

**Transit Asset Management Plan
(FY2019-2023)**

**MUNCIE INDIANA TRANSIT SYSTEM
September 2018**



**Muncie Indiana Transit System
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765-282-2762
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Table of Contents

1. Introduction	4
Purpose	4
Policy	4
State of Good Repair	4
2. Goals & Objectives	5
Goal 1	5
Goal 2	5
Goal 3	5
3. Performance Measures and Targets	6
Rolling Stock Performance Measures	6
• Fixed Route Fleet	6
• Paratransit Fleet	7
• Trolley Fleet	7
Equipment Performance Measures	8
• Non-Revenue Vehicles	8
• Maintenance	8
Facility Performance Measures	8
• Administration and Operating Headquarters	8
• J.B. Black, Jr. Meeting and Training Facility	8
• T.J. Ault, III MITS Station	8
4. Asset Inventory and Assessment	9
MITS Asset Summary	9
Rolling Stock Inventory	10
• Fixed Route Fleet	10
• Paratransit Fleet	11
• Trolley Fleet	12
• Voucher Program Fleet	12

Table of Contents

Equipment Inventory	13
• Non-Revenue Vehicles	13
• Maintenance	13
Facilities Assessment	14
• Administration and Operating Headquarters	14
• J.B. Black, Jr. Meeting and Training Facility	18
• T.J. Ault, III MITS Station	21
5. Investment Priorities	24
Rolling Stock	24
Equipment	25
Facilities	25
6. Five Year Asset Investment Program	26
Fiscal Year 2019 Projects	26
• Funding Need	27
• Funding Sources	27
Fiscal Year 2020 Projects	28
• Funding Need	29
• Funding Sources	29
Fiscal Year 2021 Projects	29
• Funding Need	31
• Funding Sources	31
Fiscal Year 2022 Projects	32
• Funding Need	33
• Funding Sources	33
Fiscal Year 2023 Projects	34
• Funding Need	35
• Funding Sources	35
7. Five Year Investment Funding Needs	36
Appendix ‘A’ Page IV-24, FTA C5010.1B	37
Appendix ‘B’ FTA Useful Life Benchmark	39
Appendix ‘C’ Facility Assessment Guidebook 102.3	40
Appendix ‘D’ Condition Inspection Guidelines	42

1. INTRODUCTION

Purpose

The Muncie Indiana Transit System (MITS) operates a fleet of public transit vehicles which include full-size, heavy duty buses operated in fixed route service and light duty vehicles used in the provision of paratransit service. Administrative, maintenance and passenger transfer facilities are also required for the operation of these services. These capital assets are critical to the safety and performance of the MITS public transportation system. MITS has recognized that when these assets are not in a state of good repair, the consequences include increased safety risks, decreased system reliability, higher maintenance costs and lower system performance. MITS has managed these assets through a comprehensive maintenance plan performance tracking and a capital improvement program. The purpose of this document is to take these existing resources and formulate them into a Transit Asset Management Plan in compliance with the requirements of 49 CFR Part 625.

Policy

It is MITS policy to insure that the vehicles, facilities and equipment entrusted to its care are maintained in a state of good repair for the useful life of the capital asset. This will be accomplished by: (1) monitoring the effectiveness of its capital assets maintenance program; (2) maintaining a current inventory of the number and type of its capital assets; (3) assessing the condition of those inventoried assets as an indicator of performance of the assets; (4) determining capital investment needs; and (5) prioritizing those needs into a five year capital asset investment program.

State of Good Repair

A MITS capital asset will be considered in a state of good repair if it: (1) is able to perform its designated function; (2) is in a condition that does not pose an identified unacceptable safety risks; and (3) has met or recovered all of its life-cycle investment needs including; all scheduled maintenance, rehabilitation and replacements. Assets that do not meet these objective standards will be taken out of service or replaced.

2. GOALS & OBJECTIVES

Goal 1. Deliver the most efficient and effective public transportation services possible to insure the least cost to the taxpayer and user.

- Increase fixed route on-time performance
- Increase paratransit on-time performance
- Reduce mechanical missed trips
- Increase fixed route miles between road calls
- Increase paratransit miles between road calls
- Reduce fixed route passenger complaints
- Reduce paratransit passenger complaints
- Perform fixed route scheduled maintenance on-time
- Perform paratransit scheduled maintenance on-time

Goal 2. Provide safe and secure conditions under which employees work and customers use MITS.

- Reduce fixed route vehicle accidents per 100,000 miles
- Reduce paratransit vehicle accidents per 100,000 miles
- Reduce fixed route passenger accidents per 100,000 passengers
- Reduce paratransit passenger accidents per 100,000 passengers
- Reduce on-the-job injuries

Goal 3. Ensure the long term financial stability necessary to maintain high quality public transportation in the community.

- Control and/or reduce fixed route cost per revenue mile
- Control and/or reduce paratransit cost per revenue mile
- Reduce fixed route parts cost per total miles
- Reduce paratransit parts cost per total miles
- Reduce fixed route fleet inventory value
- Reduce paratransit fleet inventory value
- Increase fixed route fleet miles per gallon
- Increase paratransit fleet miles per gallon
- Perform facility scheduled maintenance on-time

3. PERFORMANCE MEASURES & TARGETS

<u>Rolling Stock Performance Measures</u>	<u>TARGET</u>
1. <u>Fixed Route Fleet</u>	
% of fixed route vehicles that have met or exceeded their minimum normal service life (12 years).	20%
% of fixed route vehicles that have met or exceeded their useful life benchmark (14 years)	5%
On-time Performance	97%
Mechanical missed trips	25/yr.
Miles between road calls	15,000 mi.
Passenger complaints per 100,000 miles	3.5 mi.
Passenger accidents per 100,000 passengers	1.6
Cost per Revenue mile	\$6.80
Parts cost per total mile	\$0.18
Fleet miles per gallon	4.75 mi.

Rolling Stock Performance Measures**TARGET****2. Paratransit Fleet**

% of paratransit vehicles that have met or exceeded their minimum normal service life (6 years) 20%

0% of paratransit vehicles that have met or exceeded their useful life benefit (8 years) 5%

On-time performance 99%

Miles between road calls 22,000 mi.

