal agencies to consider the effects of federal undertakings on historic properties, those resources listed in or eligible for listing in the NRHP. As the lead federal agency for the proposed Project, the FTA has determined that the proposed Project is a federal undertaking as defined in 36 CFR Part § 800.16(y), and that it is a type of activity that has the potential to cause effects on historic properties.

Cultural resource work for this proposed Project meets the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (Standards, 48 FR 44716), and guidelines established by Michigan State Historic Preservation Office (SHPO) in its Michigan Above-Ground Survey Manual, as revised in 2018 (Kolokithas and Tuinstra 2018).

Area of Potential Effects

The first step in assessing historic properties potentially affected by a project is to delineate the Area of Potential Effect (APE). The APE is defined by 36 CFR §800.16(d) as the geographic area or areas within which a project may directly or indirectly cause alterations in the character or use of historic properties.

For this proposed Project, FTA determined that the APE was defined as the Coolidge Terminal property itself (14404 Schaefer Highway) and a single row of adjacent parcels on three sides of the property – north, south, and west, and two rows of adjacent parcels on the east shown in Figure 19. The Michigan SHPO concurred with the APE on February 15, 2022.

An intensive-level survey to identify and evaluate NRHP eligibility of architectural resources (buildings, structures, districts, and objects) within the APE that are 45 years old or older (constructed in 1975 or earlier) was conducted in June 2020. Forty-five years was used to account for Project construction and the facility becoming operational in 2025. Thirty properties were surveyed from the public right-of-way by Secretary of the Interior-qualified architectural historians.

To identify historic-age properties within the APE, DDOT's consultant reviewed a variety of resources including Wayne County online assessor data; historic aerial imagery; and historic USGS topographic maps. Research was conducted primarily using digitized resources such as local newspapers, histories, maps, and aerial photography. Fieldwork confirmed the presence or absence of extant buildings and structures.

Cultural resources—including buildings, structures, objects, sites, and districts—were evaluated for NRHP eligibility using the NRHP Criteria for Evaluation as defined in 36 CFR § 60.4. To be listed in, or considered eligible for, the NRHP, a cultural resource must typically be 50 years or older and meet at least one of the four following criteria:

1. The resource is associated with events that have made a significant contribution to the broad pattern of history (Criterion A);
2. The resource is associated with the lives of people significant in the past (Criterion B);
3. The resource embodies distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic value; or represents a significant and distinguishable entity whose components may lack individual distinction (Criterion C);
4. The resource has yielded, or may be likely to yield, information important in prehistory or history (Criterion D).

In addition to meeting at least one of the above criteria, a cultural resource must also retain sufficient integrity to convey the significance of the resource. Integrity is composed of location, design, setting, materials, workmanship, feeling, and association. Integrity is defined as the authenticity of a resource's historic identity, as evidenced by the survival of physical characteristics it possessed in the past and its capacity to convey information about a culture or group of people, a historic pattern, or a specific type of architectural or engineering design or technology. Location refers to the place where an event occurred, or a resource was originally built. Design considers such elements as plan, form, and style of a resource. Setting is the physical environment of the resource. Materials refer to the physical elements used to construct

the resource. Workmanship refers to the craftsmanship of the creators of a resource. Feeling is the ability of the resource to convey its historic time and place. Association refers to the link between the resource and a historically significant event or person.

Cultural resources meeting these standards (age, significance, and integrity) are termed “historic properties” under the NHPA. Sites, buildings, structures, or objects that are not considered individually significant may be considered eligible for listing in the NRHP as part of a historic district. According to the NRHP, a historic district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects that are historically or aesthetically united by plan or physical development (36 CFR § 60.3(d)).

Figure 19: Area of Potential Effects



Existing Conditions

Identification of Historic Properties

Twenty-three of the 30 surveyed resources in the Project APE were residential in type; many of these residential properties are abandoned. Six of the surveyed properties were commercial-industrial, including buildings used for moving/storage purposes, auto services, and scrap metal. The Coolidge Terminal property was the only transportation-related resource in the APE. All 30 of the surveyed resources were constructed in the twentieth century, ranging in date from c. 1925 to c. 1980.

Of the 30 properties, 2 are recommended eligible for listing in the NRHP, and the remaining 28 are recommended not eligible. No historic district potential was identified. The 2 eligible properties are described below. The complete survey inventory of all 30 properties is provided in Appendix D.

O.H. Frisbie Moving & Storage Company

The property at 14225 Schaefer Highway comprises a single warehouse and office building that is owned and operated by O.H. Frisbie Moving & Storage Company. The commercial-industrial building was constructed in 1951 and is shown in Figure 20.

Figure 20: O.H. Frisbie Moving and Storage Building



The rectangular-plan, single-story warehouse-office building is built in the Art Deco style. The building is significant under Criteria A and B at the local level in the areas of commerce and industry, with a period of significance spanning from 1951 to 1972, beginning with the year of its construction and ending in the year that it became the headquarters site of the company. The building at 14225 Schaefer Highway is recommended as *eligible for the NRHP* under Criterion A for its contribution to the Detroit area's commerce and industry and under Criterion B for its association with Mr. O.H. Frisbie, a Detroit native who launched the successful Detroit-based moving company using innovative techniques and later founded Atlas Van Lines.

Coolidge Terminal

The Coolidge Terminal property is recommended *eligible for the NRHP* for local significance under Criterion A for its role in the history of Detroit’s public transportation. The property has a period of significance spanning from 1948 to 1960, to encompass original construction of the terminal complex and construction of the last historic-age resource on the property, the Dispatch House. Developed on the site of the Detroit Street Railway (DSR)’s original Coolidge streetcar barn, the complex constituted a reconstruction of the original 1928 facilities.

All the buildings on the site, except for the communications tower and associated sheds and the metal trailer associated with the Fare Box House, are contributing resources to the NRHP-eligible property. Figure 21 provides a map of the Coolidge Terminal Property and Figure 22 shows the existing Administration Building.

Figure 21: Coolidge Terminal Contributing and Non-Contributing Buildings

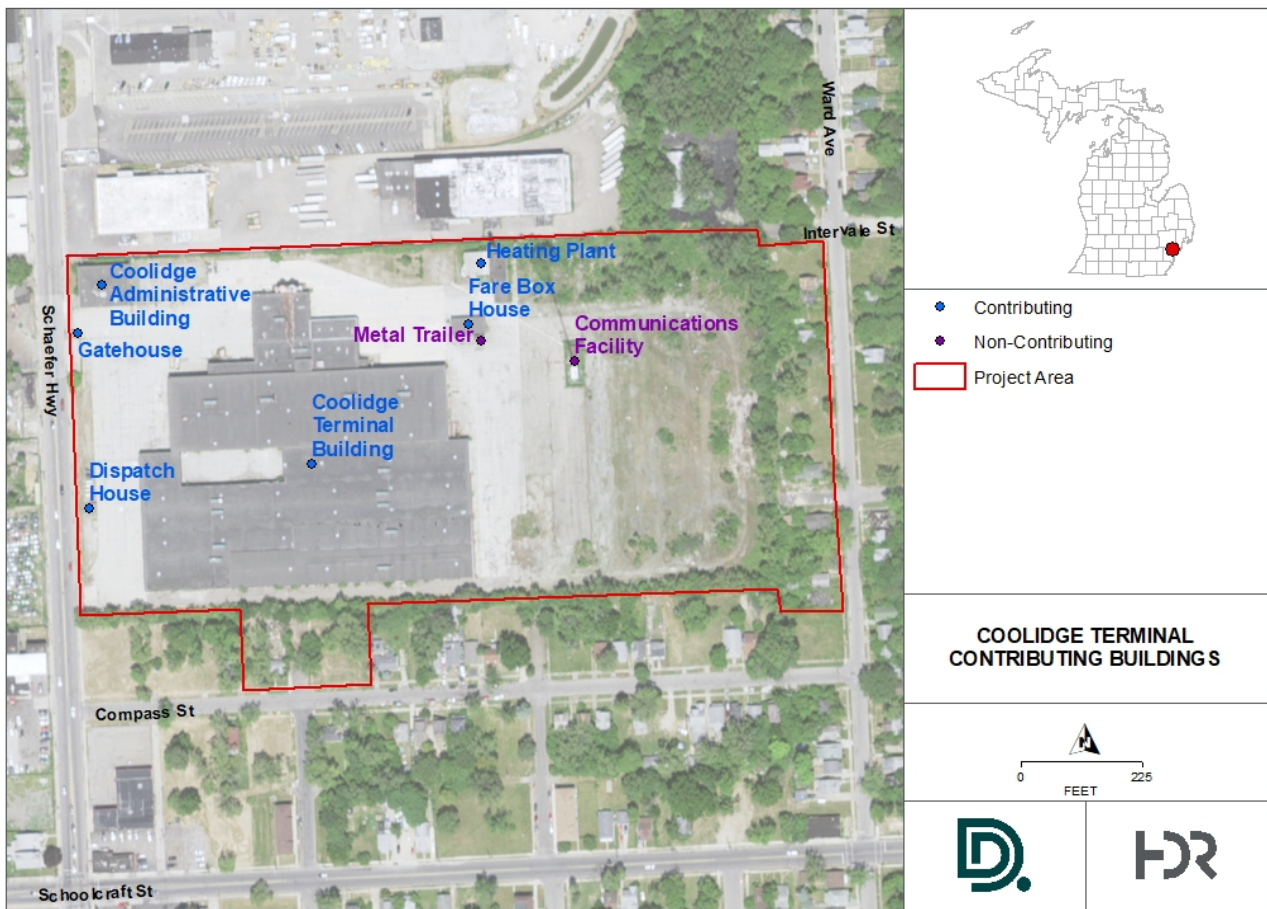


Figure 22: Coolidge Terminal Administration Building



Environmental Impacts

The setting of the historic Coolidge Terminal property would remain commercial-industrial in character, with public transportation characterizing use of the reconstructed Coolidge Terminal across the street. The proposed Project would have no effect on character-defining features of the O.H. Frisbie building that include its historic association, form, and architectural style. As such, the proposed Project would have no direct impact on the property, and minimal visual impact. The proposed Project effects generally would be limited to temporary noise, dust, and mechanical activity and traffic associated with demolition and construction. All these effects would be confined to the duration of the proposed Project and would have no lasting or direct effect on the property at 14225 Schaeffer Highway. It is therefore anticipated that the proposed Project would have *No Adverse Effect* on the O.H. Frisbie Moving & Storage Co. building.

The proposed Project would entail complete demolition of all extant buildings on the Coolidge Terminal property. Per 36 CFR Part 800.5 (2)(i), physical destruction of a historic property constitutes an adverse effect. Therefore, the proposed Project would have an *Adverse Effect* on the Coolidge Terminal.

Section 106 Consultation

FTA initiated Section 106 consultation with the Michigan SHPO on January 26, 2022. Pursuant to 36 CFR § 800.2(c)(2)(ii), upon initiation of the consultation process for the proposed Project, FTA notified the following Tribes and invited their participation in consultation for the proposed Project: Forest County Potawatomi Community of Wisconsin; Hannahville Indian Community, Michigan; Lac du Flambeau Band of Lake Superior Chippewa Indians of the Lac du Flambeau Reservation of Wisconsin; Little Traverse Bay Bands of Odawa Indians, Michigan; Menominee Indian Tribe of Wisconsin; Miami Tribe of Oklahoma; Pokagon Band of Potawatomi Indians, Michigan and Indiana; Sault Ste. Marie Tribe of Chippewa Indians, Michigan; and Seneca-Cayuga Nation.

FTA and DDOT identified 19 additional individuals, organizations, and agencies to participate as consulting parties in the Section 106 process for the proposed Project pursuant to 36 CFR § 800.2(c). The SHPO concurred with FTA's APE determination on February 15, 2022, and consulting parties (CPs) and tribal responses were received on February 1, February 3, and February 28, 2022. In addition to the Michigan SHPO, the following agencies and tribes agreed to participate as CPs: DDOT, the Michigan Department of Transportation, the Miami Tribe of Oklahoma, and the Pokagon Band of Potawatomi Indians, Michigan, and Indiana.

FTA provided the *Architectural Resources Survey for Coolidge Replacement Project* (HDR 2022) to the Michigan SHPO, CPs, and Tribes on May 24, 2022. On June 21, 2022, the Michigan SHPO concurred with FTA's determination that the proposed undertaking will have an adverse effect on the Coolidge Terminal Complex which is eligible for listing in the NRHP.

A subsequent virtual consulting parties meeting was held on June 22, 2022, to discuss the report and findings, and answer any questions that the SHPO or CPs might have. Correspondence with the SHPO and CPs, including the minutes of this meeting, can be found in Appendix D. No other comments from CPs were received.

In accordance with 36 CFR § 800.6(a)(1), on July 21, 2022, FTA notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination and invited their participation in consultation; ACHP declined to participate on July 29, 2022.

Measures to Avoid or Minimize Harm

FTA and SHPO have developed a draft Memorandum of Agreement (MOA) with DDOT as an invited signatory, to mitigate the adverse effect of demolishing the Coolidge Terminal (see correspondence in Appendix D). Per the draft MOA, FTA shall ensure that the following treatment measures are carried out by DDOT:

A. Prior to any alterations to or demolition of any individual resource within the NRHP-eligible Coolidge Terminal, the DDOT shall hire a photographer to complete large-format photography in support of the Historic American Building Survey (HABS) Documentation Level II for the Coolidge Terminal. Pursuant to 36 C.F.R. Part 61 (the "Standards"), the DDOT shall hire a Secretary of the Interior (SOI)-qualified professional in history or architectural history to complete the HABS documentation. This documentation will adhere to the standards set forth in the *Historic American Buildings Survey Guidelines for Historical Reports*. The DDOT shall provide the FTA with a draft copy of the documentation for its review and comment. Once any comments provided by the FTA are addressed, FTA will submit the documentation to SHPO for their review and comment. The SHPO shall have 30 calendar days to review and comment on the draft HABS documentation. The DDOT and its SOI-qualified professional shall address the SHPO's comments and finalize the documentation for the submittal of one paper copy and one electronic copy to the SHPO and the Detroit Public Library. The DDOT will coordinate submittal of the final documentation with the FTA. Electronic copies will be provided to the consulting parties at their request.

B. The DDOT shall prepare an interpretive sign that includes text, photographs, and/or plans focusing on the history and historical significance of the Coolidge Terminal. The interpretive sign will be designed for display adjacent to the Coolidge Terminal on the fence facing Schaefer Highway near the existing bus shelter. Required maintenance in the vicinity of the interpretive sign will be performed by the DDOT as part of their existing groundskeeping services at the Coolidge Terminal and may include general landscaping activities (e.g. mowing grass) and snow removal to maintain the interpretive sign's visibility. The interpretive sign shall be designed in consultation with an SOI-qualified professional who meets the Standards and who shall assess the content and presentation to ensure that the Coolidge Terminal's significant historic associations are incorporated. The DDOT shall provide the FTA with the content and plan for the interpretive sign for its review and comment. Once comments provided by the FTA are addressed, FTA will submit the content and plan for the interpretive sign to SHPO for a 30 calendar-day review period prior to finalization. The DDOT and its SOI-qualified professional shall address and incorporate the comments from the SHPO into a final version prior to installation of the interpretive sign.

C. The DDOT shall prepare a 508-compliant webpage or an ArcGIS Story Map on the history and significance of the Coolidge Terminal and its role in Detroit's transit history. The webpage or ArcGIS Story Map will be hosted on the DDOT's public website. The webpage or ArcGIS Story Map will include interactive images, history and other materials related to the Coolidge Terminal. The content of the webpage or ArcGIS Story Map shall be developed in consultation with an SOI-qualified professional who meets the Standards and who shall ensure that the Coolidge Terminal's significant historic associations are incorporated. The DDOT shall provide a draft version of the content and plan to FTA for its review and comment. Once comments from the FTA are addressed, the FTA will submit the draft content and plan to the SHPO who will have 30 calendar days for its review and comments. The DDOT and its SOI-qualified professional shall address and incorporate the comments from the SHPO prior to publication of the webpage or ArcGIS Story Map.

Additionally, each year on July 1 following the date of the execution of the MOA until it expires or is terminated, whichever comes first, DDOT will provide the FTA and the SHPO with a report detailing the work undertaken throughout the previous year pursuant to the stipulations of this MOA. The report will include a description of tasks undertaken relevant to stipulations within this MOA, scheduling changes, problems encountered, and/or any disputes regarding implementation of these stipulated measures.

4.2.8 Environmental Justice

This section includes a discussion of applicable federal Environmental Justice (EJ) regulations and guidelines, describes the methods used in defining EJ populations, and discusses approaches for outreach to EJ populations. This section summarizes an analysis of EJ populations within the Study Area, defined as within a 0.25-mile radius of the project site, to determine if the proposed Project would cause potential disproportionately high and adverse effects on EJ populations, and a discussion of how such disproportionate effects may be minimized or mitigated.

Legal/Regulatory Context and Methodology

The analyses presented in this section were prepared in compliance with the Presidential Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994); the U.S. Department of Transportation's (U.S.DOT) *Order to Address Environmental Justice in Minority Populations and Low-Income Populations* [U.S.DOT Order 5610.2(a), May 2, 2012]; FTA's Circular FTA C4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration Recipients* (FTA 2012); EO 13166, *Improving Access to Services for Persons with Limited English Proficiency* (August 11, 2000), and EO 13985, *Racial Equity and Support for Underserved Communities Through the Federal Government* (January 20, 2021).

As outlined in FTA Circular 4703.1, U.S. DOT and FTA are required to make EJ part of their mission by identifying and addressing disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations to the greatest extent practicable and permitted by law. EO 12898 seeks the "fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies" (U.S. Environmental Protection Agency [EPA] 2015).

Meaningful involvement means that: 1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; 2) the public's contribution can influence the regulatory agency's decision; 3) the concerns of all participants involved will be considered in the decision-making process; and 4) the decision makers seek out and facilitate the involvement of those potentially affected.

The framework for the EJ evaluation incorporated in this EA is based on FTA C4703.1, described above, which outlines a methodology that addresses EO 12898 including both a robust public participation process and an analytical process with three basic steps, as described below, and as referenced in Appendix H:

1. Determine whether there are EJ populations potentially affected by the proposed Project,
2. If EJ populations are present, consider the potential effects of the proposed Project on the EJ population, including any disproportionately high and adverse effects, and
3. Determine whether any adverse effects could be avoided, minimized, or mitigated.

The term "minority" and "low-income" are defined by FTA Circular 4703.1. "Minority" includes persons who are American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, and Native Hawaiian and other Pacific Islander. Guidance from the U.S. Environmental Protection Agency indicates that EJ populations may be present when the minority population in the defined study area is greater than 50 percent or is meaningfully greater than the minority population percentage in the general population. "Low-income" populations are defined as household incomes at or below the Department of Health and Human Services (DHHS) poverty guidelines. The 2022 DHHS poverty guidelines for a family of four is \$27,180 per year.

U.S. Census ACS census tract data was also used to identify the percentage of disabled and/or elderly individuals within the Study Area. A desktop review of the Study Area was conducted to identify assisted living and senior living communities.

The analysis for both temporary construction and permanent impacts considers direct impacts and indirect or cumulative impacts on EJ populations based on the following factors:

- Direct impacts would be permanent, resulting from implementation of the proposed Project, and occur at the same time and place (40 CFR § 1508.8). A direct impact distance of 400 feet was applied. This distance was applied based on expected direct impacts from construction and implementation of the proposed Project in an existing mixed urban setting. See Figure 23 and Figure 24.
- Indirect impacts would be caused by the proposed Project but are separated from direct impacts by time and/or distance and include induced growth and related environmental impacts, such as changes to land use patterns, population density or growth rates, and related impacts on air quality, water, and other natural systems.
- Cumulative impacts would be those that result from the incremental impact of the proposed Project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.

The Study Area was assessed for potential indirect or cumulative impacts on EJ populations affected by the proposed Project. Indirect and Cumulative Impacts are reviewed in Section 4.2.14.

Existing Conditions

Race/Ethnicity

There are 953 people living within the Study Area (ACS 2019). As listed in Table 5, the most prevalent race is Black or African American Alone (96.6 percent). Of the total population living within the Study Area, 98.7 percent are minority, higher than in the City of Detroit (88 percent) and much higher than the State minority average of 25 percent. See Figure 23 for Minority Population by Census Tract.

Figure 23: Minority Population by Census Tract

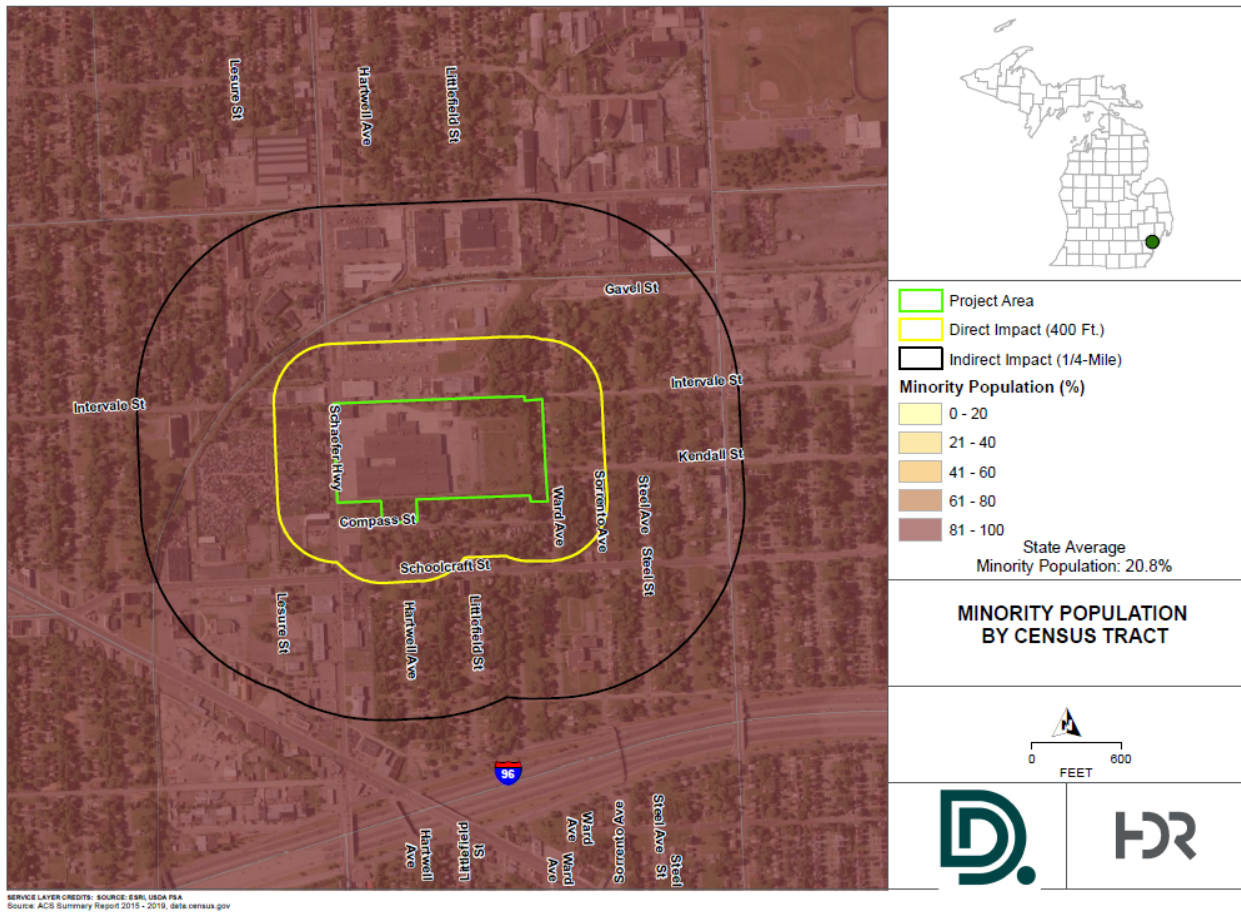


Table 5: Population by Race/Ethnicity

Race/Ethnicity	Study Area		City of Detroit		State of Michigan	
	Total Population	Percent of Total Population	Total Population	Percent of Total Population	Total Population	Percent of Total Population
Total Population	953	100.0%	674,841	100.0%	9,965,265	100.0%
Hispanic or Latino	5	0.5%	51,824	7.7%	507,353	5.1%
Not Hispanic or Latino	948	99.5%	623,017	92.3%	9,457,912	94.9%
White	13	1.4%	71,025	10.5%	7,477,400	75.0%
Black or African American	921	96.6%	526,253	78.0%	1,358,034	13.6%
American Indian and Alaska Native	2	0.2%	2,213	0.3%	45,569	0.5%
Asian	1	0.1%	11,233	1.7%	310,420	3.1%
Native Hawaiian & Other Pacific Islander	0	0.0%	99	0.0%	2,649	0.0%
Some other race alone	3	0.3%	1,941	0.3%	13,652	0.1%
Two races	9	0.9%	10,253	1.5%	250,188	2.5%
Minority (Non-White)	941	98.7%	593,563	88.0%	2,487,865	25.0%
Non-minority (White, Not Hispanic or Latino)	13	1.4%	71,025	10.5%	7,477,400	75.0%

Source: US Census 2019 ACS 5-year Estimates

* Totals provided and percentages may not precisely reflect the absolute figures, due to rounding

Income Level

Within the Study Area, 44 percent of the population have incomes that are below the poverty threshold. This percentage is higher than the City of Detroit (35 percent) and more than triple the State average of persons in poverty (12.6 percent). As shown in Figure 24, the areas to the north and west of the project site have the highest concentrations of low-income populations. Table 6 lists the population by income to Poverty Level Ratio.

Figure 24: Low Income Ratio by Census Block

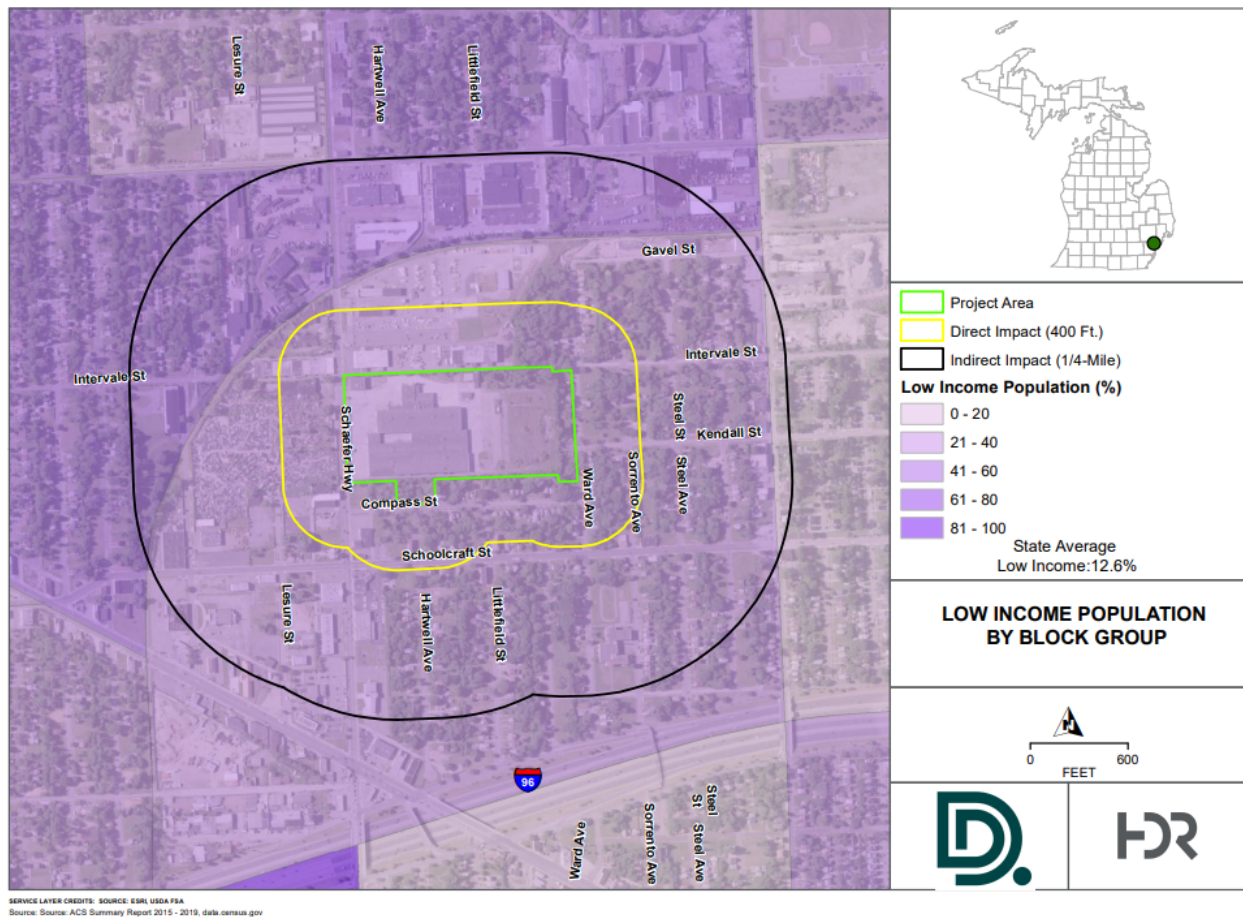


Table 6: Population by Income to Poverty Level Ratio

Ratio of Income to Poverty Level	Census Data within Study Area		City of Detroit		State of Michigan	
	#	%	#	%	#	%
Total Population	953	100.0%	662,884	100.0%	10,050,811	100.0%
Under 0.50	229	24.0%	111,292	16.8%	1,035,234	10.3%
0.51 to 1.0	191	20.0%	120,845	18.2%	904,573	9.0%
1.0 to 1.5	362	38.0%	94,089	14.2%	2,462,449	24.5%
1.51 to 2.0	57	6.0%	76,209	11.5%	1,728,739	17.2%
Above 2.0	114	12.0%	260,449	39.3%	3,919,816	39.0%
Low-Income	419	44.0%	232,137	35.0%	1,266,402	12.6%
Non-Low-Income	534	56.0%	430,747	65.0%	8,784,409	87.4%

Source: ACS Summary Report 2015 - 2019, data.census.gov

Environmental Impacts

As indicated above and shown in Figure 23 and Figure 24, the Study Area is nearly all minority (98.7 percent) and a high percentage of the population is low-income (44 percent). The makeup of the Study Area is similar to the entire City of Detroit, which is predominantly minority

(88 percent) and a large percentage is low-income (35 percent). Impacts from the proposed Project could be considered disproportionately high and adverse to the local EJ populations, but mitigation would be implemented as discussed in the respective sections of this EA, and there would also be benefits realized from the Project.

The Biden-Harris Administration developed the Justice40 Initiative to confront and address decades of underinvestment in disadvantaged communities (DACs). The U.S.DOT is working towards the goal to allocate at least 40% of the benefits from federal investments to DACs. The DACs, as identified in the U.S.DOT's screening tool, are census tracts that exceed the 50th percentile⁷ across at least four of the following transportation disadvantaged indicators: Transportation Access; Health; Environmental; Economic; Resilience; and Equity.

According to the U.S.DOT's screening tool, the census tract where the proposed Project and the adjacent residential areas are located meet only three of these indicators: Health, Environmental and Economic. However, 54 percent of the census tracts throughout the entire City of Detroit are considered transportation disadvantaged. As the proposed Project will balance and improve transit operations across the City, the benefits of the proposed Project would be realized by EJ populations and DACs throughout the entire City.

Direct and Indirect Impacts

In the area of direct impact, given the deteriorated and vacant state of the existing facility, positive perceivable visual changes would be realized by constructing the proposed Project.

The new Coolidge Terminal would enhance working conditions for DDOT maintenance workers, mechanics, administrative staff, and bus drivers, many of whom are native Detroiters. Certain positions, such as bus operators and bus mechanics, also have preferential criteria during the hiring process for Detroit residents. Overall, the proposed Project will provide new DDOT employment opportunities that will benefit the local community.

With implementation of mitigation measures, impacts would be considered less than significant. The proposed Project is expected to have impacts requiring mitigation or other requisite coordination in the resource categories listed below.

Land Use and Zoning

The residential property needed for the proposed Project is currently zoned residential and would require re-zoning. This is a direct impact to the Study Area but is consistent with the City's future land use plan, and all City re-zoning procedures will be followed. The land use plan has been presented to the community and the zoning change would also be subject to public review as part of the City's zoning process. This process includes direct coordination with people in the surrounding neighborhood and two public hearings prior to City Council approval of the zoning change.

⁷ While the 50th percentile is used for most of the indicators, the resilience indicator threshold is 75%. ([Justice40 Initiative | US Department of Transportation](#), accessed 10/27/22.)

Additionally, DDOT has presented this proposed zoning change and provided opportunities for public input using methods described in Section 6, Public Involvement. As it relates to EJ populations specifically, DDOT has distributed flyers to the Happy Homes Block Club, obtained email lists and sent emails to members of District 7 through the Councilmember staff's contacts, and has discussed the upcoming project with local church members and church leadership staff in the Study Area. DDOT has also notified property owners and business owners in Study Area through door-to-door canvassing.

Indirectly, the change in zoning is part of the City's planned transition of the neighboring residential areas to industrial. People residing within the Study Area may continue to see this transition occur on vacant parcels as new projects are brought before the City for review.

Cultural Resources

The Coolidge Terminal property has been determined *eligible for the NRHP* for local significance under Criterion A for its role in the history of Detroit's public transportation. The demolition of the historic Coolidge Terminal site is an adverse effect under Section 106 of the NHPA. Mitigation is proposed as described in an MOA between the FTA and SHPO, with DDOT as an invited signatory. The execution of the MOA mitigates the adverse impact to the historic property. Project plans, the determination of eligibility, the assessment of effect, and the proposed mitigation have been shared with the Section 106 consulting parties, in DDOT's regularly scheduled community input meetings, as well as in public meetings for the proposed Project. No comments related to the demolition of Coolidge Terminal or the proposed mitigation have been received to date. See Appendix D for full details, including consultation and the MOA.

Section 4(f)

The loss of the historic property is considered a permanent incorporation of the property into the transportation project and is considered a use under Section 4(f) of the U.S.DOT Act of 1966. Therefore, a feasible and prudent avoidance alternatives evaluation is presented in Section 5 of this EA. The impacts and mitigation measures are the same as described for Section 106.

Hazardous Materials

The proposed Project would require the demolition and disposal of contaminated materials, and the management of contaminated soils that would be left on site. The construction specifications include the development and implementation of a Soils Management Plan, and the operation of the facility must follow a Due Care Plan, both of which must be approved by the City of Detroit BSEED.

Indirectly, all residents in the Study Area and the City of Detroit would benefit from the implementation of the Soils Management Plan and the Due Care Plan.

Temporary Construction Impacts

The proposed Project would result in temporary construction impacts on the residential neighborhood adjacent to the project site due to construction related noise, vibration, dust, air quality, and traffic and pedestrian access on Schaefer Highway. Impacts would be temporary and mitigated as discussed in each respective section of this EA. Construction activities could last approximately 18 months.

Cumulative Impacts

Cumulative impacts would be those that result from the incremental impact of the proposed Project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.

The City of Detroit has programs in place that provide incentives for Detroit-based companies staffed with native-Detroit workers. The DBA adheres to the *City of Detroit's Executive Orders 2021-02 – Utilization of Detroit Residents on Publicly-Funded Construction and Demolition/ Rehab Projects* (51 percent Detroiters working on publicly funded projects) publicly funded construction projects, although federally-funded projects such as this project, are not part of this program. The 30 percent Disadvantaged Business Enterprise (DBE) goal that has been set for the construction of the proposed Project would positively contribute to the City's overall goals of enhancing minority business opportunities.

Additionally, the DBA participates in the City of Detroit's Office of Contracting & Procurement (OCP) Outreach Program. OCP holds several workshops and events throughout the year that are designed to identify new potential vendors and contractors, and many events are targeted to minority businesses. In 2022, the OCP has sponsored, and DBA has participated in events with the Detroit Association of Black Organizations (March 2022), a Minority Business Summit (April 2022), the Juneteenth Freedom Festival (June 2022), and the Detroit Economic Growth Corporation (DEGC) Market Place (July 2022).