Passenger complaints per 100,000 passengers 12

Scheduled maintenance on-time 99.5%

Vehicle accidents per 100,000 miles 4.2

Passenger accidents per 100,000 passengers 3.8

Cost per revenue mile \$5.75

Parts cost per total cost \$.20

Fleet miles per gallon (diesel) 8.5

Fleet miles per gallon (propane) 5.5

3. Trolley Fleet

% of rubber-tired vintage trolley that have met or exceeded their useful life benchmark (14 years) 100%

Replacement schedule TBD

Equipment Performance Measures

Target

1. Non-Revenue Vehicles

% of service vehicles that have met or exceeded their useful life minimum service life (6 years) 75%

% of service vehicles that have met or exceeded their useful life benefit (8 years) 25%

2. Maintenance

% of equipment that inspections identify in a deteriorated condition 0%

Facility Performance Measures

Target

1. Support Facilities

A. Administration and Operating Headquarters
Overall condition of facility rating on the FTA Transit Economics Requirements Model (TERM) 3 or above

B. J.B. Black, Jr. Meeting and Training Facility
Overall condition of facility rating on the FTA Transit Economics Requirements Model (TERM) 3 or above

2. Passenger Facilities

A. T.J. Ault, III MITS Station
Overall condition of facility rating on the FTA Transit Economic Requirements Model (TERM) 3 or above

4. ASSET INVENTORY AND ASSESSMENT

1. MIT S Asset Summary

ASSET CATEGORY		ASSET CLASS	INDIVIDUAL ASSET
	EQUIPMENT	Non-revenue Service Vehicles	
Maintenance			1. Recessed Parallelogram Lift (2) 2. Two Post Axle Engaging Lift 25,000 to 25,000 3. Two Post in Ground Lift (9,000 to 12,000) 4. Paint Booth 5. Bus Interior Cleaner 6. Bus Wash 7. Tank Farm 8. Radio Tower Antenna, Hut
ROLLING STOCK	Buses		1. 40 foot Bus (6) 2. 35 foot Bus (24)
	Other Passenger Vehicles		1. Paratransit Van (15) 2. Rubber Tired Trolley (3) 3. Voucher Van (2)
FACILITIES	Support Facilities		1. Administrative & Operating Headquarter 2. Dr. J.B. Black Jr. Meeting & Training Facility
	Passenger Facilities		1. T.J. Ault MITS Station

ROLLING STOCK INVENTORY

1. FIXED ROUTE FLEET									
MITS VEHICLE #	IN SERVICE YEAR	VEHICLE MAKE/MODEL	FUEL TYPE	VEHICLE IDENTIFICATION # (VIN)	CURRENT ODOMETER	CONDITION RATING	FTA MINIMUM SERVICE LIFE	FTA USEFUL LIFE BENEFIT	REPLACEMENT YEARS
148	2005	Gillig LF (35')	Diesel	15GGB291151076451	452,023	Marginal	12	14	Pending
149	2005	Gillig LF (35')	Diesel	15GGB291351076452	388,670	Marginal	12	14	2017-2019
150	2005	Gillig LF (35')	Diesel	15GGB291551076453	451,860	Marginal	12	14	2017-2019
151	2005	Gillig LF (35')	Diesel	15GGB291751076454	448,936	Marginal	12	14	2017-2019
152	2005	Gillig LF (35')	Diesel	15GGB291751076455	447,682	Marginal	12	14	2017-2019
153	2005	Gillig LF (35')	Diesel	15GGB291051076456	443,524	Marginal	12	14	2017-2019
154	2005	Gillig LF (35')	Diesel	15GGB291251076457	445,292	Marginal	12	14	2017-2019
155	2005	Gillig LF (35')	Diesel	15GGB291451076458	447,244	Marginal	12	14	2017-2019
156	2005	Gillig LF (35')	Diesel	15GGB291651076459	440,867	Marginal	12	14	2017-2019
157	2005	Gillig LF (35')	Diesel	15GGB291251076460	446,455	Marginal	12	14	2017-2019
159	2007	Gillig LF BRT (35')	Diesel	15GGB291671077579	446,883	Adequate	12	14	2019-2021
160	2007	Gillig LF BRT (35')	Diesel	15GGB291271077580	485,264	Adequate	12	14	2019-2021
161	2007	Gillig LF BRT (35')	Diesel	15GGB291471077581	468,661	Adequate	12	14	2019-2021
162	2007	Gillig LF BRT (35')	Diesel	15GGB291671077582	443,159	Adequate	12	14	2019-2021
163	2007	Gillig LF BRT (35')	Diesel	15GGB291871077583	465,459	Adequate	12	14	2019-2021
164	2010	Gillig LF	Hybrid	15GGB3013A1177584	322,261	Adequate	12	14	2019-2021
165	2010	Gillig LF	Hybrid	15GGB3015A1177585	326,833	Adequate	12	14	2020-2022
166	2010	Gillig LF	Hybrid	15GGB3017A1177586	329,059	Adequate	12	14	2020-2022
167	2010	Gillig LF	Hybrid	15GGB3019A1177587	309,233	Adequate	12	14	2020-2022
168	2010	Gillig LF	Hybrid	15GGB3010A1177588	284,255	Adequate	12	14	2020-2022

ROLLING STOCK INVENTORY CONTINUED

1. FIXED ROUTE FLEET									
MITS VEHICLE #	IN SERVICE YEAR	VEHICLE MAKE/MODEL	FUEL TYPE	VEHICLE IDENTIFICATION # (VIN)	CURRENT ODOMETER	CONDITION RATING	FTA MINIMUM SERVICE LIFE	FTA USEFUL LIFE BENEFIT	REPLACEMENT YEARS
169	2012	New Flyer Xcelisior (40')	Hybrid	5FYG8FR01CB041391	198,408	Good	12	14	2024-2026
170	2012	New Flyer Xcelisior (40')	Hybrid	5FYH8FR01CB041392	190,384	Good	12	14	2024-2026
171	2013	New Flyer Xcelisior (40')	Hybrid	5FYH8FR08DB042976	194,790	Good	12	14	2025-2027
172	2013	New Flyer Xcelisior (40')	Hybrid	5FYH8FR0XD8042977	176,732	Good	12	14	2025-2027
173	2013	New Flyer Xcelisior (40')	Hybrid	5FYH8FR03DB042978	192,544	Good	12	14	2025-2027
174	2013	New Flyer Xcelisior (40')	Hybrid	5FYH8FR03DB042979	196,604	Good	12	14	2025-2027
175	2014	New Flyer Xcelisior (35')	Hybrid	5FYH8KROXEC045253	158,012	Excellent	12	14	2026-2028
176	2014	New Flyer Xcelisior (35')	Hybrid	5FYH8KR01EC045254	174,905	Excellent	12	14	2026-2028
177	2017	New Flyer Xcelisior (35')	Hybrid	5FYD8KV11HF050969	164,295	Excellent	12	14	2029-2031
178	2018	New Flyer Xcelisior (35')	Diesel	5FYH8KR171F053814	4,832	Excellent	12	14	2030-2032