Measures to Avoid or Minimize Harm

DDOT has implemented an outreach program to provide mechanisms to solicit public comments and ideas, identify circumstances and impacts that may not have been known or anticipated, and build support among the public who are stakeholders in transportation investments that impact their communities (see Appendix H). These mechanisms include a public information website dedicated to the Coolidge Terminal project, two public meetings held in June and October 2022, email updates, flyers, door to door canvassing, and social media postings.

DDOT has a process already established and in place to solicit input and feedback from the community as a whole, which includes monthly community input meetings. From feedback received during the public input process, DDOT focused further efforts to reach the EJ population in conjunction with the Land Use and Zoning outreach process described previously. This outreach included soliciting input from the Happy Homes Block Club, working with District 7 Councilmember staff for coordinated meetings, door to door canvassing by DDOT Outreach and Marketing staff, and visiting local places of worship for comment during November 2022.

In addition, flyers regarding the public meeting were provided at the Rosa Parks Transit Center, which is a high-traffic location, and therefore, very visible to the community, and a local activist helped distribute over one hundred flyers throughout the community. DDOT has placed large vinyl banners posted at the project site, inviting comment via email or phone number leading to DDOT Outreach Staff and produced and distributed targeted flyers that were handed out via onsite pop-up booth / table events at the bus stop on Schaefer Avenue, in front of the existing Coolidge Terminal and project site. During these events, DDOT Outreach staff have answered questions and concerns, and discussed the upcoming public hearing with approximately 50

people. DDOT will continue to hold pop-up events at the bus stop site and will hand out flyers at the local grocery store to invite email and phone comment until the upcoming public hearing.

Members of the community that have participated in public outreach to date have voiced their support for the proposed Project in the public meetings and to DDOT Outreach staff, and the benefits it will bring to the community in terms of clearing blight, improving neighborhoods, and improving transit. DDOT has not received any comments in opposition to the proposed Project.

After examining the proposed Project holistically, considering the impacts on EJ populations, committed mitigation measures, and benefits to EJ populations and DACs, DDOT and FTA have concluded that the proposed Project will not result in disproportionately high and adverse impacts to EJ populations.

4.2.9 Safety and Security

This section describes the general safety and security considerations related to the design and operation of the proposed Project. Potential safety hazards include crashes or fires that could result in property damage, injuries, or fatalities. Security refers to freedom from harm resulting from intentional acts or circumstances.

Legal/Regulatory Context and Methodology

Transportation providers that receive federal financial assistance under 49 USC § 5307, Urbanized Area Formula Program, are required to meet safety and security standards and regulations set forth in the FTA's Public Transportation Agency Safety Plan (49 CFR Part 673) and National Public Transportation Plan.

The impacts of the proposed Project are assessed in this section by identifying the following:

- Whether adequate provisions for safe and secure operations would be made with the introduction of the Build Alternative;
- Whether the Build Alternative would affect vehicular, transit, and/or pedestrian accidents, and what design features would be included to avoid, minimize, or mitigate these accidents; and
- Whether the Build Alternative would improve safety and security compared to the existing conditions at the project site.

Existing Conditions

The existing Coolidge Terminal site is a non-functioning collection of structures that has been falling into disrepair since the 2011 fire. Inspections conducted at the site reveal structural issues that could potentially cause unsafe conditions. Hazardous materials are known to be present on this site. The site is currently fenced off with locked gates. Service Guards (Security) currently make patrol rounds of the existing Coolidge site on a daily basis and are called to approve and facilitate access by non-DDOT persons, if required.

Environmental Impacts

The Build Alternative would enhance safety measures, security systems and procedures like those currently used by DDOT to protect passengers, employees, and the surrounding community. There are specific site requirements necessary to ensure a safe, efficient, and

functional facility, which DDOT would implement. These specific requirements include the following:

- Site Security. Use of cameras and limited access points throughout the site.
- Two guard gates with 24 hour/7 days per week/365 days per year coverage.
- Third gate for first responder vehicle access.
- A perimeter fence and/or barrier would secure the entire site.
- Transit Police would be assigned the site.
- Site circulation for buses would support/promote a counterclockwise flow of traffic.
- Adequate and efficient bus and employee/visitor parking.
- Employee parking lot would accommodate spaces for employees during shift changes.
- Visitor parking needs would be provided and designated on the site.
- Support vehicles designated for Operations and Maintenance would be located near their respective workspace.
- Site lighting would provide efficient and even light throughout the entire site.
- Fully accessible patio for all staff.
- Handicapped/Disabled Parking would be provided as required by code.
- Pedestrian Circulation Areas.
- Appropriate site wayfinding.
- Stop controlled approach at Schaefer Avenue/employee driveway.

Site geometrics and turning radii would be provided in accordance with AASHTO design standards. Employee and visitor parking is laid out to minimize danger from run-away vehicles. Curbs, landscape areas, and bollards are used to minimize accident occurrences particularly in accessible parking areas. Pedestrian circulation utilizes new concrete sidewalks that connect to the east side of the Schaefer Highway right-of-way. On-site pedestrian walkways are provided with a minimum width of 5 feet. This width will allow for 2-way pedestrian traffic. Sidewalks are intended to be graded and sloped in accordance with the Americans with Disabilities Act at 1 to 5 percent.

As described in Section 4.2.11, hazardous materials have been identified at the project site, which would be removed in accordance with all federal, state, and local procedures. Removal of these materials would provide a safer environment for the entire community, as compared to the No Build Alternative, in which these harmful materials would be left on site. The proposed Project would have a beneficial impact to safety and security.

Measures to Avoid or Minimize Harm

The contractor would be required to prepare a TCP, as previously discussed, in coordination with DDOT, City of Detroit, and emergency responders to identify construction phasing, maintenance of traffic, maintenance of access, and associated circulation on the Project site for vehicles and pedestrians. Pedestrian detours along Schaefer Highway would be provided, as needed. The contractor would be required to maintain good housekeeping standards during construction, as outlined in the Occupational Safety and Health Administration standard number 1926.25.

Safety measures related to hazardous materials are discussed in Section 4.2.11.

4.2.10 Utilities

This section identifies potential impacts of the proposed Project on existing public utilities.

Legal/Regulatory Context and Methodology

DDOT reviewed municipal utility information provided by the DWSD, as well as other information provided by various municipal departments.

Existing Conditions

Water

The proposed site is located within the service boundary of the DWSD water system. There is a 12-inch water main within the Schaefer Highway right-of-way that would be utilized to serve the site.

Sanitary Sewer

The proposed site would be served by an existing 27-inch DWSD combined sewer main located within Schaefer Highway right-of-way on west and southwest side of the building facility.

Electric Service

The primary electric service to the facility is provided by Diversified Energy Company (DTE Energy). The electrical service to the site would enter the northwest corner of the site from the existing 4.8 kV line that runs along Schaefer Highway.

Environmental Impacts

Coordination with affected utilities would commence with all significant utility facility owners within the project site and surrounding area during Project design. Utilities that anticipate removal, relocation, or upgrades would be identified. Modifications to utilities would be coordinated with service providers to ensure disruptions are minimal. No permanent utility impacts are expected.

The size of the water service lines is yet to be determined. The size of these lines will be based upon a water network analysis, building demand requirements, and building construction type and size. The water main would be ductile iron and would be designed per DWSD standards.

The on-site sanitary sewer laterals would be sized based upon total water usage demand. The material type would be determined based on effluent quality and per DWSD standards.

Locations of proposed dry utilities for communication, electric, and gas would be determined based upon site infrastructure requirements (transformers, generators, etc.). The tie in location for the proposed Project would depend on the site requirements and will be determined by the design team.

Measures to Avoid or Minimize Harm

The design architect and contractor would be required to coordinate complete utility locations and include utilities on construction plans. Coordination with the City of Detroit and the various

utility companies would be conducted to identify any utility relocation agreements required. Design plans would be reviewed and approved by the Detroit DWSD.

The contractor would be required to provide affected utility customers advance notice of any planned utility disruptions.

4.2.11 Hazardous Materials

This section discusses the potential for encountering hazardous materials during proposed Project construction and implementation. Hazardous materials may include petroleum products, pesticides, organic compounds, heavy metals, asbestos-containing materials, lead paint, or other compounds that would harm human health or the environment (ASTM E1527-13). The nature and extent of contamination can vary widely; early detection, evaluation, and determination of appropriate remediation of hazardous materials are essential. Information in this section is derived from the *Phase I Environmental Site Assessment (ESA)*, *Phase II ESA*, and *Report of Asbestos and Universal Waste Survey* included in Appendix E.

This section also discusses the current geologic, soil and groundwater conditions at the site, as described in the Phase II ESA.

Legal/Regulatory Context and Methodology

Federal and state laws have been established for the protection of human health and the environment. These regulations include the Clean Air Act (CAA) (42 USC § 7401 et seq.); the Resource Conservation and Recovery Act (RCRA) (42 USC § 82); the Toxic Substances Control Act (TSCA) (15 USC § 2601 et seq.); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC § 103); the Superfund Amendments and Reauthorization Act (SARA) (42 USC § 9601 et seq.); and the Occupational Safety and Health Act (OSHA) (29 USC § 15); the Federal National Emission Standard for Hazardous Air Pollutants (NESHAP) CFR Title 40, Part 61, Subpart M, (40 CFR 61, Subpart M); and R 299.9228 of Part 111 Hazardous Waste Administrative Rules of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (ACT 451).

The Project is also subject to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Part 201 Residential Generic Cleanup Criteria and Screening Levels and Section 20101(1)(r) of Michigan's Natural Resources Environmental Protection Act, 1994 Public Act 451, as amended (NREPA).

The City of Detroit BSEED, as well as the DWSD, must review and approve construction plans that require the removal of contaminated materials and soils. BSEED must review and approve Due Care Plans that are put in place prior to the opening of a facility where contamination is to be managed on-site.

Finally, FTA's Standard Operating Procedure 19, Consideration of Contaminated Properties including Brownfields (August 2016) applies to property being considered for acquisition for FTA-funded projects, with an emphasis on property that is or may be contaminated and is limited to the property considerations taking place during the environmental review process conducted pursuant to NEPA.

Existing Conditions

Geology

Shallow subsurface soils at the vacant Coolidge Terminal generally consist of sand with some gravel and debris/bricks/concrete (fill) from ground surface to approximately 4 to 5 feet below ground surface (bgs) across the site. Below shallow subsurface soils, the soils generally consist of native medium stiff to stiff clay, silty clay, or sandy clay to depths of 7 to 9 feet bgs, followed by a stiff to very stiff mottled clay to 12 to 14 feet bgs, and soft to stiff gray clay with high plasticity to a terminal depth of 15 feet bgs, except for the central and northern sections of the site where soils have been disturbed and backfilled with sand and gravel. Water was encountered sporadically across the site at varying depths ranging from 4 to 11 feet bgs.

Phase I ESA

A Phase I ESA of the Coolidge Terminal property was conducted in 2019 in accordance with ASTM Standard Practice E1527-13. The Phase I ESA was updated in 2021 when the adjoining residential parcels were identified. The Phase I ESA constitutes “all appropriate inquiry into the previous ownership and uses of the subject property consistent with good commercial or customary practice,” as defined at 42 USC §9601(35)(B). The Phase I ESA identified recognized environmental conditions (RECs) that may exist or may have historically existed at the project site.

As part of the Phase I ESA, prior assessments completed at the project site were reviewed and evaluated. A regulatory agency database search was performed to evaluate the possible presence of federal, state, tribal, and local-listed sites of known or potential environmental concerns located within a specified search distance from the project site. Lastly, a site reconnaissance was conducted to view accessible portions of the project site.

Based on the information obtained for the Phase I ESA, the following opinions were rendered by DDOT’s consultant regarding conditions that represent a REC:

- The historical use of the project site for bus maintenance and outdoor bus storage.
- The current and former presence of underground storage tanks (USTs), above ground storage tanks (ASTs) vaults, and/or oil/water separators on the Subject Property, including approximately 800 gallons of standing diesel fuel discovered within the pump house “aqua system vault” during a December 1994 inspection by the Detroit Fire Department.
- Five confirmed releases reported at the Subject Property resulting in soil and groundwater contamination on the Subject Property and the presence of elevated concentrations of contaminants in the soil and groundwater at the Subject Property at levels that exceed EGLE Part 201 Residential Generic Cleanup Criteria and Screening Levels.
- A phenol-type odor and oily water in pits were observed in the former bus repair shop in the north-central portion of the Main Building.
- The historical industrial uses of the adjoining properties to the north and west represent.
- Due to the potential contaminated nature of the property at 14270 Schaefer Hwy, located approximately 100 meters north of the project site, this property represents a REC in connection with the project site.

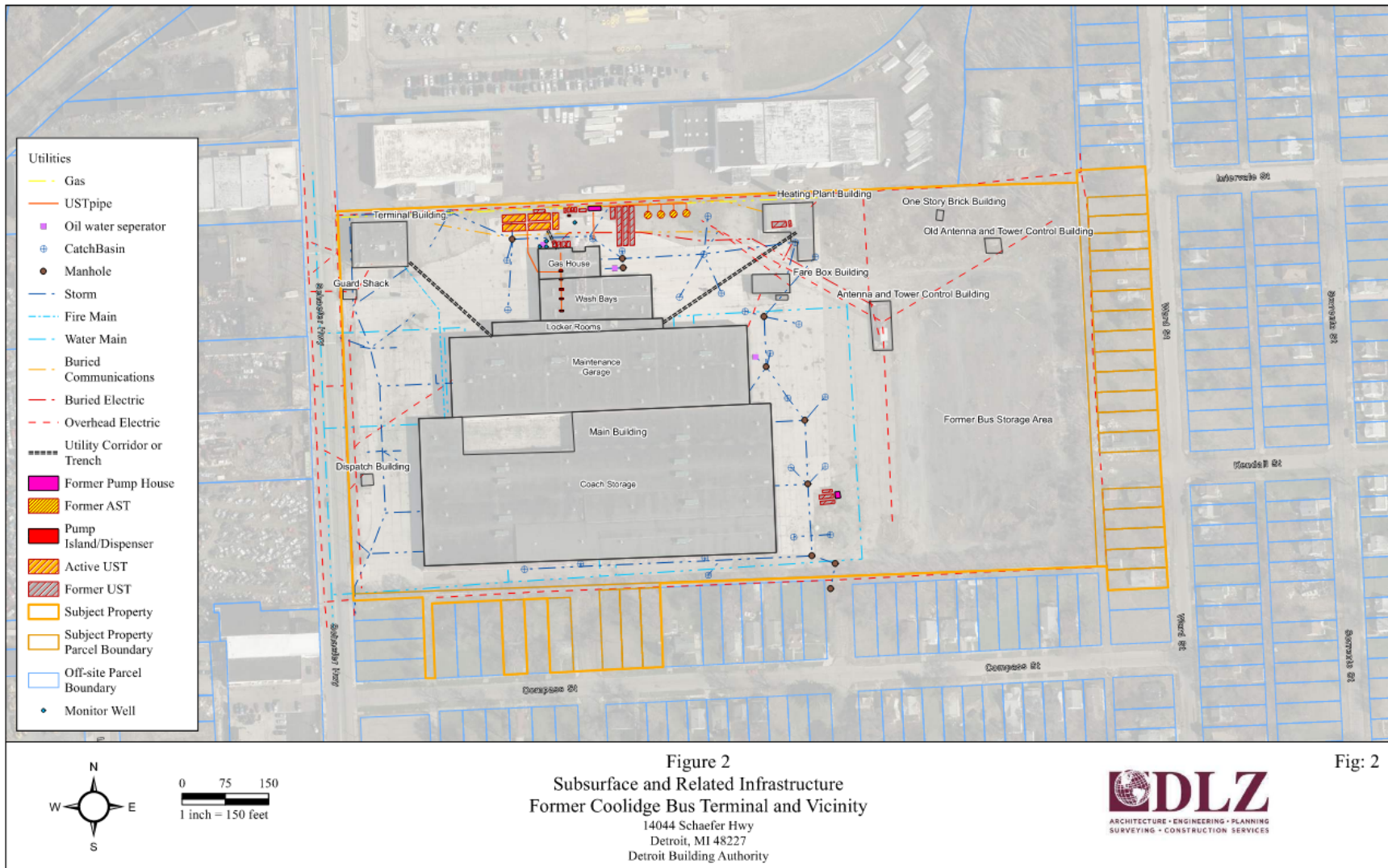
Figure 25 shows the locations of the various buildings and subsurface infrastructure at the project site. Figure 26 shows the locations and types of RECs found during the Phase I ESA.

Phase II ESA

A Phase II ESA was finalized in November 2022 to determine the nature and degree of contamination present at locations of previously identified RECs and to further characterize subsurface soils in the vicinity of proposed on-site stormwater management features (e.g., bioswales). During the Phase II ESA, 67 soil borings were advanced on the Coolidge Terminal site itself, and 14 soil borings were advanced on the DLBA's residential parcels adjoining the Coolidge Terminal to the south and east that will be transferred to DDOT for the proposed Project. Soil samples were analyzed for Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), and Michigan 10 metals, with select samples also analyzed for PCBs. Twelve temporary monitoring wells were installed where groundwater was encountered for groundwater sample collection. Groundwater samples were analyzed for total VOCs, SVOCs, and Michigan 10 metals, with select samples also analyzed for PCBs.

Based on the data collected as part of the Phase II ESA, subsurface soils at the Coolidge Terminal contain contaminants at concentrations that exceed the EGLE Part 201 Residential Generic Cleanup Criteria and Screening Levels. As a result, the Coolidge Terminal is defined as a "facility" by NREPA. Further detail on the "facility" designation is provided in this section.