*NOTE: Life Miles Through August 27, 2017

2. PARATRANSIT FLEET									
MITS VEHICLE #	IN SERVICE YEAR	VEHICLE MAKE/MODEL	FUEL TYPE	VEHICLE IDENTIFICATION # (VIN)	CURRENT ODOMETER	CONDITION RATING	FTA MINIMUM SERVICE LIFE	FTA USEFUL LIFE BENEFIT	REPLACEMENT YEARS
326	2008	Chevy Van	Diesel	1G5JG316181155249	167,108	Poor	6	8	Pending
338	2010	Chevy Van	Diesel	1G86G3AG3A1108509	164,295	Marginal	6	8	Pending
339	2010	Chevy Van	Diesel	1G86G3A61A1121320	160,855	Marginal	6	8	Pending
340	2013	Ford E450 Phoenix	Propane	1FDFE4FS3DD826021	87,646	Marginal	6	8	Pending
341	2015	Ford E450 Phoenix	Propane	1FDFE4FS9FDA05030	70,371	Good	6	8	2021-2023
342	2015	Ford E450 Phoenix	Propane	1FDFE4FS0FDA05031	72,089	Good	6	8	2021-2023
343	2017	Ford E450 Phoenix	Propane	1FDFE4FS1HDC17780	31,462	Excellent	6	8	2023-2025
344	2017	Ford E450 Phoenix	Propane	1FDFE4FS3HDC17781	33,963	Excellent	6	8	2023-2026
345	2017	Ford E450 Phoenix	Propane	1FDFE4FS5HDC17782	31,525	Excellent	6	8	2023-2027
346	2017	Ford E450 Phoenix	Propane	1FDFE4FS3HDC77544	14,013	Excellent	6	8	2023-2028
347	2017	Ford E450 Phoenix	Propane	1FDFE4FS5FDC77545	12,955	Excellent	6	8	2023-2029
348	2017	Ford E450 Phoenix	Propane	1FDFE4FS7HDC77546	12,912	Excellent	6	8	2023-2030
349	2017	Ford E450 Phoenix	Propane	1FDFE4FS9HDC77547	13,329	Excellent	6	8	2023-2031
350	2017	Ford E450 Phoenix	Propane	1FDFE4FS0HDC77548	9,044	Excellent	6	8	2023-2032
351	2017	Ford E450 Phoenix	Propane	1FDFE4FS52HDC7754	97,338	Excellent	6	8	2023-2033

*NOTE: Life Miles Through July 31, 2017

3. TROLLEY FLEET									
MTS VEHICLE #	IN SERVICE YEAR	VEHICLE MAKE/MODEL	FUEL TYPE	VEHICLE IDENTIFICATION # (VIN)	CURRENT ODOMETER	CONDITION RATING*	FTA MINIMUM SERVICE LIFE	FTA USEFUL LIFE BENEFIT	REPLACEMENT YEARS
01	2000	Chance AH-28	Diesel	1C952HGS0YW535180	109,684	Adequate	12	14	TBD
02	2000	Chance AH-28	Diesel	1C952HGS2YW535181	101,447	Adequate	12	14	TBD
03	2000	Chance AH-28	Diesel	1C952HGS4YW535182	98,854	Adequate	12	14	TBD

*Based on Total Miles

4. VOUCHER FLEET									
MTS VEHICLE #	IN SERVICE YEAR	VEHICLE MAKE/MODEL	FUEL TYPE	VEHICLE IDENTIFICATION # (VIN)	CURRENT ODOMETER	CONDITION RATING	FTA MINIMUM SERVICE LIFE	FTA USEFUL LIFE BENEFIT	REPLACEMENT YEARS
703	2015	Ford Van, Elkhart	Gas	1FDEE3FS7FDA07042	NA	Good	6	8	2021-2023
704	2015	Ford Van, Elkhart	Gas	1FDEE3FS1FDA27738	NA	Good	6	8	2021-2023

*Note: Vehicle Numbers 703 & 704 are leased to Eaton EMT's, Inc. to provide 24/7 accessible service in Delaware County

EQUIPMENT INVENTORY

1. NON-REVENUE VEHICLES									
MTS VEHICLE #	IN SERVICE YEAR	VEHICLE MAKE/MODEL	FUEL TYPE	VEHICLE IDENTIFICATION # (VIN)	CURRENT ODOMETER	CONDITION RATING	FTA MINIMUM SERVICE LIFE	FTA USEFUL LIFE BENEFIT	REPLACEMENT YEARS
606	2002	Ford F350, 4x4 Truck	Diesel	1FTSF31F42EB37069	33,963	Marginal	6	8	TBD
608	2003	Ford E350m Lift Van	Diesel	1FTSS34F03HAR0568	76,950	Marginal	6	8	TBD
609	2006	Ford XLT, Escape 4x4	Gas	1FMCU931X6KC62577	86,559	Marginal	6	8	2019
610	2006	Chevy SUV, Trailblazer	Gas	1GNES13H662340300	120,861	Marginal	6	8	TBD
611	2009	Ford SUV, Escape Hybrid	Gas	1FMCU59329KC38747	81,029	Adequate	6	8	2019
612	2009	Chevy Silverado, 4WD Truck	Diesel	1GCHK4YK39E143038	57,168	Adequate	6	8	TBD
613	2011	Ford SUV, Escape Hybrid	Gas	1FMCU5K33BKA43000	39,088	Adequate	6	8	2021
614	2014	GMC SUV, Terrain 4WD	Gas	2GKFLVEKXE6271367	39,083	Excellent	6	8	2020-2022
615	2015	Ford F350, 4x4 Truck	Diesel	1FTRF3BT7FEA98485	5,209	Excellent	6	8	2021-2023

2. MAINTENANCE (≥ \$50,000)						
MTS INVENTORY #	IN SERVICE YEAR	DESCRIPTION	REBUILD/UPG RAD	CONDITION RATING	USEFUL LIFE	ESTIMATED REPLACEMENT COST
	1986	Ross & White Paint Booth	1998	Adequate	2023	\$ 200,000
	1986	SBS Paint Booth	2001	Adequate	2026	\$ 150,000
	2001	Transmatic Interior Vacuum	NA	Adequate	2026	\$ 150,000
	1999	Rotary Recessed Drive on Lift	NA	Adequate	2024	\$ 120,000
	2002	Rotary Recessed Drive on Lift	NA	Adequate	2027	\$ 120,000
	2002	Rotary Two Post Axle Lift	NA	Adequate	2027	\$ 100,000
	1986	Underground Storage Tanks	1991	Adequate	TBD	\$ 180,000
	1896	Radio Tower & Hut	NA	Adequate	TBD	\$ 150,000

FACILITIES ASSESSMENT

1. ADMINISTRATION & OPERATING HEADQUARTERS	
NTD IDENTIFICATION NUMBER	2053
AGENCY NAME	Muncie Indiana Transit System (MITS)
MAILING ADDRESS	Muncie Indiana Transit System 1300 East Seymour Street Muncie, IN 47302
URBANIZED AREA	Muncie Urbanized Area, 60625
FACILITY NAME	Administrative & Operating Headquarters
SECTION OF LARGER FACILITY	NA
STREET ADDRESS	1300 East Seymour Street Muncie, IN 47302
PRIMARY MODE	75% Motor Bus 25% Demand Response
FACILITY TYPE	General Purpose Maintenance Facility Owned, Under 200 Vehicles
YEAR BUILT OR REPLACED	Dedicated February 1986 Remodeled 2003
SQUARE FEET	45,763 sq. ft.
PERCENT CAPITAL RESPONSIBILITY	Federal: 80% Local: 20%
CONDITION ASSESSMENT	3.37
ESTIMATED DATE OF CONDITION ASSESSMENT	January 2017

MITS Administrative and Operating Headquarters-Construction and Equipment Information

Building Area Totals:

Service (Fueling, Washing)	4,011 sq. ft.
Maintenance	7,304 sq. ft.
Parts Storage	1,752 sq. ft.
Tire Storage	1,000 sq. ft.
Bus Storage	25,976 sq. ft.
Paint Shop	1,632 sq. ft.
Dispatcher/Driver	1,232 sq. ft.
Administrative Offices	2,856 sq. ft.
TOTAL	45,763 sq. ft.

Type of Construction:

Maintenance, Service, and Storage Areas - Reinforced concrete frame, insulated precast concrete walls, and precast concrete double tee roof system with fiberglass reinforced PVD elastic sheet roofing.

Administrative Area - Conventional steel frame with metal deck roof.

Type of Heating:

Maintenance, Service, and Storage Areas have gas fired infra red radiant heaters. Administrative Area has a roof mounted heat pump with gas fired back up for heating and cooling.

Type of Ventilation: Maintenance, Service, and Storage Areas have five (3,000 CFM) supply, 12,000 CFM exhaust roof mounted "Energy Conservation Ventilators." The EC.V.'s are air-to-air heat exchangers with a rated efficiency of 95%.

Type of Lighting:

Storage Area - High pressure sodium fixtures, also natural light from twenty eight 3' x 3' insulated skylights.

Maintenance and Service Areas - Metal halide fixtures, also natural light from eight 3' x 3' insulated skylights.

Administrative, Parts, Storage, and Tire Storage Areas - Fluorescent or metal halide fixtures.

Fuel and Liquids Capacity:

- Two 20,000 gallon diesel fuel tanks
- Two 550 gallon oil tanks
- One 1,000 gallon waste oil tank
- One 550 gallon anti freeze tank
- Grease, oil, antifreeze, and transmission fluid pumped to metered hose reels.

Bus Washer: Fully automatic 6 brush drive through washer with roof brush and undercarriage spray.

Hydraulic Bus Lifts: Two twin post lifts with 36,000 lb. capacity.

Conveying Systems:

Tire Storage - Bridge crane with 14 ton capacity hoist.