Figure 25: Subsurface and Related Infrastructure (from Phase I ESA)



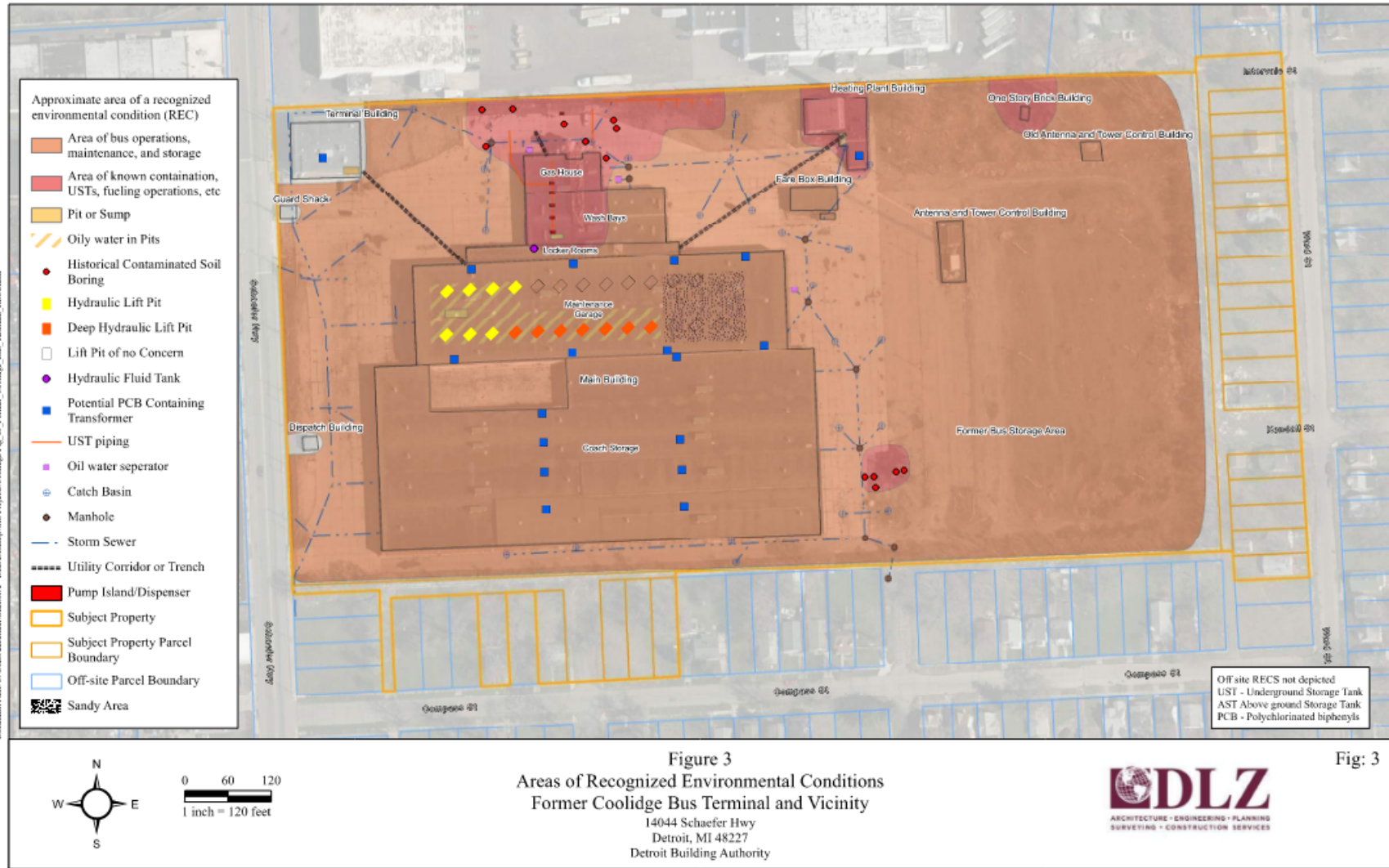
Data Sources: State of Michigan, City of Detroit, SEMCOG, Statistics Canada

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Author: AA

Date: 8/20/2021

Figure 26: Areas of Recognized Environmental Concerns



Data Sources: State of Michigan, City of Detroit, SEMCOG, Statistics Canada

1942-6994-50

Author: AA

Date: 8/20/2021

Soils

- Metals including lead and arsenic were detected in soil at concentrations which exceeded the Nonresidential Direct Contact (NDC) Criteria and/or Nonresidential Particulate Soil Inhalation Criteria (PSIC) at two soil sample locations in the former outdoor bus storage area in the eastern portion of the Coolidge Terminal.
- Metals including arsenic, chromium, mercury, and selenium were detected in soil above DWP and/or Groundwater Surface Water Interface Protection (GSIP) Criteria at a sample location in the southwest portion of the vacant Coolidge Terminal, and at sample locations along Ward Avenue associated with the DLB's residential parcels adjoining the Coolidge Terminal to the east that would be transferred to DDOT for the proposed Project.
- SVOCs (Dibenzofuran and Phenanthrene) were detected in soil at one soil sample location beneath the southeast portion of the existing main Coolidge Terminal Building in excess of Nonresidential Infinite Source Volatile Soil Inhalation Criteria (VSIC).
- SVOCs (Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a, h)anthracene, and/or Indeno (1,2,3-cd) pyrene) were detected in soil above Nonresidential Direct Contact (NDC) Criteria at six soil sample locations in the northeast, southeast, and western portions of the Coolidge Terminal.
- SVOCs (2-Methylnaphthalene, Naphthalene, and/or Phenanthrene) were detected in soil above Nonresidential Volatilization to Indoor Air Pathway (VIAP) Screening Levels at 10 soil sample locations throughout the Coolidge Terminal, particularly in the general vicinity of the former UST area (north of and beneath the main Coolidge Terminal Building), the former Heating Plant UST area, and the former bus storage area in the eastern portion of the site.
- VOCs (Acrylonitrile, Benzene, Chloroform, 1,2-Dichlorobenzene, Ethylbenzene, Isopropyl benzene, Naphthalene, 1,1,2-Trichloroethane, 1,2,4-Trimethylbenzene, and/or 1,3,5-Trimethylbenzene) were detected in soil above VIAP Screening Levels at 25 soil sample locations across the Coolidge Terminal, including in the general vicinity of the former UST area (north of and beneath the main Coolidge Terminal Building), the former UST area southeast of the main Coolidge Terminal Building, and the former bus storage area in the eastern portion of the site.
- No VOC or SVOC concentrations in soil exceeded the Nonresidential Soil Volatilization to Indoor Air Inhalation (SVIAI) Criteria.

Groundwater

- SVOCs: Anthracene, Fluoranthene, and Pyrene were detected in groundwater at sample location TW-06 above the Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIAC). Anthracene, Benzo(a)anthracene, Phenanthrene, and Pyrene were detected in groundwater above the VIAP for shallow groundwater at one groundwater sample location beneath the central portion of the existing main Coolidge Terminal Building. 2-Methylnaphthalene was detected in groundwater above the VIAP for shallow groundwater at one groundwater sample location in the southern portion of the existing main Coolidge Terminal Building.
- VOCs: Benzene was detected in groundwater above the VIAP for shallow groundwater at one groundwater sample location in the southern portion of the existing main Coolidge Terminal Building. Naphthalene was detected in groundwater above the VIAP for shallow

groundwater at sample locations in the central and southern portions of the existing main Coolidge Terminal Building.

- VOC or SVOC concentrations in groundwater exceeded the Nonresidential Groundwater Volatilization to Indoor Air Inhalation (GVIAI) Criteria.

Asbestos and Universal Waste Surveys

DDOT's consultant performed an asbestos survey of the Coolidge Terminal buildings and the DLB's residential parcels adjoining the Coolidge Terminal to the south and east that will be transferred to DDOT for the proposed Project. Due to site constraints, the interior of the former Coolidge Terminal Fare Box Building was not accessible and therefore was not inspected. In addition, the tunnel located between the Main Coolidge Terminal Building and the Former Heating Plant building was flooded and therefore was not inspected.

As part of the Asbestos Survey, DDOT's consultant also performed a visual inspection of the structures for readily observable materials that may be classified as Universal Waste and potentially environmental sensitive materials that may require special handling and disposal.

Based on the age of the buildings, DDOT's consultant assumed that any paint located on the building components contained lead.

The findings from the Asbestos and Universal Waste survey resulted in the identification of 46 asbestos containing homogenous areas and numerous materials that could be classified as a Universal Waste and/or be considered a potentially environmentally sensitive material that could require special handling and disposal. Descriptions of the results for each structure are contained in the full report in Appendix E.

Environmental Impacts

The proposed Project would include demolition of all of the structures on the existing Coolidge Terminal site and adjacent parcels and construction and operation of a new Coolidge Terminal, as described in Section 3.3. The demolition of the structures would result in the disturbance of asbestos containing materials and other potentially environmental sensitive materials. In addition, the removal of existing building foundations may result in the disturbance of contaminated soils and/or contaminated groundwater. Contaminants of potential concern currently present onsite include VOCs, SVOCs and heavy metals.

The proposed Project would also require the removal of the existing paved surfaces, removal of existing utilities, clearing of existing vegetation and other existing site improvements located outside the footprint of the existing buildings. Much of the proposed construction areas are currently paved in asphalt and concrete. As a result, the removal of these impervious surfaces for construction may result in the disturbance of contaminated soils and/or contaminated groundwater, which could lead to contaminant exposure to construction workers, the public and/or the environment.

Excavation work required for the construction of the proposed Project building foundations, utilities, stormwater bioswales and associated piping, new pavement, and the overall site grading may result in the disturbance of contaminated soils and/or contaminated groundwater, which could lead to contaminant exposure to construction workers, the public and/or the environment.

Construction activities associated with the proposed Project may also have the potential to introduce additional environmental impacts through operation of heavy machinery and the resultant releases of fuel during refueling operations, as well as releases of small quantities of greases, oil, or other petroleum-based lubricants or products.

Due to the identification of VOCs and SVOCs onsite, potential indoor air quality issues from vapor intrusion could be a concern if elevated concentrations of these contaminants are left in place beneath a building footprint.

Upon completion of construction, minor storage and use of petroleum products, solvents, and other materials for maintenance purposes are likely to occur. The new facility may also generate regulated wastes such as used oil, antifreeze, etc.

Measures to Avoid or Minimize Harm

Due Diligence

As part of its due diligence, DDOT will update the Phase I ESA prior to any transfer of real estate property.

Demolition and Site Clearing

DDOT would prepare demolition plans and technical specifications that identify the demolition and site clearing performance requirements, asbestos abatement requirements, the removal requirements for Universal Wastes, USTs, oil-water separators, and other potentially environmentally sensitive materials, utility abandonment requirements, and demolition debris disposal requirements.

Prior to the start of demolition activities, the demolition contractor would be required to utilize a State of Michigan Accredited Asbestos Inspector to complete an asbestos survey of the former Fare Box Building. The demolition contractor would also be required to dewater the tunnel located between the Main Coolidge Terminal Building and the Former Heating Plant so that the area can be inspected by a State of Michigan Accredited Asbestos Inspector to determine if asbestos is present. Based on the potential for asbestos to be present on the piping in the tunnel, the water in the tunnel would be considered an asbestos-containing waste and would be properly handled and disposed of in accordance with federal, state, and local regulations.

DDOT would competitively bid the demolition and site clearing of the Coolidge Terminal site and the DLBA's residential parcels adjoining the Coolidge Terminal to the south and east that would be transferred to DDOT for the Project. The selected demolition contractor will be required to comply with all the requirements set forth in the demolition plans and technical specifications including but not be limited to the following:

- All Regulated asbestos-containing materials (ACMs) that were identified in the pre-demolition asbestos surveys require abatement prior to the start of any demolition activities that may have the potential to disturb these materials. The abatement shall be performed by an Asbestos Abatement Contractor accredited through the State of Michigan Department of Labor and Economic Opportunity (LEO) in accordance with federal, state, and local requirements.

- All Universal Wastes and other potentially environmentally sensitive materials that were identified in the pre-demolition surveys will require removal prior to the start of any demolition activities that may have the potential to disturb these materials. Removal, handling, and disposal of Universal Wastes and other environmentally sensitive materials shall be performed in accordance with the requirements set forth in R299.9228 of Part 111 Hazardous Waste Administrative Rules of the NREPA, 1994 PA 451, as amended (ACT 451).
- Removal and proper disposal of all abandoned utilities, railroad tracks, observation and monitoring wells, USTs, oil-water separators, and other RECs and potentially environmentally sensitive materials shall be performed in accordance with all local, state, and federal regulations. If an unknown/abandoned UST and/or other potential environmental source is encountered, the demolition contractor will be required to notify DDOT, and remove the item in accordance with applicable regulatory requirements. Confirmation soil sampling would be conducted to determine if a release had occurred. If hazardous materials or wastes are encountered, the appropriate state regulatory agency would be contacted.
- Handling, transport, and disposal requirements for all debris generated as part of the demolition and site clearing activities, including all waste manifest, and tracking requirements. Provisions would be included in the demolition plans specifications to encourage recycling of metals, concrete, brick, and block. It is anticipated that the concrete debris would be crushed on-site to the designed gradation and then utilized as backfill and parking lot subbase material associated with the construction of the new Coolidge Terminal.

Soil and Water Management Plan (SWMP)

The removal of paved surfaces, building slabs, building foundations, below-grade foundations, and other below-grade improvements may result in the disturbance of contaminated soil and groundwater. DDOT would prepare a SWMP to address the on-site management and/or proper removal, verification sampling, waste characterization sampling, handling and disposal requirements associated with the excavation of known and or potentially contaminated soils and groundwater during the demolition and site clearing activities and then all subsequent construction operations associated with the new Coolidge Terminal. The SWMP would be incorporated into specifications and contract documents and provided to all parties who perform work at the site. The SWMP would specify policies and procedures to be followed during site work.

The purpose of the SWMP is intended to:

- Educate contractors and subcontractors on the presence of contaminated and potentially contaminated soils and groundwater within the proposed Project Limits.
- Provide risk mitigation measures during excavation and construction activities for the direct contact and inhalation exposure pathways to control construction worker exposure.
- Provide plans for the environmental screening and/or the additional sampling and analysis requirements for potentially contaminated soils and/or groundwater encountered during the excavation and site grading activities.
- Provide handling, temporary stockpiling, and management requirements for the on-site re-use of the contaminated soils.

- Provide requirements for the removal, transport, and disposal of contaminated soils and/or unsuitable soils that are not to be managed on-site.
- Provide plans for the management and disposal of contaminated groundwater encountered during dewatering and construction activities.

In general, excavated contaminated soils that display geotechnical characteristics that are suitable for reuse as backfill shall be managed in-place on-site as long as the contaminated soil does not pose a post-construction direct contact and/or inhalation exposure pathway. If it is determined that the contaminated soils cannot be properly managed in-place on-site and/or the soil contains geotechnical characteristics that are not suitable for reuse as backfill then this soil shall be removed and properly disposed of at an approved waste disposal facility. Prior to removal of the excavated soil from the site, waste characterization samples shall be collected from the soil to determine the appropriate disposal requirements.

As part of the implementation of the SWMP, contractors working on-site shall be required to develop a Health and Safety Plan (HASP) to address potential exposure to contaminants that may be encountered during construction and excavation activities associated with each component of the proposed Project. The HASP shall be prepared in accordance with the requirements set forth in 40 CFR 1910.120 and shall establish the specific training requirements for all personnel involved with the construction and excavation activities required for the completion of the proposed Project based on their specific job assignments. The HASP shall be prepared by a qualified Health and Safety Professional.

The contractor will be responsible hiring an independent third-party Environmental Professional who would be responsible for overseeing the implementation of the SWMP. DDOT and their consultants/on-site representatives shall be responsible for overseeing the performance of the SWMP.

Design Considerations

As described above, some contaminated soils suitable for reuse would be left on site for reuse. The DDOT design team has incorporated measures into the design of the new Coolidge Terminal to reduce the disturbance of contaminated soils, and to minimize the transmission of contaminated materials. Design plans would be reviewed and approved by the BSEED as well as the DWSD.

To minimize the migration of contamination through soil and to reduce the potential leaching of contaminants to groundwater, the new Coolidge Terminal would include impervious pavement in parking, roadway, and driveway areas.

To manage stormwater run-off associated with the new Coolidge Terminal, bioretention would be accomplished utilizing a series of bioswales that are located around the perimeter of the site. A series of bioswales would also be incorporated into the design of the parking lot and the green space located adjacent to the Operations and Administration Building. The bioswales would consist of shallow landscaped basins that are used to slow and treat the stormwater run-off to reduce the concentrations of suspended solids. The bioswales would also contain various plantings specifically designed to increase evapotranspiration and phytoremediation (treatment of pollutants by the use of green plants that remove, degrade, or stabilize the undesirable

substances). As a result, the bioswales would help reduce potential contaminants in the stormwater run-off and contribute aesthetic value to the site.

As part of the on-site stormwater management system proposed for the new Coolidge Terminal, DDOT's consultants designed the bioswales to minimize impact to known areas of contamination. However, due to the size of the new Coolidge Terminal and the proposed grades, there are known areas of soil contamination that could not be avoided. In these areas, as part of the construction of the bioswales, contaminated soils would be excavated and properly handled in accordance with the SWMP. Based on the soil conditions and existing soil contaminant concentrations, the final design of the bioswales would include the over-excavation of contaminated soils beyond the base elevation of the bioswale cross-section and then the placement of clean fill so as to create a buffer zone or an impermeable liner may be placed underneath the base elevation of the bioswale. In addition, in areas where the bioswale underdrain and/or equalization piping traverses through contaminated soil, non-perforated piping would be used to reduce infiltration. The final design of bioswales would require review and approval by the City of Detroit Engineering Department.

To eliminate a potential exposure pathway for indoor air quality issues arising from vapor intrusion due to elevated concentrations of VOCs and SVOCs onsite, contaminated soils exceeding the Nonresidential Infinite Source VSIC and Nonresidential GVIAI criteria shall be excavated and removed from within the proposed building footprints and/or a vapor barrier would be designed and incorporated into the construction of the proposed buildings.

Operational Considerations

The operational impacts of the proposed Project are expected to be minor, as any storage and/or generation of regulated wastes including oils, greases, solvents, and other waste materials would be disposed of in accordance with state and local guidelines. The new Coolidge Terminal would continue to operate under a health and safety program that will include provisions for the safe handling, storing, and disposal of regulated materials. In doing so, operational impacts regarding regulated materials are minimized to the extent feasible. DDOT's Safety Department will complete the Spill Prevention Control and Countermeasures Plan (SPCC) prior to opening.

Based on the presence of contamination that would be left on site and managed, the new Coolidge Terminal would be classified as a "facility" as defined by NREPA. NREPA requires that a person who owns or operates property that he/she has knowledge is a "facility" must do all of the following tasks:

- Undertake measures as are necessary to prevent exacerbation;
- Exercise due care by undertaking response activity necessary to mitigate unacceptable exposure to hazardous substances, mitigate fire and explosion hazards due to hazardous substances, and allow for the intended use of the property in a manner that protects the public health and safety;
- Take reasonable precautions against the reasonably foreseeable acts or omissions of a third party and the consequences that could result from those acts or omissions;

- Provide reasonable cooperation, assistance, and access to the persons that are authorized to conduct response activities at the property;
- Comply with appropriate land use or resource use restrictions established or relied on in connection with the response activities; and
- Not impede the effectiveness or integrity of appropriate land use or resource use restriction.

DDOT and/or its consultants would prepare a Due Care Plan for the new Coolidge Terminal, in accordance with Section 20107a of Part 201 of NREPA, 1994 P.A. 451, as amended. This Plan would be reviewed and approved by the City of Detroit BSEED and would outline how the proposed activities at the new Coolidge Terminal would satisfy the requirements of NREPA and associated administrative rules.

4.2.12 Noise and Vibration

This section describes the predicted noise and vibration impacts of the proposed Project using the FTA Transit Noise and Vibration Impact Assessment manual. A Noise Screening and General Noise Assessment, as well as a Vibration Screening and General Vibration Assessment were conducted. More information can be found in the *Noise and Vibration Technical Memorandum* in Appendix F.

Legal/Regulatory Context and Methodology

Procedures published by the FTA were used to evaluate the potential for noise and vibration impacts at sensitive receiver locations near the project site. The criteria are described in the FTA's 2018 *Transit Noise and Vibration Impact Assessment* (FTA Manual). The guidance sets forth the basic concepts, methods, and procedures for evaluating the extent and severity of the noise and vibration impacts resulting from transit projects.

Noise Assessment Methodology

Noise is "unwanted or undesirable sound," generally measured in terms of loudness. The loudness or magnitude of noise determines its intensity and is measured in decibels (dB). The overall noise level from transit sources is described in A-weighted decibels (dBA). The A-weighted decibel scale was developed to approximate the way the human ear responds to sound levels. Because the decibel is based on a logarithmic scale, a 10-dB increase in noise level is generally perceived as a doubling of loudness, while a 3-dB increase in noise is just barely perceptible to the human ear (FTA Manual).

The equivalent average sound level (L_{eq}) is often used to describe sound levels that vary over time, usually a 1-hour period. Using 24 consecutive 1-hour L_{eq} values, it is possible to calculate daily cumulative noise exposure. A common community noise metric is the Day-Night Average Sound Level (DNL or L_{dn}). The L_{dn} is the 24-hour L_{eq} but includes a 10-dBA adjustment on noise that occurs during nighttime hours (between 10 PM and 7 AM) when sleep interference might be an issue. The L_{dn} is useful when assessing noise in residential areas, or land uses where overnight sleep occurs (FTA Manual).

The proposed Project would replace an existing bus terminal that has been out of use since 2011. FTA thresholds for noise and impacts depend on existing noise levels. As existing noise levels increase, the allowed increase in transit noise exposure decreases.

The noise screening and general assessment consist of the following general steps:

- Establish the project site and identify noise-sensitive receptors within defined screening distances
- Evaluate the existing conditions and establish corresponding impact thresholds
- Calculate the noise effects due to the proposed Project
- Identify receptors anticipated to experience moderate or severe noise impacts under the Build Alternative.

The purpose of the noise screening assessment is to determine if there are noise-sensitive land uses located close enough to a proposed Project that would require an additional assessment to evaluate the potential for noise impacts. Using the FTA Manual, the project type is selected and the corresponding screening distance for unobstructed line of sight or the presence of intervening buildings is applied. This assessment used the “Bus Storage and Maintenance” project type and applied both the intervening and unobstructed screening distances of 125 feet and 350 feet, respectively. FTA’s noise screening guidance says to apply the screening distance(s) from the center of the site for stationary sources. FTA Table 4-13 (General Noise Assessment) says that bus storage and bus O&M facilities are stationary sources. Therefore, HDR used the center of the project site as the origin of the (operations) noise screening distances.

Receivers that are potentially influenced by the noise from the proposed Project are those that are described in land use categories 1, 2, or 3, as shown in Table 7. Noise sensitive receivers were identified by reviewing a combination of available land use-related GIS data; available digital aerial photographs; and other area photography, including publicly available internet imagery. Receivers around the project site were identified and categorized for noise sensitivity based on the descriptions in Table 7.

Table 7: Noise Land Use Categories

Noise Land Use Category	Description of Land Use Category
1	Land where quiet is an essential element of its intended purpose. Example land uses include preserved land for serenity and quiet, outdoor amphitheaters and concert pavilions, and national historic landmarks with considerable outdoor use. Recording studios and concert halls are also included in this category.
2	This category is applicable to all residential land use and buildings where people normally sleep, such as hotels and hospitals.
3	This category is applicable to all land uses with primarily daytime and evening use. Example land uses include schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds, and recreational facilities are also included in this category.

Source: FTA Manual

Vibration Screening Assessment

The FTA manual includes a vibration screening procedure for projects that propose to use rubber-tired vehicles, as follows. For projects that involve rubber-tire vehicles and do not meet the following conditions, vibration impact from the operation of the facility is unlikely, and no further analysis is needed.

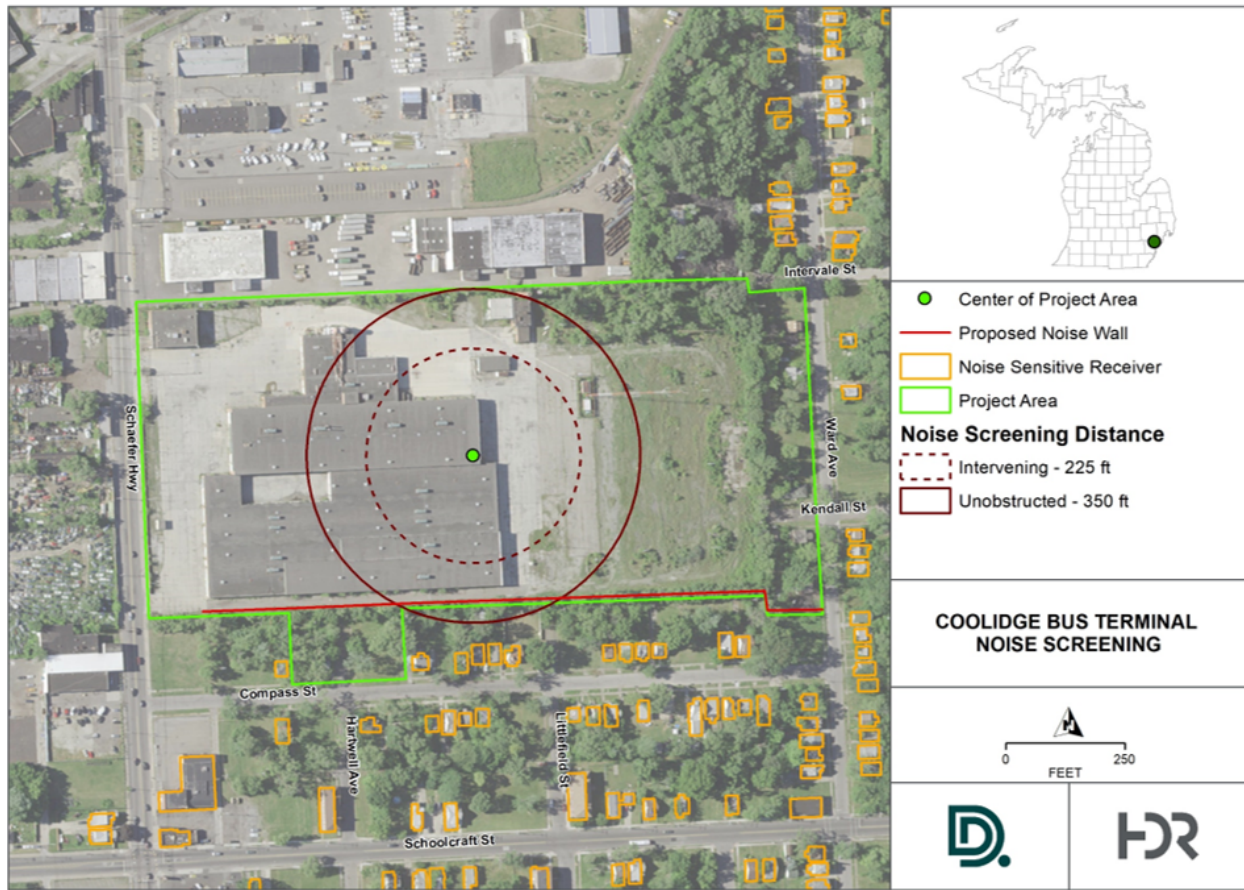
- *Roadway Irregularity* – Expansion joints, speed bumps, or other design features that result in unevenness in the road surface can result in perceptible ground-borne vibration at distances up to 75 feet away. The Project proposes to construct and operate a bus maintenance facility. Bus speeds on-site will be 5 to 10 mph, and there would be no pavement irregularities. *The proposed Project does not meet this criterion.*
- *Operation Close to Vibration-Sensitive Buildings* – Buses, trucks, or other heavy vehicles operating close to a vibration-sensitive building (within approximately 100 feet from the property line) may impact vibration-sensitive activities, such as research that uses electron microscopes or manufacturing of computer chips. Parcels whose activities could be interrupted by ground-borne vibration do not exist within 100 feet of the project site. Furthermore, vibration from bus movements is not a concern due to low operating speeds and pneumatic tires and suspension systems. *The proposed Project does not meet this criterion.*
- *Vehicles Operating Within Buildings* – Special considerations are often required for shared use facilities where vehicles operate inside or directly underneath buildings such as bus stations located inside an office building complex. The Project does not include vibration-sensitive operations inside or directly above project-related indoor activities. *The proposed Project does not meet this criterion.*

The proposed Project does not meet the three conditions described above, therefore FTA considers vibration impact during operations unlikely and no further vibration assessment is necessary.

Existing Conditions

There were no noise-sensitive receivers identified within the noise screening distances. Figure 27 shows the screening distances and nearest sensitive receivers.

Figure 27: Noise Screening Results



Environmental Impacts

There are no noise-sensitive receivers within the screening distances, and vibration impact is unlikely. Therefore, Project-related operational noise or vibration would not cause noise or vibration impacts as defined by FTA.

The construction noise and vibration assessments used the center of the project site as the origin for construction noise and vibration calculations. Construction noise was assessed according to Section 7 of the FTA Manual. A quantitative construction assessment was used to estimate construction noise because construction is expected to be longer than a month, and noisy equipment may be used. For projects in the early assessment stage when construction equipment and schedule are undefined, FTA recommends the general assessment option should be used to evaluate construction noise.

Construction Noise

Construction equipment most likely to be used during the proposed Project was selected for each of the two phases of site development (demolition and construction) based on assumptions made about the existing conditions on-site and the proposed plan. The following scenarios were assessed:

- *Demolition* – A jackhammer and bulldozer would be the two loudest pieces of equipment used to break up existing concrete and asphalt.
- *Construction* – An impact pile driver and a generator would be the two loudest pieces of equipment.

Noise levels for each piece of equipment were calculated using General Construction Noise Assessment guidance and Equation 7-1 from the FTA Manual. Individual equipment noise levels were calculated in dBA for the two loudest pieces of equipment to be used during each proposed Project phase. Noise levels were propagated from the center of the proposed project site towards the nearest receptors.

The nearest receiver is a residential land use which is approximately 395 feet from the center of the project site.

This set of calculations represents the anticipated average noise levels due to the construction equipment being mobile and presumed to operate anywhere within the proposed project site at a given time. Noise levels of combined equipment were then calculated for each phase using decibel addition for comparison to General Assessment Construction Noise Criteria from Table 7-2 in the FTA Manual. Results of the General Construction Noise Assessment, including FTA general assessment construction noise criteria, are presented in Table 8.

Table 8: Quantitative General Construction Noise Assessment

Distance	Land Use	Phase	Equipment	Result (dBA)	General Assessment Construction Noise Criteria (dBA)
395 ft. (from center of site)	Residential	Demolition	Jackhammer and bulldozer	72	Residential: Day = 90; Night = 80
		Construction	Impact pile-driver and generator	83	

Source: HDR 2022

The resulting noise for the residential receptor was 72 dBA and 83 dBA for the demolition phase and construction phase, respectively. Construction noise levels are projected to be below the applicable residential land use criterion of 90 dBA for daytime.

Therefore, significant adverse impacts from construction noise are not anticipated at the residential receptor. However, a more detailed assessment of construction noise may be warranted if there are significant changes to the construction equipment, if noise sources are operated for prolonged periods close to receptors, or if construction activities occur during nighttime hours. Construction activities would be conducted in accordance with City, State, and Federal guidelines, and would use best practices to limit noise, such as limiting construction activities to normal daytime working hours, limiting idling equipment, and additional preventative actions as the construction plan is finalized.

Construction Vibration

Construction equipment vibration source levels are assessed in terms of peak particle velocity (PPV in/sec) and vibration velocity level (LV; measured in vibration decibels (VdB), which are compared to FTA criteria for building damage and annoyance, respectively. Per the FTA Manual, construction vibration is assessed for each piece of equipment individually using Equation 7-2 for PPV and Equation 7-3 for LV. The following scenarios were assessed based on the same assumptions made in the construction noise assessment:

- *Demolition* – Loaded trucks would be the largest vibrational source.
- *Construction* – An impact pile driver would be the largest vibrational source.

Like the general assessment method for construction noise, construction-related vibration levels were calculated at the nearest residential receiver. This set of calculations represents the anticipated average vibration levels due to the construction equipment being mobile and presumed to operate anywhere within the project site at a given time.

A second set of calculations was utilized to represent the maximum vibration levels that may be experienced by sensitive receptors near the proposed Project site when vibration sources are operating at the closest project site boundary. Per FTA guidance, this analysis used the distance between the nearest receiver and the location where equipment will be used to evaluate construction vibration. The nearest residential receiver is approximately 80 feet from the project site boundary.

Table 9 presents FTA’s construction vibration criteria from Table 7-5 in the FTA Manual, which outlines construction vibration criteria for a variety of building types. The nearest receiver building appears to be constructed of non-engineered timber and likely contains plaster and is categorized as a Type III building for the damage assessment.

Table 9: FTA Construction Vibration Criteria

Building/Structural Category	Damage Assessment (PPV, in/sec)	Annoyance Assessment (VdB)
I. Reinforced-concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	90
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA Manual

Table 10 presents the construction vibration assessment results and facilitates a comparison with FTA construction vibration criteria for building response and human response to vibration. The construction vibration assessment examined impacts from the most-vibration inducing equipment (impact pile drivers) at the center of the project site, as well as at the project site boundaries. At the center of the project site, the assessment found that the proposed Project

would not have impacts to non-engineered timber and masonry buildings that may have plaster walls nor cause an annoyance to people living in the nearest residence 80 feet away.

However, if impact pile drivers operate in the upper range at the project site boundary, it may pose a risk of damage to non-engineered timber and masonry buildings, and result in increased annoyance to the residential receptor 80 feet away. Based on the concept site plan, it is unlikely that an impact pile driver would be used near the project site boundary; therefore, impacts from construction vibration are unlikely. See Appendix F for further information.

Table 10: Quantitative Construction Vibration Assessment Results

Distance	Land Use	Phase	Equipment	Damage Assessment (PPV, in/sec)	Annoyance Assessment (VdB)	Building/Structural Category	FTA Damage Assessment Criteria (PPV, in/sec)	FTA Annoyance Assessment Criteria
395 ft. (from center of site)	Residential	Demolition	Loaded trucks	0	50	III. Non-engineered timber and masonry buildings	0.2	94
		Construction	Impact pile driver (upper range)	<0.1	76			
		Construction	Impact pile driver (typical)	<0.1	68			
80 ft. (from Project boundary)	Residential	Demolition	Loaded trucks	<0.1	71	III. Non-engineered timber and masonry buildings	0.2	94
		Construction	Impact pile driver (upper range)	0.3	97			
		Construction	Impact pile driver (typical)	0.1	89			

Source: HDR 2022

Measures to Avoid or Minimize Harm

The need to mitigate proposed Project’s operational noise and vibration is not necessary since there are no noise impacts, and because ground-borne vibration is not a concern with buses on-site. This analysis assumes that the majority of the proposed Project-related operational noise would occur indoors.

Construction noise levels are projected to be below the FTA’s recommended construction noise criterion. A detailed assessment of construction noise may be warranted if there are significant

changes to the construction equipment roster or if noise sources are operated for prolonged periods close to receptors.

If impact pile drivers are operated at their upper ranges near the proposed project site boundaries, potential construction vibration levels could approach or exceed FTA construction vibration criteria posing a risk of damage to non-engineered timber and masonry buildings.

At a minimum, DDOT would implement the following mitigation measures to minimize the potential noise and vibration impacts during construction:

- DDOT would include noise and vibration performance specifications in construction contract documents that are consistent with City of Detroit ordinances.
- Construction contractors would be required to develop a construction noise and vibration management plan. If there are significant changes to the construction equipment roster or if vibration sources are operated for prolonged periods close to receptor buildings, DDOT would require contractors to prepare a detailed construction noise and vibration assessment. The noise and vibration management plan may be a singular plan or it may be included in a larger environmental management plan for the construction project. At a minimum, the plan would include the following:
 - › Identification of the proposed Project's noise and vibration control objectives and potential components;
 - › Summary of noise and vibration-related criteria and local ordinances for construction contractors to abide by;
 - › Requirement of a pre-construction survey to identify receptors potentially affected by construction noise and vibration and documentation of the pre-construction conditions of particularly susceptible receptors;
 - › List of potential mitigation measures, a plan to implement mitigation, and an approach for deciding the appropriateness of mitigation by construction activity and receptor;
 - › Identification of methods to minimize noise impacts on adjacent noise-sensitive stakeholders while maintaining construction progress; and
 - › Plans for coordination with affected Project stakeholders to minimize intrusive construction effects;
 - › Process to handle and resolve any noise or vibration-related complaints.