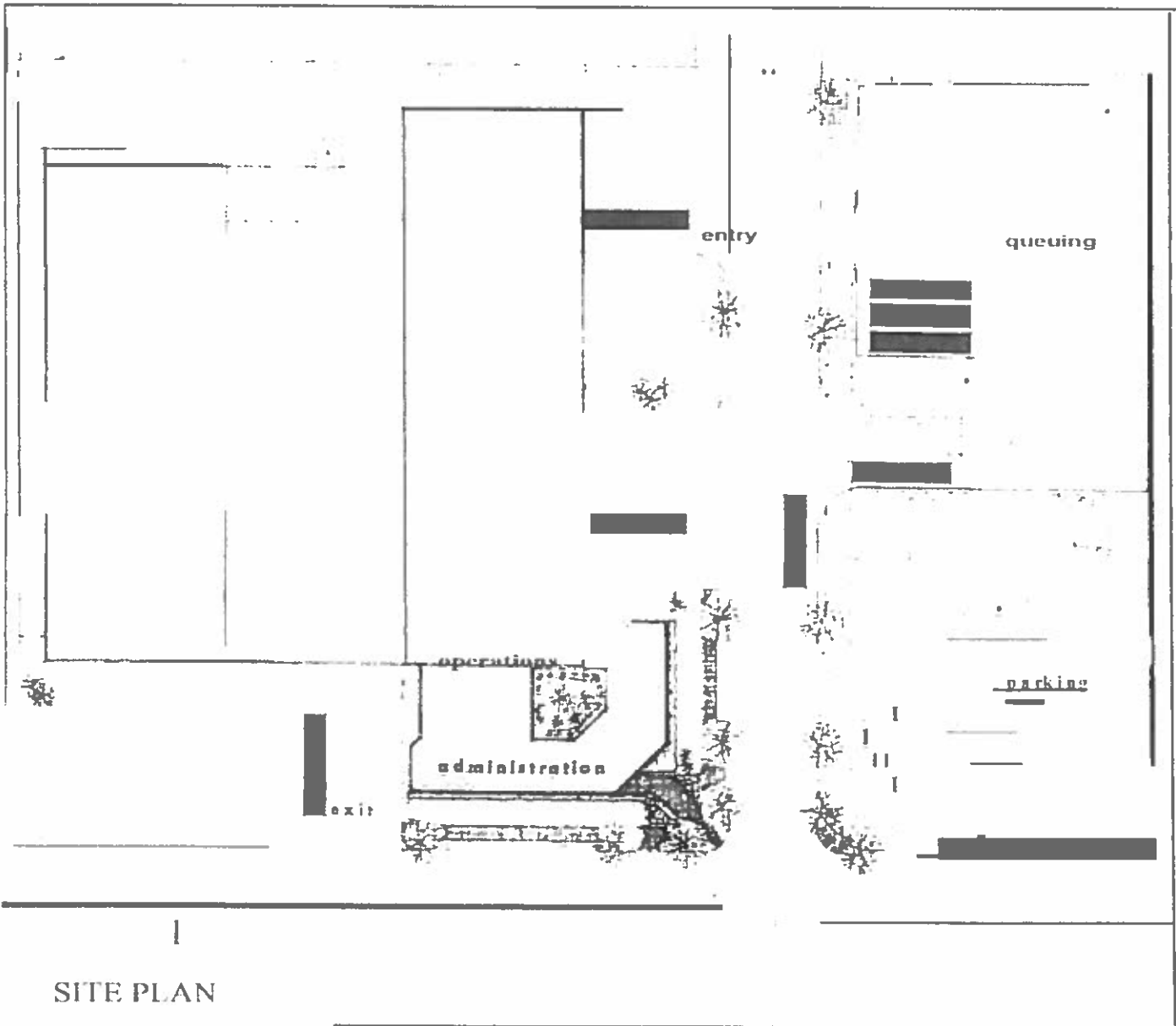
Parts Mezzanine - Monorail with 1 ton capacity hoist.

Maintenance - Jib crane with 5 ton capacity hoist.

Other Equipment: Double spindle brake lathe, two parts cleaning tanks with rinse booth, drill press, air hydraulic press, power loading dock with 12,000 lb. capacity, tire changer, grinder, vacuum cleaning system, battery charger, paint spray booth and vehicle exhaust system.

Construction Contractor: Glenroy Construction Co., Inc.

Construction Administrator: Taylor Architects, Inc.



SITE PLAN

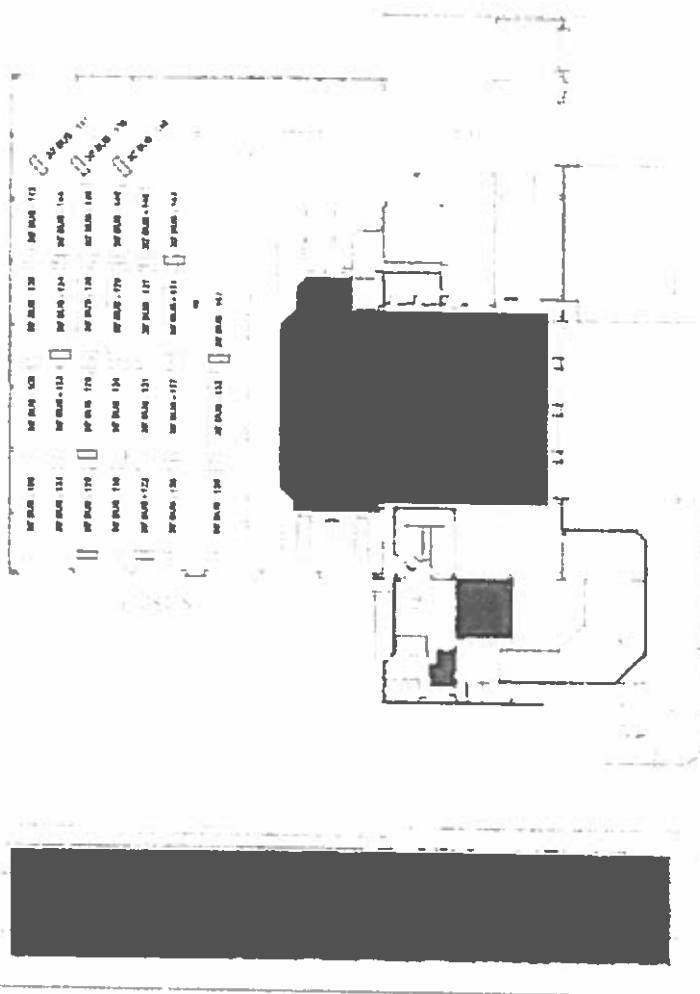
REMODELING

Parking: New bus queuing area and employee parking lot.

Maintenance Area Four new maintenance bays. One drive on hoist, two in ground lifts (one for heavy duty buses and one for medium duty vans), new hose reels and lighting and new vehicle exhaust system.

Offices: Three new transportation offices in previous board room space. Redesigned public foyer and existing transportation offices. Updated heating, ventilation and cooling system.