Appendix F contains the noise and vibration analysis.

4.2.13 Construction Impacts

Temporary impacts to resources from construction activities are detailed in their respective sections of this EA. In addition, direct emissions are anticipated from off-road construction equipment and fugitive dust from site preparation, land clearing, material handling and demolition activities as well as indirect emissions from on-road vehicles associated with truck deliveries, commuting contractors, etc. The proposed Project would refer to the US Environmental Protection Agency's (USEPA) Construction Control Checklist and other USEPA guidance for best practices to control dust and particulate matter during construction. Consultation with EGLE would occur to determine if air quality modeling is required for the

proposed Project's construction phase and what methodologies and assumptions would be used if modeling is required. Information on the best practices to be implemented to control temporary construction-related air quality will be shared with the public prior to and during construction.

With regards to water quality, DDOT would obtain a National Pollutant Discharge Elimination System (NPDES) permit from the EGLE Water Resources Division for stormwater runoff.

4.2.14 Indirect and Cumulative Effects

Legal/Regulatory Context and Methodology

Indirect effects are defined by the Council on Environmental Quality as follows:

“Effects” include: (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts, as used in these regulations, are synonymous (40 CFR § 1508.8) (1978).

Cumulative impacts are defined as follows:

“Cumulative impact” is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR § 1508.7) (1978).

Additional guidance for this analysis comes from Considering Cumulative Effects under the National Environmental Policy Act (CEQ, 1997), Guidance on the Consideration of Past Actions in Cumulative Effects Analysis (CEQ, 1995), and National Cooperative Highway Research Project Report 466, Desk Reference for Estimating the Indirect Effects of Transportation Projects (TRB, 2002).

Existing Conditions

Present and reasonably foreseeable future projects are identified in Table 11, including both public and private development projects. The Southeast Michigan Council of Governments (SEMCOG) Transportation Improvement Program FY 2020-2023 was consulted for planned and programmed transportation projects within 0.5-mile of the project site.

The Detroit Economic Growth Corporation (DEGC) is a private, non-profit corporation established in 1978 devoted exclusively to supporting Detroit's economic development initiatives. Over the years, Downtown Detroit has gone through a major transformation in efforts to revive the City after it declared bankruptcy in 2013. DEGC's mission is to “design and implement innovative solutions that attract investment, create jobs and advanced Detroit's economy for all residents.” The DEGC 2020 Impact Report was consulted for major projects that have been recently completed or are planned in the Detroit area.

Table 11: Present and Reasonably Foreseeable Future Projects

Action	Sponsor	Description	Timing	Potential Impacts (including Construction)
New auto part manufacturer	Dakkota Integrated Systems	\$40m investment; 300,000 s.f. plant. Northeast of downtown Detroit	Completed	400+ new jobs; land use changes; land acquisition; hazardous waste/brownfields; environmental justice
New auto part manufacturer	Tibernia Group	\$19m investment; 10 acres of land; Repurposing of former American Axle Detroit Complex; 75,000 s.f. hot stamping facility in Detroit's Russell Industrial Neighborhood. North of downtown Detroit	Completed	60+ new jobs; land use changes; land acquisition; cultural resources; hazardous waste/brownfields; environmental justice
Little Caesars Arena	Detroit Red Wings and Detroit Pistons	New professional hockey/basketball arena in downtown Detroit	2017	Traffic, visual resources
New automobile manufacturing site and retooling of Jefferson North Assembly Plant	Fiat-Chrysler Automobiles	Total investment of \$2.5 billion; 200 contiguous acres of land. FCA committed to a Community Benefits Agreement giving \$14m in support for neighborhood improvements, housing, workforce development & environmental initiatives; Northeast of downtown Detroit	2019	15,000 new jobs; land use changes; land acquisition; hazardous waste/brownfields; environmental justice
M-8, Rosa Parks Boulevard to Oakland Ave.	MDOT	Pavement repairs	2020	Traffic, environmental justice
Hamilton Ave bike lanes	Highland Park	Webb road to McNichols Road.	2020	Traffic
Burt Road, Chicago Ave to M-5	Detroit	Pavement	2021	Traffic, environmental justice

Action	Sponsor	Description	Timing	Potential Impacts (including Construction)
I-94 Modernization, Wayne County	MDOT	Reconstruct the I-94 freeway in Detroit from east of the I-96/I-94 interchange to east of Conner Avenue. Includes 67 bridges and two major interchanges at M-10 (Lodge) and I-75 (Chrysler) freeways.	2021	Traffic; visual resources; environmental justice
Hubbell Street, Fenkell Ave to Seven Mile Rd	Detroit	Pavement	2021	Traffic, environmental justice
TCF Bank Headquarters	TCF Bank	Brownfield redevelopment of former Michigan Mutual Liability Annex; \$100m investment of new 20-story building with retail, office, parking.	2022	new jobs; cultural resources; hazardous waste/brownfields;
Oakland Avenue	Highland Park	Pavement	Under construction	Traffic, environmental justice
M-10, McNichols to I-94	MDOT	Pavement	Under construction	Traffic, environmental justice
State Fairgrounds New Transit Center (and Amazon distribution center)	City of Detroit	Transformation of 142-acre Michigan State Fairgrounds site, including new Amazon facility and \$18.6m DDOT transit center.	Under construction	1200+ new jobs; transportation/traffic; land use/zoning changes; land acquisition; visual resources; cultural resources; hazardous waste; air quality; noise; environmental justice
New Ford Motor Company headquarters	Ford Motor Company	In 2018, Ford purchased the Michigan Central Depot for repurposing its headquarters.	Under construction	Traffic, visual, cultural resources

Action	Sponsor	Description	Timing	Potential Impacts (including Construction)
Intelligent Woodward Corridor Project	Michigan DOT (MDOT)	Network will support autonomous and connected vehicles, and transit agencies that operate on the corridor, including DDOT. One component of the project is transit signal prioritization (TSP), which modifies traffic signals when transit vehicles are present.	Grant received in 2019; in progress	Traffic; air quality
Hudson's Site	Various	Brownfield redevelopment at lower Woodward Avenue in downtown Detroit; mixed use development with 600,000 s.f. of retail, office, public space, and residential/hotel tower.	Under construction 2017-2024	new jobs; hazardous waste/brownfields; visual resources
Addition of pilot electric buses	DDOT	Addition of 4 electric buses to DDOT's fleet, including bicycle racks.	On-going	Air quality
Expansion of clean diesel coach fleet	DDOT	Addition of 28 new cleaner diesel-engine coaches, including bicycle racks.	2022/2023	Air quality
M-39	MDOT	Plymouth Road to Ford Road pavement reconstruction.	2024	Traffic, environmental justice
I-96 Bridges	MDOT	Repairs to several bridges, including those at M-39, Hubbell Ave, Fullerton Ave and Schaefer Ave.	2024	Traffic, environmental justice
M-39	MDOT	Six bridges over M-39 from McNichols Road to Plymouth Road.	2025	Traffic, environmental justice
Joe Louis Greenway	City of Detroit, DEGC	27.5-mile multi-use path creating access to the riverfront from 8 Mile Rd. Links 186 miles of existing bike lanes.	TBD	Visual resources

Action	Sponsor	Description	Timing	Potential Impacts (including Construction)
Osi Art Apartments @ West End	DEGC, Michigan Economic Development Corp. (MEDC)	Mixed-use development at Grand River's West end Gallery district. \$6.6m for 30 apartments, half of which are slated as affordable units.	TBD	Land use; hazardous waste/brownfields; cultural resources
Autonomous vehicle technology facility	Waymo	\$14m investment; Repurposing of former American Axle Detroit Complex; 200,000 s.f. autonomous vehicle technology facility in Detroit's Russell Industrial Neighborhood. North of downtown Detroit.	TBD	400+ new jobs; land use changes; land acquisition; cultural resources; hazardous waste/brownfields; environmental justice

Environmental Impacts

Indirect and cumulative effects of the present and reasonably foreseeable projects are summarized in Table 12.

Table 12: Indirect and Cumulative Impacts

Resource Area	Indirect Effects	Cumulative Impacts
Transportation	None expected; Level of Service is anticipated to remain at acceptable levels.	Localized increase in traffic during and after construction. Mitigations required for transportation projects would be implemented.
Land Use	Induced development due to the proposed Project is not expected. As it relates to changes in the pattern of land use, population density or growth rate, the DLBA would re-zone the adjacent residential parcels to industrial, consistent with the Land Use Plan.	Positive impact of brownfield redevelopment. Land use changes due to transformation of land uses may occur but would be subject to zoning approvals.
Neighborhoods and Communities	Positive impact due to the removal of some contaminated soils from the site, the implementation of the approved SWMP, active management of the soils left onsite through the Due Care Plan, and replacement of blighted property with aesthetically pleasing new buildings and landscaping.	Positive impact on development and community resources; more efficient delivery of transit services across the City.
Economics	Positive impact due to improved energy efficiency at the new Coolidge Terminal.	Positive impact from new development and additional jobs that have or would be created; land values likely to increase.
Visual Resources and Aesthetics	Positive impact due to the replacement of blighted property with aesthetically pleasing new buildings and landscaping.	Positive impact of re-use of older buildings and construction of new buildings to replace blighted properties.
Cultural Resources	No indirect effects would occur.	Potential for redevelopment projects to impact older buildings that may be historic properties pursuant to the NHPA.

Resource Area	Indirect Effects	Cumulative Impacts
Environmental Justice	<p>As it “relates to induced changes in the pattern of land use, population density or growth rate,” the proposed Project is not expected to induce development; however, it would require re-zoning of vacant residential parcels to industrial, consistent with the Land Use Plan.</p> <p>As it relates to the loss of a historic property, the proposed Project would not have indirect effects.</p> <p>With respect to hazardous materials, the proposed Project would indirectly benefit EJ populations through the removal of some contaminated soils, as well as the implementation of the approved, active management of the soils left onsite through the Due Care Plan.</p> <p>There would be positive indirect visual benefits to EJ populations in the surrounding community by removing blighted property.</p> <p>The procurement of the construction of the proposed Project has a DBE goal of 30%, which would benefit minority businesses.</p> <p>The new Coolidge Terminal would enhance working conditions for DDOT maintenance workers, mechanics, administrative staff, and bus drivers, many of whom are native Detroiters. Detroit residents may also receive preference points for certain DDOT employment opportunities.</p>	<p>The City of Detroit has programs in place that provide incentives for Detroit-based companies with native-Detroit workers. The DBA adheres to the City of Detroit’s Executive Orders for publicly funded construction projects, although it does not include federally funded projects.</p> <p>Executive Order 2021-02 – Utilization of Detroit Residents on Publicly-Funded Construction and Demolition/Rehab Projects (51% Detroiters working on publicly funded projects)</p> <p>Additionally, the DBA participates in several of the City of Detroit’s OCP vendor and contractor outreach events that are designed to identify new potential vendors. Many of these are targeted to minority businesses.</p> <p>There would be no potentially adverse impacts to EJ populations as a cumulative result of the proposed Project and reasonable and foreseeable projects.</p>
Safety and Security	Positive impact on safety and security because of increased activity and human presence.	Positive impact on safety and security because of increased activity and human presence.
Utilities	None expected	None expected
Water Resources	None expected.	None expected

Resource Area	Indirect Effects	Cumulative Impacts
Hazardous Materials, Geology, Groundwater, and Soils	Positive impact with the removal of hazardous materials from site and the implementation of the Due Care Plan.	Positive impact with the removal of hazardous materials and brownfield redevelopment.
Noise and Vibration	Temporary minor impacts during construction.	Temporary minor impacts during construction.
Air Quality	Temporary minor impacts during construction; proposed Project provides ability to better service and maintain new electric and clean diesel buses.	Temporary minor impacts during construction.
Biological Resources	None expected.	None expected.
Construction Impacts	Minor temporary increase in traffic, dust, noise, and vibration.	Temporary localized increase in traffic, dust, noise, vibration.

4.2.15 Environmental Resources of No Concern

Based on agency and stakeholder coordination, database searches, site visits and analysis, the following resources were not found within the study area or were determined to have no or negligible effects for the Build Alternative:

- *Surface Waters* – No surface waters are present within the project site or nearby, therefore, there would be no impacts and no further discussion in this analysis.
- *Floodplain Management* – Under Executive Order (EO) 11988, Executive Order 13690, and U.S. DOT Order 5650.2, Floodplain Management and Protection - The project site is within Zone X, Area of Minimal Flood Hazard. There would be no impacts and no further discussion in this analysis.
- *Wetlands* – Under EO 11990 Protection of Wetlands of 1977 – There are no wetlands in the project site, therefore, there would be no impacts and no further discussion in this analysis.
- *Navigable Waterways* – Under Section 10 of the Rivers and Harbors Act (RHA) of 1899 - There are no navigable waterways in or near the project site, therefore, there would be no impacts and no further discussion in this analysis.
- *Coastal Zones* – Per the Coastal Zone Management Act (CZMA) of 1972 - The project site is not within a coastal zone. There would be no impacts or potential conflict with the Coastal Zone Management Act, therefore, there is further discussion in this analysis.
- *Unique Farmlands* – Under the Farmland Protection Policy Act (FPPA) of 1981 - The project site is a developed, urbanized area and no Prime or Unique farmlands are present. There would be no impacts or potential conflict with the Farmland Protection Policy Act, therefore, there is no further discussion in this analysis.
- *Air Quality* – Under the Clean Air Act Section 176(c) (42 U.S.C. 7506(c)) and the conformity process under 40CFR Part 93 - The proposed Project is included in the FY 2020-2023

Transportation Improvement Program approved by SEMCOG on July 25, 2019, as well as the 2045 Long Range Transportation Plan. As this is not a capacity-adding project, this Project is exempt under *40 CFR Part 93.126, mass transit projects reconstruction or renovation of transit buildings and structures*; Therefore, there are no impacts and no further analysis. As discussed in Section 4.2.13, the proposed Project would refer to the USEPA’s Construction Control Checklist and other USEPA guidance for best practices to control dust and particulate matter during construction. Consultation with EGLE would occur to determine if air quality modeling is required for the proposed Project’s construction phase and what methodologies and assumptions would be used if modeling is required. Information on the best practices to be implemented to control temporary construction-related air quality will be shared with the public prior to and during construction.

- *Section 6(f) Resources* – Under the Land and Water Conservation Act (LWCA) of 1965 – There are no Section 6(f) resources in the project site, therefore, there would be no impacts and no further discussion in this analysis.
- *Ecologically Sensitive Areas and Threatened or Endangered Species* – Due to the urban nature and current industrial use of the site, suitable habitat is not present within or near the proposed Project. Therefore, there would be no adverse impacts to endangered species or ecologically sensitive areas, and no further discussion in this analysis. The federally listed species in Wayne County are included for reference in Appendix G.

4.2.16 Environmental Permits, Commitments and Mitigation Measures

This section summarizes the environmental permits, commitments and mitigation that must occur to mitigate for permanent or temporary impacts from the proposed Project.

Table 13: Permits and Approvals Required

Agency	Permit/Approval
City of Detroit	Building permit, Zoning change approval, approval of plans related to handling of contaminated materials, street vacations, and stormwater
Michigan Dept. of EGLE – Water Resources Division	NPDES permit
Michigan SHPO	Section 106, Section 4(f)
Department of the Interior	Section 4(f)

Table 14: Summary of Commitments and Mitigation Measures for the Project

Resource Areas	Permits, Commitments and Mitigation Measures
<p>Transportation Safety & Security</p>	<p>Both the employee and bus driveways from the facility to Schaefer Highway will operate as stop-controlled approaches to Schaefer Highway for Phase I of the proposed Project. DDOT will continue to monitor both intersections for indications that alternative control may be needed.</p> <p>Prior to construction, a Traffic Control Plan (TCP) would be developed and implemented during construction to manage vehicular and pedestrian circulation and access within and near the construction zone to minimize temporary traffic impacts. Both vehicular and pedestrian access to businesses and residences would be maintained during construction. DDOT would prohibit construction vehicles from using residential streets to access the site. During operation of the Coolidge Terminal facility, buses and all other vehicles will access the site on the west side via Schaefer Highway.</p> <p>After construction is complete and buses are moved to Coolidge, DDOT will determine if there are route or schedule changes as result of the move. If there are changes that would affect riders, DDOT will inform the public using various outreach techniques.</p>
<p>Land Use & Zoning</p>	<p>DLBA will apply for rezoning of the adjacent residential parcels to industrial prior to transferring the parcels to DDOT for the proposed Project. DDOT, DBA and DBLA will comply with the City’s zoning process and requirements.</p>
<p>Neighborhoods Community Resources</p>	<p>Before construction, DDOT would communicate with neighborhoods and businesses to prepare for construction. In addition to mitigation outlined in other sections, DDOT would manage construction stages with the contractor as required to maintain access and provide alternate access to businesses and residences, if necessary. During construction, the Project contractor would implement construction best management practices (BMP) including:</p> <ul style="list-style-type: none"> • maintenance of traffic and access to businesses; • erosion and dust control; • maintenance of equipment; and • noise and vibration monitoring. <p>DDOT would work with the City of Detroit and emergency response providers to ensure safe mobility would be maintained within and near the project site, including reasonable traffic plans, safe pedestrian-friendly crossings, and accessibility to businesses and residential streets.</p>
<p>Cultural Resources</p>	<p>The stipulations contained within the Memorandum of Agreement (MOA) between FTA and SHPO to mitigate the adverse effects on historic properties resulting from the proposed Project would be implemented with the assistance of DDOT.</p>

Resource Areas	Permits, Commitments and Mitigation Measures
Environmental Justice	<p>All impacts from the proposed Project are being mitigated.</p> <p>DDOT has implemented an outreach program with community input meetings, Project meetings, block club and City councilmember staff-coordinated meetings, door to door canvassing and visiting local places of worship to solicit public comments and ideas, identify circumstances and impacts that may not have been known or anticipated, and building the support of public stakeholders in transportation investments that impact their communities. DDOT identified and reached out to key stakeholders that represent the community, including those in the area where the proposed Project is located. This outreach will continue through the end of the NEPA process, as well as during construction.</p>
Utilities	<p>DDOT would coordinate with utilities during final design to minimize utility conflicts and determine utilities requiring relocation. Utility agreements would be developed to determine relocation criteria and access protocols for facilities that remain in place during and after construction.</p>