Cameras Security system with cameras in various locations throughout property



Administration and Operating Headquarters

ID#	COMPONENTS	SUB-COMPONENTS	SUB-COMPONENT RATING	COMPONENT RATING
A.	Substructure	* Foundations: Walls, columns, pilings other structural components	4.0	4.0
		* Basement: Materials, insulation, slab, floor underpinnings	NA	
B.	Shell	* Superstructure/structural frame: columns, pillars, walls	3.0	2.75
		* Roof: Roof Surface, gutters, eaves, skylights, chimney surrounds	2.0	
		* Exterior: Windows, doors, and all finishes (paint, masonry)	3.0	
		* Shell Appurtenances: Balconies, fire escapes, gutters, downspouts	3.0	
C.	Interiors	* Partitions: walls, interior doors, fittings such as signage	4.0	4.00
		* Stairs: Interior stairs and landings	4.0	
		* Finishes: Materials used on walls, floors, and ceilings	4.0	
		This component covers all interior spaces, regardless of use		
D.	Conveyance	* Elevators	NA	3.0
		* Escalators	NA	
		* Lifts: any other such fixed apparatuses for the movement of goods or people	3.0	
E.	Plumbing	* Fixtures	3.0	3.0
		* Water distribution	3.0	
		* Sanitary waster	3.0	
		* Rain water drainage		
F.	HVAV+C	* Energy Supply	4.0	2.8
		* Heat generation and distribution systems	2.0	
		* Cooling generation and distribution systems	2.0	
		* Testing, balancing, controls and instrumentation	3.0	
		* Chimney's and vents	3.0	
G.	Fire Protection	* Sprinklers	4.0	4.00
		* Standpipes	4.0	
		* Hydrants and other fire protection specialties	4.0	
H.	Electrical	* Electrical service & distribution	4.0	3.5
		* Lighting & branch wiring (interior & exterior)	4.0	
		* Communications & security	3.0	
		* Other electrical system-related pieces such as lightning protection, generators, and emergency lighting	3.0	
I.	Equipment	* Equipment related to the function of the facility, including maintenance or vehicle service equipment	3.0	3.0
		* For clarity, includes only items valued above \$10,000 and related to facility function		
J.	Site	* Roadways/driveways and associate signage, marking and equipment	3.0	3.67
		* Parking lots and associated signage, marking and equipment	4.0	
		* Pedestrian areas and associated signage, marking and equipment	4.0	
		* Site development such as fences, walls and miscellaneous structures	4.0	
		* Landscaping and irrigation	4.0	
		* Site Utilities	3.0	

2. DR. J.D. BLACK JR. MEETING & TRAINING FACILITY

AGENCY INFORMATION	NTD IDENTIFICATION NUMBER	2053
	AGENCY NAME ACRONYM	Muncie Indiana Transit System (MITS)
	MAILING ADDRESS	Muncie Indiana Transit System 1300 East Seymour Street Muncie, IN 47302
	URBANIZED AREA	Muncie Urbanized Area, 60625
ADMINISTRATIVE & MAINTENANCE FACILITIES (A-10)	FACILITY NAME	Dr. J.B Black Jr. Meeting & Training Facility
	SECTION OF LARGER FACILITY	NA
	STREET ADDRESS	1400 East Seymour Street Muncie, IN 47302
	PRIMARY MODE	60% Demand Response Motor Bus
	FACILITY TYPE	General Purpose Maintenance Facility Owned, Under 200 Vehicles
	YEAR BUILT OR REPLACED	Dedicated December 2003
	SQUARE FEET	17,006 sq. ft.
	PERCENT CAPITAL RESPONSIBILITY	Federal: 80% Local: 20%
	CONDITION ASSESSMENT	3.93
	ESTIMATED DATE OF CONDITION ASSESSMENT	January 2017

Meeting & Training Facility - Construction Information

BUILDING AREA TOTALS

Training Room	594 sq. ft.
Meeting Room	1,180 sq. ft.
Lobby, Kitchen, Restrooms	982 sq. ft.
Vehicle Storage	11,494 sq. ft.
Total Main Level	14,250 sq. ft.
Mezzanine Storage	2,756 sq. ft.

MEETING & TRAINING FACILITY

Store paratransit and specialized vehicles, vehicle parts and documents. Conduct employee training, team building and other employee meetings, recruitment and testing activities. Conduct board meetings, public hearings, and special functions.

FUNDING

Federal Transit Administration \$1.2 million

Local \$300,000

Total Project \$1.5 million

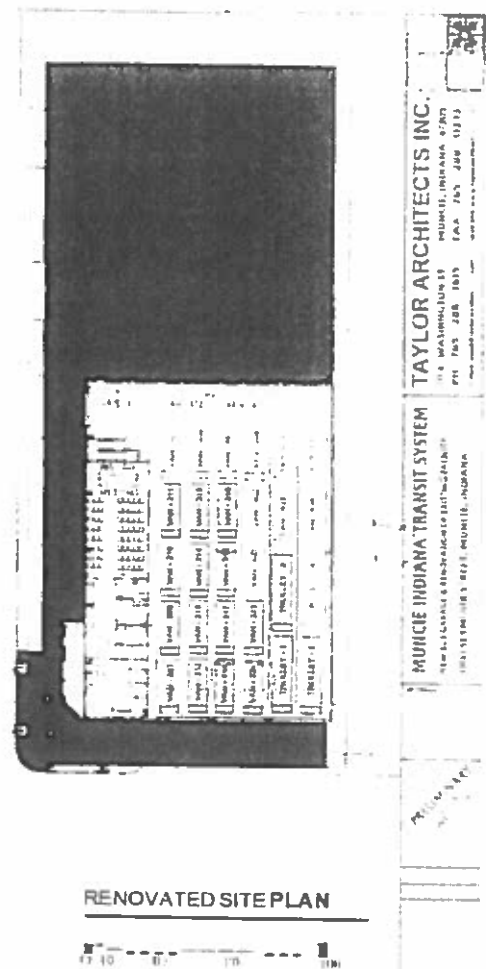
CONSTRUCTION CONTRACTORS

3D Company, Inc.

J G Case Construction, Inc.

ARCHITECT

Taylor Architects, Inc.



Dr. J.B. Black Jr. Meeting & Training Facility

ID#	COMPONENTS	SUB-COMPONENTS	SUB-COMPONENT RATING	COMPONENT RATING
A.	Substructure	* Foundations: Walls, columns, pilings other structural components	4.0	4.0
		* Basement: Materials, insulation, slab, floor underpinnings	NA	
B.	Shell	* Superstructure/structural frame: columns, pillars, walls	4.0	3.75
		* Roof: Roof Surface, gutters, eaves, skylights, chimney surrounds	4.0	
		* Exterior: Windows, doors, and all finishes (paint, masonry)	4.0	
		* Shell Appurtenances: Balconies, fire escapes, gutters, downspouts	3.0	
C.	Interiors	* Partitions: walls, interior doors, fittings such as signage	4.0	4.0
		* Stairs: Interior stairs and landings	4.0	
		* Finishes: Materials used on walls, floors, and ceilings	4.0	
		This component covers all interior spaces, regardless of use		
D.	Conveyance	* Elevators	NA	NA
		* Escalators	NA	
		* Lifts: any other such fixed apparatuses for the movement of goods or people	NA	
E.	Plumbing	* Fixtures	4.0	4.0
		* Water distribution	4.0	
		* Sanitary waster	4.0	
		* Rain water drainage	4.0	
F.	HVAV+C	* Energy Supply	4.0	4.0
		* Heat generation and distribution systems	4.0	
		* Cooling generation and distribution systems	4.0	
		* Testing, balancing, controls and instrumentation	4.0	
		* Chimney's and vents	4.0	
G.	Fire Protection	* Sprinklers	4.0	4.0
		* Standpipes	4.0	
		* Hydrants and other fire protection specialties	4.0	
H.	Electrical	* Electrical service & distribution	4.0	4.0
		* Lighting & branch wiring (interior & exterior)	4.0	
		* Communications & security	4.0	
		* Other electrical system-related pieces such as lightning protection, generators, and emergency lighting	4.0	
I.	Equipment	* Equipment related to the function of the facility, including maintenance or vehicle service equipment	NA	NA
		* For clarity, includes only items valued above \$10,000 and related to facility function		
J.	Site	* Roadways/driveways and associate signage, marking and equipment	3.0	4.0
		* Parking lots and associated signage, marking and equipment	4.0	
		* Pedestrian areas and associated signage, marking and equipment	4.0	
		* Site development such as fences, walls and miscellaneous structures	4.0	
		* Landscaping and irrigation	4.0	
		* Site Utilities	5.0	

3. T.J. AULT III, MITS STATION

AGENCY INFORMATION	NTD IDENTIFICATION NUMBER	2053
	AGENCY NAME ACRONYM	Muncie Indiana Transit System (MITS)
	MAILING ADDRESS	Muncie Indiana Transit System 1300 East Seymour Street Muncie, IN 47302
	URBANIZED AREA	Muncie Urbanized Area, 60625
PASSENGER & PARKING FACILITIES (A-20)	FACILITY NAME	T.J. Ault III, MITS Station
	SECTION OF LARGER FACILITY	NA
	STREET ADDRESS	113 West Main Street Muncie, IN 47302
	PRIMARY MODE	Motor Bus
	FACILITY TYPE	Passenger Facility
	YEAR BUILT OR REPLACED	Dedicated September 1987 Remodeled 2002 (300 sq. ft. expansion)
	SQUARE FEET	3,308 sq. ft.
	PERCENT CAPITAL RESPONSIBILITY	Federal: 80% Local: 20%
	CONDITION ASSESSMENT	3.82
	ESTIMATED DATE OF CONDITION ASSESSMENT	January 2017

T. J. AULT III MITS STATION - CONSTRUCTION AND EQUIPMENT INFORMATION

SITE AREAS/TOTALS

Platform	7,132 sq. ft.
Bus Lanes	12,480 sq. ft.
Kiosks/Landscape Building	5,200 sq. ft.
Total	27,820 sq. ft.

BUILDING AREAS/TOTALS

Waiting	2,377 sq. ft.
Supervisors Booth/Office	453 sq. ft.
Drivers Room	120 sq. ft.
Drivers Restroom	30 sq. ft.
Storage	186 sq. ft.
Mechanical	142 sq. ft.
Total	3,308 sq. ft.

TYPE OF CONSTRUCTION:

Reinforced concrete frame, insulated masonry walls, and precast double tee roof system with elastic sheet roofing.

TYPE OF HEATING/COOLING:

Roof mounted combination gas heating and electric cooling unit.

TYPE OF LIGHTING:

Waiting Area - Fluorescent strip mounted fixtures, also natural light from twenty-six 3'x3' insulated glass block skylights.

Platform Area - Photo-cell controlled high pressure sodium fixtures, also natural light from eighteen 3'x3' glass block skylights and ten inclined skylights.

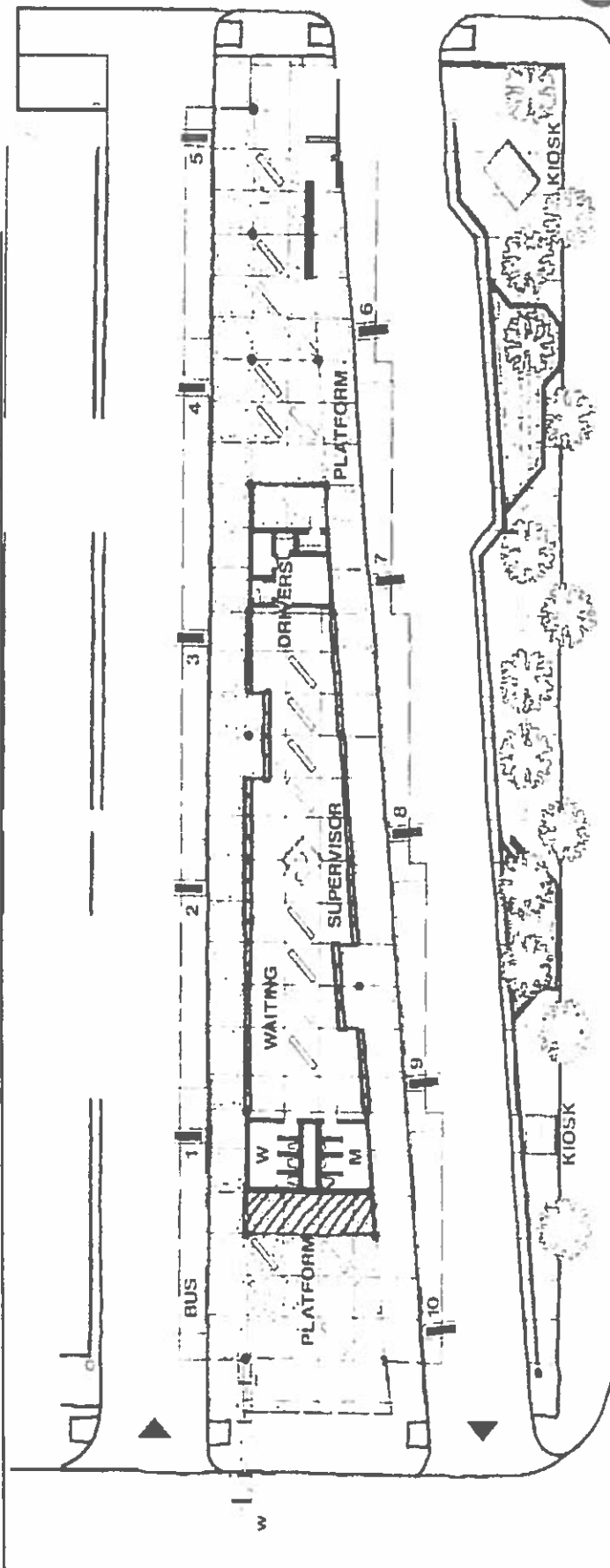
OTHER EQUIPMENT/AMENITIES:

Public address system, electronic display sign, fire alarm system, security system, radio system, comfortable wood bench seating, route and schedule information, vending machines, drinking fountains, and kiosk vending area.