Resource Areas	Permits, Commitments and Mitigation Measures
<p>Hazardous Materials</p>	<p><i>Demolition and Site Clearing</i> Plans and specifications would require:</p> <ul style="list-style-type: none"> • A State of Michigan Accredited Asbestos Inspector to complete an asbestos survey of the former Fare Box Building and tunnel • Abatement of regulated ACMs prior to demolition • All universal wastes be removed prior to demolition • Removal, handling, transport, and proper disposal of all materials in accordance with local, state, and federal guidelines <p><i>Soil and Water Management Plan (SWMP)</i> DDOT would prepare a SWMP to address the on-site management and/or proper removal, verification sampling, waste characterization sampling, handling and disposal requirements associated with the excavation of known and or potentially contaminated soils and groundwater during the demolition and site clearing activities and then all subsequent construction operations associated with the new Coolidge Terminal. The SMWP would be incorporated into specifications and contract documents that would be provided to all parties who perform work at the site and would specify policies and procedures to be followed during site work.</p> <p>Contractors working on-site shall be required to develop a Health and Safety Plan (HASP) to address potential exposure to contaminants that may be encountered during construction and excavation activities associated with each component of the Project.</p> <p>The Contractor would be responsible for hiring an independent third-party Environmental Professional who would be responsible for overseeing the implementation of the SWMP. DDOT and their consultants/on-site representatives shall be responsible for overseeing the performance of the SWMP.</p> <p><i>Due Care Plan</i> DDOT and/or its consultants would prepare a Due Care Plan for the new Coolidge Terminal, in accordance with Section 20107a of Part 201 of NREPA, 1994 P.A. 451, as amended. This Plan would be reviewed and approved by the City of Detroit BSEED and would outline how the proposed activities at the new Coolidge Terminal would satisfy the requirements of NREPA and associated administrative rules.</p>

Resource Areas	Permits, Commitments and Mitigation Measures
Noise & Vibration	<p>DDOT would include noise and vibration performance specifications in construction contract documents that are consistent with City of Detroit ordinances. Construction contractors would be required to develop a construction noise and vibration management plan. If there are significant changes to the construction equipment roster or if vibration sources are operated for prolonged periods close to receptor buildings, DDOT would require contractors to prepare a detailed construction noise and vibration assessment. The noise and vibration management plan may be a standalone plan or it may be included in a larger environmental management plan for the construction project. At a minimum, the plan would include the following:</p> <ul style="list-style-type: none"> • Identification of the proposed Project's noise and vibration control objectives and potential components; • Summary of noise and vibration-related criteria and local ordinances for construction contractors to abide by; • Requirement of a pre-construction survey to identify receptors potentially affected by construction noise and vibration and documentation of the pre-construction conditions of particularly susceptible receptors; • List of potential mitigation measures, a plan to implement mitigation, and an approach for deciding the appropriateness of mitigation by construction activity and receptor; • Identification of methods to minimize noise impacts on adjacent noise-sensitive stakeholders while maintaining construction progress; • Plans for coordination with affected Project stakeholders to minimize intrusive construction effects; and • Process to handle and resolve any noise or vibration-related complaints.
Construction Impacts	<p>DDOT would consult EGLE to determine if air quality modeling is required for the Project's construction phase and what methodologies and assumptions would be used if modeling is required.</p> <p>DDOT would direct the contractor to follow U.S. EPA's Construction Emissions Control Checklist and other USEPA guidance for best practices to control dust and particulate matter during construction. Information on the best practices to be implemented to control temporary construction-related air quality will be shared with the public prior to and during construction.</p> <p>Prior to construction, an application for a general permit for construction activities under the National Pollutant Discharge Elimination System (NPDES) would be prepared. As part of the permit application to the City of Detroit, a detailed Stormwater Pollution Prevention Plan (SWPPP) would be prepared to control stormwater runoff and erosion at construction sites.</p>

5. Section 4(f) Evaluation

Section 4(f) of the U.S.DOT of 1966 establishes requirements for U.S.DOT consideration of publicly owned parks/recreational areas that are accessible to the general public, publicly owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects (49 USC § 303, 23 CFR Part 774). Section 4(f) prohibits use of these resources for transportation projects unless: (1) it is proven that there is no feasible and prudent alternative to the use and the action includes all possible planning to minimize harm; or (2) the agency determines that the use of the property, including any measure(s) to minimize harm, will have a *de minimis* impact on the property (23 CFR § 774.17).

This law, commonly known as Section 4(f), is now codified in 49 USC § 303, and is implemented by the Federal Transit Administration (FTA) through 23 CFR Part 774. Additional guidance on the implementation of Section 4(f) may be found in U.S.DOT Federal Highway Administration's (FHWA) Section 4(f) Policy Paper (FHWA 2012). The FTA has formally adopted this guidance, and this analysis was conducted consistent with the guidance.

FTA determined that the proposed Project would not use any public parklands, recreational areas, or wildlife and waterfowl refuges that are afforded protection by Section 4(f).

Through Section 106 consultation that was undertaken for the proposed Project, FTA identified NRHP-eligible historic properties within the Project's Area of Potential Effect (APE) that are also afforded protection under Section 4(f).

5.1 Supporting Information

Section 2 of the EA presents the purpose of, and need for, the proposed Project. Section 3 of the EA discusses the alternatives that were considered. Section 4.2.7 and Appendix D discuss historic sites that are afforded protection under Section 4(f).

This Section 4(f) evaluation also relies upon correspondence contained in Appendix D of the EA from the SHPO, which is the Official with Jurisdiction (OWJ) for the historic site found to have a Section 4(f) use in this evaluation.

5.2 Legal/Regulatory Framework

Section 4(f) protects specific resources of federal, state, or local significance that are proposed to be used for a transportation project. The term "use" in the Section 4(f) context is defined in 23 CFR § 774.17. There are three types of Section 4(f) resource uses:

- 1) Permanent Incorporation – A permanent incorporation of a Section 4(f) resource occurs when a resource is permanently removed or integrated into a proposed transportation project. This incorporation may occur as a result of partial or full acquisition, permanent easement, or temporary easement.
- 2) Temporary Occupancy – A temporary occupancy of a Section 4(f) resource occurs when there is a short-term use of a resource. Under 23 CFR § 774.13, a temporary occupancy

of a resource does not constitute a use of a Section 4(f) resource when all the following conditions are satisfied:

- a. The duration of use would be temporary (that is, less than the time needed for construction of the project), and there would be no change in ownership of land.
 - b. The scope of work would be minor (that is, both the nature and magnitude of the changes to the Section 4(f) resource would be minimal).
 - c. There would be no anticipated permanent adverse physical impacts, nor would there be interference with the protected activities, features, or attributes of the resource, on either a temporary or a permanent basis. The land being used would be fully restored to a condition that is at least as good as that which existed before the project.
 - d. There is documented agreement among appropriate federal, state, and local official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.
- 3) Constructive Use – A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the proximity of the project results in impacts (for example, noise, vibration, visual impacts, or property access) that substantially impair the activities, features, or attributes that qualify a resource for Section 4(f) protection. Factors for assessing substantial diminishment are provided in 23 CFR § 774.15.

Before approving a project that uses a Section 4(f) resource, FTA must either determine that the impacts are *de minimis* or undertake an individual Section 4(f) evaluation to determine that there is no feasible and prudent avoidance alternative to that use, and that all measures to minimize harm to the resource have been undertaken as defined at 23 CFR § 774.17. A *de minimis* impact for historic sites means that FTA has determined, in accordance with 36 CFR Part 800, that either no historic property would be affected by the project or that the project would have “no adverse effect” on the historic property.

As the proposed Project requires the permanent incorporation of a Section 4(f) resource through the demolition of the historic Coolidge Terminal, FTA has determined that an individual Section 4(f) evaluation is required.

5.3 Organization of this Section 4(f) Evaluation

This Section 4(f) evaluation considers Section 4(f) resources in accordance with all applicable regulations and guidance referenced in the previous sections and the EA, and the sections are organized to follow the major analysis processes in FTA and FHWA’s Section 4(f) Policy Paper. Each section provides appropriate citations, definitions, and evaluation criteria for each of these steps:

- Section 5.4 – Identification of Section 4(f) Resources
- Section 5.5 – Assessment of Use of Section 4(f) Resources
- Section 5.6 – Avoidance Alternatives Analysis
- Section 5.7 – Least Overall Harm Analysis

- Section 5.8 – All Possible Planning to Minimize Harm
- Section 5.9 – Consultation and Coordination with Official with Jurisdiction
- Section 5.10 –Section 4(f) Determination Conclusion

5.4 Identification of Section 4(f) Resources

The proposed Project is located in the City of Detroit on Schaefer Highway, north of I-96. There are no public parklands, recreational areas, or wildlife and waterfowl refuges that will be used by the Project; however, there are two individual historic properties in the proposed Project’s APE. See Table 15 and Figure 28.

Table 15: Summary of Historic Properties and Section 4(f) Use

Name	Address	Status	Assessment of Effect	Section 4(f) Use?
O.H. Frisbie Moving & Storage	14225 Schaefer Highway	Eligible for Listing in NHRP, Criteria A and B	No Adverse Effect	No
Coolidge Terminal	14404 Schaefer Highway	Eligible for Listing in NHRP, Criterion A	Adverse Effect	Yes

5.5 Assessment of Use of Section 4(f) Resource

There is no adverse effect to the O.H. Frisbie Moving and Storage building, and therefore, there would be no “use” under Section 4(f).

The Coolidge Terminal is eligible for listing in the NRHP under Criterion A for its role in the history of Detroit’s public transportation. The property has a period of significance spanning from 1948 to 1960, to encompass original construction of the terminal complex and construction of the last historic-age resource on the property, the Dispatch House. Developed on the site of the DSR’s original Coolidge streetcar barn, the complex constituted a reconstruction of the original 1928 facilities.

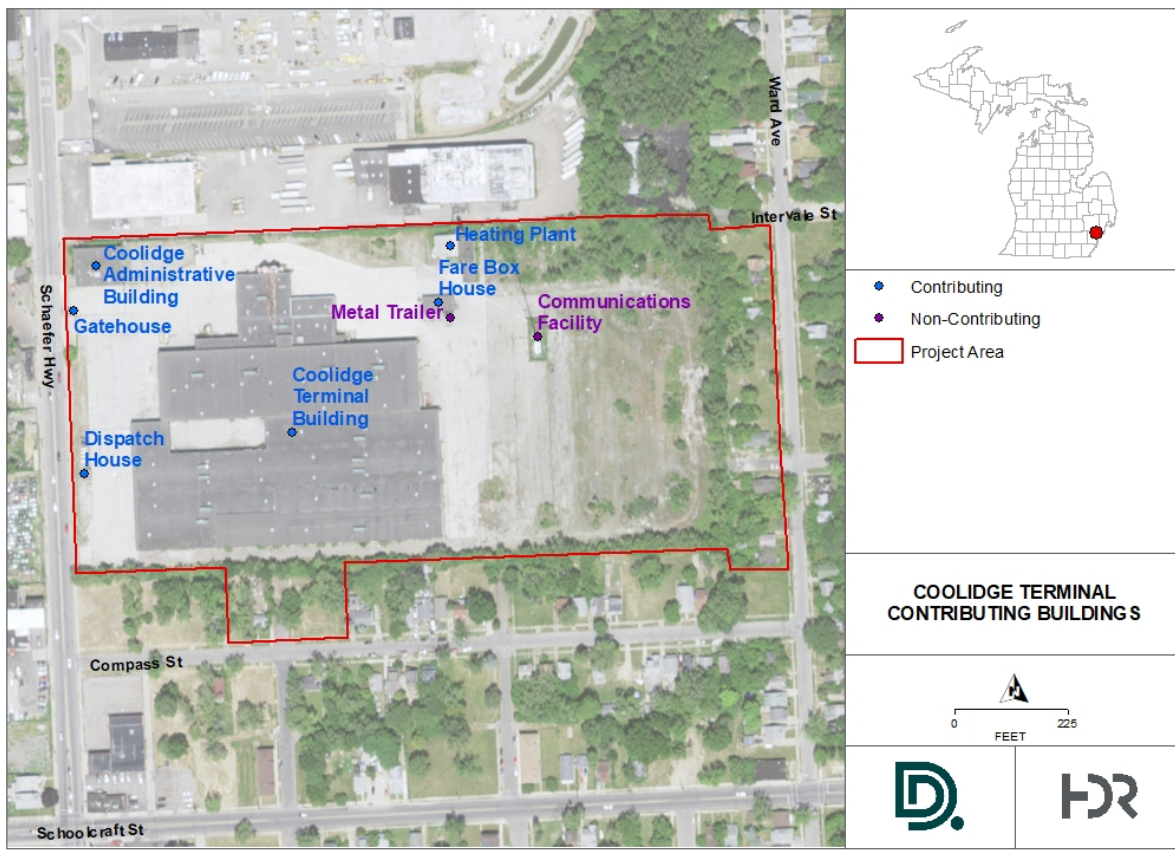
All the buildings on the site, except for the communications tower and associated sheds and the metal trailer associated with the Fare Box House, are contributing resources to the NRHP-eligible property.

The proposed Project will entail complete demolition of all extant buildings on the Coolidge Terminal property. The proposed plans will result in the complete loss of a historic property, effectively rendering the property no longer eligible for listing in the NRHP. Therefore, the proposed Project will result in an **adverse effect** under Section 106 to the Coolidge Terminal. The demolition of the Coolidge Terminal is a permanent incorporation of the property into the Project. **As such this adverse effect constitutes a “use” under Section 4(f).**

Figure 28: Historic Properties and Section 4(f) Use



Figure 29: Coolidge Terminal Contributing and Non-Contributing Buildings



5.6 Avoidance Alternatives Analysis

Under Section 4(f), the use of historic sites for transportation purposes may only occur if no feasible and prudent avoidance alternative to such use exists and if the project includes all possible planning to minimize harm to resources from such use (23 CFR § 774.3). A feasible and prudent avoidance alternative, as defined in 23 CFR § 774.17, avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property. In assessing the importance of protecting the Section 4(f) property, the relative value of the resource to the preservation purpose of the statute is considered.

Per the statute, an alternative is not feasible if it cannot be built as a matter of sound engineering judgment. An alternative is not prudent if:

- (i) It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- (ii) It results in unacceptable safety or operational problems;

- (iii) After reasonable mitigation, it still causes:
 - (A) Severe social, economic, or environmental impacts;
 - (B) Severe disruption to established communities;
 - (C) Severe disproportionate impacts to minority or low income populations; or
 - (D) Severe impacts to environmental resources protected under other Federal statutes;
- (iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- (v) It causes other unique problems or unusual factors; or
- (vi) It involves multiple factors in paragraphs (3)(i) through (3)(v) of this definition, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

DDOT identified and evaluated the feasibility and prudence of potential avoidance alternatives to the use of the Coolidge Terminal.

DDOT began studying different alternatives at the Coolidge Terminal site as far back as 2019. Workshops were held with various DDOT departments to examine DDOT's overall goal to move the existing 143-bus operations and maintenance facility functions currently performed at Gilbert Terminal to the Coolidge Terminal site. DDOT and its design team undertook a facilities master planning effort in 2021 that assessed and considered the physical condition of the four DDOT terminals (inclusive of the Coolidge Terminal even though it is currently not operational).

Staff from DDOT's Maintenance, Operations and Administration departments identified the space and programming needs and functional requirements that needed to be met with any improved facility at the Coolidge site. Of primary importance was that any new or improved facility must have enough space to store and maintain at least 143 buses in the near term and be able to expand to up to 216 buses in the longer term. Knowing that the Coolidge Terminal complex was considered eligible for listing on the National Register of Historic Places, alternatives that re-used some or all of the existing buildings were considered.

DDOT worked with the design team to develop concepts that included re-use of the existing Coolidge Terminal buildings (or at least some of them), as well as building an all-new facility.

DDOT and the design team evaluated the pros and cons of various alternatives. The factors used in this analysis were weighted fairly equally (10 to 15 percent for each) and included the ability to re-use buildings; ability to expand in the future; site circulation; efficiency of layout; adjacency of functional uses; scheduling of maintenance activities; cross circulation; safety and security; and snow removal. See Appendix A for further information.

5.6.1 No Build Alternative

The No Build Alternative would not meet the proposed Project's purpose and need because it would not improve transit operations or accommodate current and evolving fleet needs. Additionally, DDOT has determined that due to the current state of disrepair, deterioration, and vacancy of the Coolidge Terminal buildings, it will be demolished even under the No Build Alternative. The No Build Alternative is feasible but not prudent because it does not meet the stated purpose and need and does not avoid the use of the historic site.

5.6.2 Build Alternatives

Re-use of Existing Coolidge Buildings

DDOT examined the feasibility of reusing the existing Coolidge Terminal buildings to meet the purpose and need of the proposed Project. The location and configuration of the existing buildings on the site do not allow enough space to support the programming needs of a 216-bus program in terms of capacity and would not achieve the functional and operational layout that is needed to accommodate current and future vehicles and equipment with optimal bus circulation.

Further, the physical condition assessment conducted as part of the facility master planning effort in 2021 revealed many structural issues, damage, and deterioration from the 2011 fire and ensuing vacancy, and violations of Americans with Disabilities Act of 1990 (ADA)-compliance and local fire code requirements. Based on the inability to meet the space and programming needs, the inability to expand, and the current condition of the buildings, DDOT determined this alternative would not meet the purpose and need for the proposed Project. This alternative is feasible but is not prudent because it would compromise the Project to a degree that it is unreasonable to proceed with the Project in light of its stated purpose and need and it results in unacceptable safety or operational problems.

Hybrid of Constructing New Buildings and Re-use of Existing Buildings

DDOT further evaluated options that would re-use or renovate some of the buildings including the Coach Services/Maintenance/Bus Storage building and the Operations Building, supplemented with new building construction.

While this alternative could better meet the space needs required to support 216 buses, other factors such as circulation, adjacency of functional uses, scheduling of maintenance activities, and cross circulation were not met. This alternative is feasible but is not prudent because it would compromise the proposed Project to a degree that it is unreasonable to proceed with the proposed Project in light of its stated purpose and need; and it results in unacceptable safety or operational problems.

Full Replacement of Coolidge Terminal

After concluding that it was not prudent to salvage and/or reuse any of the existing buildings in order to meet the purpose and need, DDOT considered the full replacement of the Coolidge Terminal with an entirely new facility. DDOT developed several conceptual site layouts for a single terminal at the existing Coolidge site that could accommodate the 216-bus program. Based on today's design standards to store and maintain 40' and 60' articulated buses, DDOT's

current operational needs, and infrastructure for a future alternative fuel fleet, DDOT determined that one single site must be able to ultimately serve 216 buses.

Given the amount of funding available for the proposed Project, and the immediate need to move 143 buses out of Gilbert Terminal, DDOT decided to phase the construction of the proposed Project. This phased approach allows DDOT to close and decommission Gilbert Terminal upon completion of construction and provides the ability to expand the new Coolidge facility to accommodate the equivalent of 216 buses (36 60' articulated buses and 162 standard 40' buses) in the future, which is DDOT's projected fleet need.

In the first phase of the proposed Project, the new Coolidge Terminal would accommodate 144 buses. This facility would need 408 employees for 24 hour-operations, nearly 80 percent of them being bus operators. In the second phase, 671 employees would be needed for a 216-bus operation. The facility and site must be able to accommodate this level of operation and three shift changes over a 24-hour period.

The future expansion in the second phase would be accomplished by adding future bays to the main facility when the demand warrants, adding more employee parking, interior modifications to accommodate the additional employees and expanding ancillary buildings to store more parts where additional functions for non-revenue vehicles can be performed.

The proposed facility consists of three separate buildings with interdependent programs: Operations, Bus Storage, and Fleet Maintenance. The three buildings are configured to integrate with and support the primary on-site bus circulation while providing functional adjacencies to one another. Other site improvements include the utility yard, stormwater management, perimeter fencing and landscaping, and improvements to Schaefer Highway to the west of the site.

This alternative is feasible and prudent.

Only the Build Alternative, which is full replacement of the Coolidge Terminal, is both feasible and prudent. There are no feasible and prudent avoidance alternatives.

5.7 Least Overall Harm Analysis

Since there is no feasible and prudent avoidance alternative, FTA is required to select the alternative that causes the least overall harm considering the preservation purpose of the Section 4(f) statute (23 CFR § 774.3(c)(1)). This selection is accomplished by balancing the seven factors in 23 CFR § 774.3(c)(1), which are described below and used in Table 16 to rank the alternatives by factor.

The least overall harm is determined by balancing the following factors:

- (i) The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property);
- (ii) The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;

- (iii) The relative significance of each Section 4(f) property;
- (iv) The views of the official(s) with jurisdiction over each Section 4(f) property;
- (v) The degree to which each alternative meets the purpose and need for the project;
- (vi) After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
- (vii) Substantial differences in costs among the alternatives.

Table 16: Comparison of Harm Among Build Alternatives (green=least; red=highest)

	Ability to mitigate adverse impacts to 4f properties	Relative severity of remaining harm to 4f properties	Relative significance of each 4f property	Views of OWJ	Meets purpose and need	Magnitude of adverse impacts to non-4f resources	Differences in costs	Least Overall Harm
Re-Use Coolidge Terminal Buildings	Green	Red	Yellow	Green	Red	Yellow	Pink	No
Hybrid Re-Use Coolidge Terminal	Green	Red	Yellow	Yellow	Red	Yellow	Yellow	No
Full Replacement Coolidge Terminal	Green	Red	Yellow	Red	Green	Green	Green	Yes

The full replacement of the Coolidge Terminal causes the least overall harm. The Build Alternative is the only one that can meet the purpose and need of the proposed Project.

5.8 All Possible Planning to Minimize Harm

The FTA has prepared a draft Memorandum of Agreement (MOA) with the SHPO with DDOT as an invited signatory to implement stipulations to mitigate the effect of the Project on historic properties. This is discussed more in Section 4.2.7, as well as in Appendix D. The following treatment measures are included in the draft MOA.

5.8.1 Treatment Measures

- A. Prior to any alterations to or demolition of any individual resource within the NRHP-eligible Coolidge Terminal, the DDOT shall hire a photographer to complete large-format photography in support of the Historic American Building Survey (HABS) Documentation Level II for the Coolidge Terminal. Pursuant to 36 C.F.R. Part 61 (the “Standards”), the DDOT shall hire a Secretary of the Interior (SOI)-qualified professional in history or architectural history to complete the HABS documentation. This documentation will adhere to the standards set forth in the *Historic American Buildings Survey Guidelines for Historical Reports*. The DDOT shall provide the FTA with a draft copy of the documentation for its review and comment. Once any comments provided by the FTA are addressed, FTA will submit the documentation to SHPO for their review and comment. The SHPO shall have 30 calendar days to review and comment on the draft HABS documentation. The DDOT and its SOI-qualified professional shall address the SHPO’s comments and finalize the documentation for the submittal of one paper copy and one electronic copy to the SHPO and the Detroit Public Library. The DDOT will coordinate submittal of the final documentation with the FTA. Electronic copies will be provided to the consulting parties at their request.

- B. The DDOT shall prepare an interpretive sign that includes text, photographs, and/or plans focusing on the history and historical significance of the Coolidge Terminal. The interpretive sign will be designed for display adjacent to the Coolidge Terminal on the fence facing Schaefer Highway near the existing bus shelter. Required maintenance in the vicinity of the interpretive sign will be performed by the DDOT as part of their existing groundskeeping services at the Coolidge Terminal and may include general landscaping activities (e.g. mowing grass) and snow removal to maintain the interpretive sign’s visibility. The interpretive sign shall be designed in consultation with an SOI-qualified professional who meets the Standards and who shall assess the content and presentation to ensure that the Coolidge Terminal’s significant historic associations are incorporated. The DDOT shall provide the FTA with the content and plan for the interpretive sign for its review and comment. Once comments provided by the FTA are addressed, FTA will submit the content and plan for the interpretive sign to SHPO for a 30 calendar-day review period prior to finalization. The DDOT and its SOI-qualified professional shall address and incorporate the comments from the SHPO into a final version prior to installation of the interpretive sign.

C. The DDOT shall prepare a 508-compliant webpage or an ArcGIS Story Map on the history and significance of the Coolidge Terminal and its role in Detroit's transit history. The webpage or ArcGIS Story Map will be hosted on the DDOT's public website. The webpage or ArcGIS Story Map will include interactive images, history and other materials related to the Coolidge Terminal. The content of the webpage or ArcGIS Story Map shall be developed in consultation with an SOI-qualified professional who meets the Standards and who shall ensure that the Coolidge Terminal's significant historic associations are incorporated. The DDOT shall provide a draft version of the content and plan to FTA for its review and comment. Once comments from the FTA are addressed, the FTA will submit the draft content and plan to the SHPO who will have 30 calendar days for its review and comments. The DDOT and its SOI-qualified professional shall address and incorporate the comments from the SHPO prior to publication of the webpage or ArcGIS Story Map.

5.8.2 Monitoring and Reporting

Each year on July 1 following the date of the execution of this MOA until it fulfilled, expires, or is terminated, whichever comes first, DDOT would provide FTA and the SHPO with a report detailing the work undertaken throughout the previous year pursuant to the stipulations of this MOA. The report would include a description of tasks undertaken relevant to stipulations within this MOA, scheduling changes, problems encountered, and/or any disputes regarding implementation of these stipulated measures.

5.9 Consultation and Coordination with Official with Jurisdiction

For historic properties, the OWJ is the SHPO. The Coolidge Terminal is owned by DDOT. DDOT has led the planning and design process since the inception of the proposed Project and served as a Section 106 consulting party.

The FTA invited the Michigan SHPO and many other agencies to consult in the Section 106 process for the proposed Project. FTA began consultation with the SHPO and consulting parties in January 2022. SHPO concurred with the APE on February 16, 2022. FTA informed the SHPO and consulting parties that the undertaking would have an adverse effect on one historic property on May 24, 2022, and it was further discussed at the consulting parties meeting on June 22, 2022. The SHPO concurred on June 21, 2022, with this finding.

FTA and SHPO have developed a draft Memorandum of Agreement (MOA) with DDOT as an invited signatory, to mitigate the adverse effect of demolishing the Coolidge Terminal. The draft MOA indicates that consideration was given to alternatives and refinements throughout the project development process that would avoid, minimize, or mitigate impacts to historic properties while meeting the stated Project purpose and need, and that the FTA and the SHPO agree that the undertaking shall be implemented in accordance with the stipulations in order to take into account and mitigate the adverse effect of the Project on historic properties. The Section 106 correspondence is included in Appendix D.

5.10 Section 4(f) Determination Conclusion

The proposed Project would result in the use of one historic property eligible for the NRHP, the Coolidge Terminal. There is no feasible and prudent alternative to the use of the Coolidge Terminal. The proposed Project includes all possible planning to minimize harm to this resource, as demonstrated above.

The Section 4(f) evaluation involved consultation and coordination with agencies and the public. On January 26, 2022, FTA initiated Section 106 consultation with the Michigan SHPO, who is the OWJ. FTA consulted with the Michigan SHPO and other consulting parties as part of the Section 106 process for the Project, including Michigan Department of Transportation, THPO-Pokagon Band, and DDOT. Coordination and consultation with the SHPO and consulting parties continued throughout the Section 106 consultation process. The public was notified of the impacts at the October 27, 2022, public meeting. The public will be notified of the Section 4(f) evaluation and determination via official notice of the upcoming public hearing.

In addition, to meet the Section 4(f) coordination and review requirements [23 CFR § 774.5(a)], this evaluation will be sent to the U.S. Department of Interior (USDOI) for a 45-day review and comment period.

6. Public Engagement and Agency Coordination

6.1 Public Engagement

The FHWA and the FTA have jointly issued an Interim Policy on Public Involvement that supports public involvement at all stages of planning and project development. State departments of transportation, metropolitan planning organizations, and transportation providers are required to develop, with the public, effective involvement processes tailored to local conditions. The performance standards for these proactive public involvement processes include early and continuous involvement; reasonable public availability of technical and other information; collaborative input on alternatives, evaluation criteria and mitigation need; open public meetings where matters related to federal-aid highway and transit programs are being considered; and open access to the decision-making process prior to closure. DDOT developed the public outreach program for the proposed Project and has considered these performance standards.

DDOT's outreach efforts include:

- Providing the public with detailed information about DDOT's plans to replace the current Gilbert Terminal by rebuilding the Coolidge Terminal.
- Hosting three public meetings during the design phase to educate and update citizens on the progression of the proposed Project and where and how they can provide feedback.
- Establishing a webpage at [Coolidge Terminal Replacement Project | City of Detroit \(detroitmi.gov\)](https://www.detroitmi.gov/coolidge-terminal-replacement-project) that is updated as new information becomes available.
- Increasing social media awareness, communication, and providing more resource materials as the Project progresses.
- Identifying and notifying groups and organizations that represent the EJ community and individuals of public meetings, the public hearing, and other opportunities for comment.
- Door to door canvassing to property owners in the immediate vicinity, including those within the area of direct impact as well as EJ community members and individuals.
- Reaching out directly to the affected public, which includes EJ communities and individuals, by setting up meetings with the Happy Homes Block Club, District 7 Councilmember staff, and members of churches within the study area.
- Holding pop-up events at the bus stop on Schaefer Avenue immediately in front of the project site

Public Notices

In preparation for the June 30, 2022, public meeting, DDOT sent two email invitations to its nearly 14,000 person subscriber's list, and flyers were provided at the Rosa Parks Transit Center, which is a very high-traffic location and therefore visible to many DDOT patrons and the general public. A local activist also helped distribute over one hundred flyers in the immediate study area. The June public meeting for the proposed Project was also announced and included

as part of the opening presentation for DDOT's monthly Community Input Meeting held on Thursday, June 16, 2022.

The meeting notices were circulated on social media and on DDOT's website. A dedicated landing page for the Project was published in April 2022. The address is www.detroitmi.gov/Coolidge. The same notification methods were used for the second meeting in October 2022. In addition to an email sent to the subscriber's list, the recordings of the two public meetings for the proposed Project were placed on the City of Detroit's YouTube page and DDOT's website. The same will be done for the public hearing.

Internally, the meeting notice and information about the proposed Project were shown on DDOT's terminal monitors at Gilbert and Shoemaker Terminals.

6.1.1 Public Meetings

Meeting 1 – June 30, 2022

The first public meeting was held virtually on Thursday, June 30, 2022, at 10:00 a.m. The DDOT Executive Director of Transit, Mikel Oglesby, introduced the proposed Project, and representatives from the DBA explained their involvement. A PowerPoint presentation included background information about the Coolidge and Gilbert Terminals, the proposed Project overview with renderings, details on the plans and alternatives considered, as well as an opportunity for the public to provide input and ask questions. The meeting recording is available on the website. A PDF version of the information is also provided.

Following the presentation, staff took public comment through verbal comments or in the chat feature of the virtual meeting. An email address was also provided for the public to provide comments. Approximately 34 people were in attendance, out of whom at least 14 were non-DDOT staff or associated with the proposed Project.

Meeting 2 – October 27, 2022

The second meeting took place on October 27, 2022, was conducted virtually and focused more on the environmental impacts of the proposed Project. This meeting was an opportunity to describe the needs of the proposed Project, give project updates, factors that affected project decisions on proceeding, environmental impacts, potential mitigation measures, DDOT's public involvement efforts and to provide an opportunity for the public to give feedback. The public was notified via flyers, email distribution, and social media. The meeting recording is available on the website, as well as a PDF version of the presentation.

Following the presentation, staff took public comment through verbal comments or in the chat feature of the virtual meeting. An email address was also provided for the public to provide comments. Approximately 33 people were in attendance, out of whom at least 13 were non-DDOT staff or associated with the Project.

Public Hearing – Winter 2023

A formal public hearing is expected to take place in early 2023. At the hearing, additional details of the EA and the Section 4(f) Evaluation will be provided along with the opportunity for public comments. A fact sheet will be presented at this meeting. Public notices will be provided ahead

of the meeting via the information on the website, social media, email distributions, and flyers. This meeting will be in virtual and in-person platforms.

6.1.2 Summary of Public Comments

Meeting 1

DDOT has not received any objections to the proposed Project. DDOT received two verbal comments during the first public meeting on June 30, 2022, and one after the public meeting. One commenter stated that the proposed Project has been a priority for a while and that they were excited to finally see progress and that the Coolidge Terminal property may be re-used. They were happy to hear that Gilbert Terminal will be decommissioned, stating that they had heard from drivers about the poor conditions at Gilbert Terminal. They also commented positively on being able to see the pictures and the design layouts. They believed that the new building will also create more opportunities and better work conditions. They commended both DDOT and the DBA on the Project.

The second commenter asked what was being done to ensure that City residents and minorities have the opportunity to be involved with the construction, including whether there were any incentives to get them involved.

A third comment was received via the DDOT comments inbox after the June 30, 2022, meeting. It requested that Detroiters receive priority contracts, jobs, and input to promote a sense of belongingness to the community.

Meeting 2

At the October 27, 2022 meeting, community members requested active links to the presentation and the materials that were presented. Specific questions were also received. DDOT did not receive any objections to the proposed Project.

One commenter wanted to know when the Coolidge Terminal moves buses from Gilbert to Coolidge, would the Southwest routes be based out of Coolidge Terminal? This commenter also asked whether staff members will be passing out flyers to canvas the neighborhoods or if DDOT will be asking volunteers to go out, expressing that they would like to help get the information out. Lastly, they wanted to know whether there would be a slideshow presentation for the memories of Coolidge Terminal.

A second commenter said their comment assumed that the DDOT pilot program with the electric buses will work out well and that DDOT will switch to more electric buses. Based on that, they wanted to know if the plans for Coolidge Terminal would accommodate them.

A third commenter wanted to know whether there would be a concerted effort to get local workers to do the construction work on the proposed Project. They were primarily concerned that the jobs should go to local Detroiters and people of color.

A fourth commenter wanted to know about the DLBA parcels in the plan, particularly on Ward Street. They wanted to know whether the properties had been reversed in the last ten years or whether they had been in the government's hands.

A fifth commenter asked what would become of the Gilbert Terminal due to the proposed Project and how much of the Coolidge Terminal does DDOT own.

The public engagement report, to date, is included in Appendix H. This will continue to be updated after the public hearing. Responses to public comments will be addressed in the environmental decision document.

6.2 Agency Coordination

FTA has coordinated directly with the Michigan SHPO and the Tribal Historic Preservation Officers, as well as other Section 106 consulting parties that agreed to participate in the process, including the Michigan Department of Transportation (DOT).

DDOT has and will continue to coordinate with other City departments to vacate certain streets for use in the proposed Project, obtain building permits and acquire the proper zoning. DDOT has and will continue to coordinate with the DLBA regarding the re-zoning of the adjacent properties and then transfer of the adjacent parcels to DDOT.

The EA will be provided to federal and state regulatory agencies for review. In addition to the agencies listed above, the EA will be provided to the USEPA, US Army Corps of Engineers, US Fish and Wildlife Service, Michigan DOT and EGLE during the public comment period.

7. References

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8. Appendices

See separate files for the following appendices.

- A. Concept Report
- B. Traffic Study
- C. Zoning Correspondence
- D. Cultural Resources Reports and Correspondence
- E. Special Waste Reports: Phase I and II ESAs
- F. Noise and Vibration Technical Memorandum
- G. Reference Documents for Environmental Resources of No Concern
- H. Public Engagement

Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

APPENDIX A

CONCEPT REPORT

Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

APPENDIX B

TRAFFIC STUDY

Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

APPENDIX C

ZONING CORRESPONDENCE

Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

APPENDIX D

CULTURAL RESOURCES
REPORT AND CORRESPONDENCE

Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

APPENDIX E

SPECIAL WASTE REPORTS:
PHASE I AND II ENVIRONMENTAL SITE ASSESSMENTS

Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

APPENDIX F

NOISE AND VIBRATION TECHNICAL MEMORANDUM

Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

APPENDIX G

REFERENCE DOCUMENTS FOR ENVIRONMENTAL
RESOURCES OF NO CONCERN

Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

APPENDIX H

PUBLIC ENGAGEMENT