CONSTRUCTION CONTRACTORS

Baystone Construction, Inc.
Owren Harkin and Sons, Inc.

Architect: TAYLOR ARCHITECTS INC.



FLOOR/SITE PLAN 10' 20' 40'

Illustration by J. Robert Taylor, AIA

NORTH

T.J. Ault III MITS Station

ID#	COMPONENTS	SUB-COMPONENTS	SUB-COMPONENT RATING	COMPONENT RATING
A.	Substructure	* Foundations: Walls, columns, pilings other structural components	4.0	4.0
		* Basement: Materials, insulation, slab, floor underpinnings	NA	
B.	Shell	* Superstructure/structural frame: columns, pillars, walls	3.0	3.75
		* Roof: Roof Surface, gutters, eaves, skylights, chimney surrounds	5.0	
		* Exterior: Windows, doors, and all finishes (paint, masonry)	3.0	
		* Shell Appurtenances: Balconies, fire escapes, gutters, downspouts	4.0	
C.	Interiors	* Partitions: walls, interior doors, fittings such as signage	3.0	3.5
		* Stairs: Interior stairs and landings	NA	
		* Finishes: Materials used on walls, floors, and ceilings	4.0	
		This component covers all interior spaces, regardless of use		
D.	Conveyance	* Elevators	NA	NA
		* Escalators	NA	
		* Lifts: any other such fixed apparatuses for the movement of goods or people	NA	
E.	Plumbing	* Fixtures	2.0	3.3
		* Water distribution	4.0	
		* Sanitary waster	3.0	
		* Rain water drainage	4.0	
F.	HVAV+C	* Energy Supply	5.0	4.8
		* Heat generation and distribution systems	5.0	
		* Cooling generation and distribution systems	5.0	
		* Testing, balancing, controls and instrumentation	5.0	
		* Chimney's and vents	4.0	
G.	Fire Protection	* Sprinklers	4.0	4.0
		* Standpipes	4.0	
		* Hydrants and other fire protection specialties	4.0	
H.	Electrical	* Electrical service & distribution	4.0	4.3
		* Lighting & branch wiring (interior & exterior)	5.0	
		* Communications & security	4.0	
		* Other electrical system-related pieces such as lightning protection, generators, and emergency lighting	4.0	
I.	Equipment	* Equipment related to the function of the facility, including maintenance or vehicle service equipment	NA	NA
		* For clarity, includes only items valued above \$10,000 and related to facility function		
J.	Site	* Roadways/driveways and associate signage, marking and equipment	3.0	3.0
		* Parking lots and associated signage, marking and equipment	3.0	
		* Pedestrian areas and associated signage, marking and equipment	3.0	
		* Site development such as fences, walls and miscellaneous structures	3.0	
		* Landscaping and irrigation	3.0	
		* Site Utilities	3.0	

5. INVESTMENT PRIORITIES

Every asset listed in the previous inventories contribute to meeting MITS' goals and objectives. With funding limited and inconsistent, it is important to identify and prioritize capital improvement projects so available funding can be utilized effectively to maintain those assets in a state of good repair. Factors considered important in determining MITS' investment priorities include: (1) safety and security; (2) reliability; (3) operations and maintenance impact; (4) customer experience; (5) asset condition; and (6) technological advances.

MITS has determined that the six factors impact each of the three asset categories in different ways and require different methods of defining state of good repair and investment prioritization. Rolling stock assets support an age-based system where vehicles should be scheduled for replacement beyond a certain maximum age. Equipment assets are supportive of a condition based system where replacement is warranted once inspections identify deteriorated condition. Finally, facility assets require a more comprehensive assessment to make a condition assessment as described in the five-point scale used by FTA's Transit Economic Requirements Model (TERM). This comprehensive assessment combines age, condition inspection, performance and maintenance history. MITS will use FTA's guidelines as required for facility assessment (See Appendix 'C').

1. Rolling Stock

Excellent -	New and/or major components under warranty.
Good -	Equal to or less than one half the minimum normal service life, but major components out of warranty.
Adequate -	Greater than one half the minimum normal service life, but less than the minimum normal service life.
Marginal -	Equal to or greater than the minimum normal service life, but less than the useful life benchmark.
Poor -	Equal to or greater than the useful life benchmark.

Note: See Appendices 'A' and 'B'

2. Equipment

- Excellent - New and/or under warranty.
- Good - Issues can be addressed through routine maintenance.
- Adequate - Repairs are needed and shows signs of deterioration, but functioning as intended.
- Marginal - More substantial part replacement and/or repair is frequent. No safety issues but reliability and cost impact evident.
- Poor - Critical defects evident that effect performance/function. Condition merits replacement rather than repair.

3. Facilities

- Excellent (5)** New or like new; no visible defects, no damage, cosmetically looks new. An asset is only new once, after rebuild some old parts are not new and therefore the highest score after rebuild is (4.5).
- Good (4)** Shows minimal signs of wear, no major defects, and some minor defects with only minimal signs of deterioration.
Cosmetic defects/minor wear
- Adequate (3.0)** Some moderately defective or deteriorated components; expected maintenance needs. Cosmetically “fair” but all devices are functioning as designed.
Small repairs and/or minor refurbishment
- Marginal (2.0)** Asset near overhaul or retirement, but in serviceable condition. Asset has increasing number of defects or deteriorated component(s).
Significant and/or multiple repairs needed
- Poor (1.0)** Asset is in need of major repair or refurbishment, multiple minor defects or major defects. Evidence of corrosion may be apparent; major or numerous minor areas of damage or structural issues.
Safety concern, critical damage, close to or time for overhaul or replacement

6. FIVE YEAR ASSET INVESTMENT PROGRAM

1. FISCAL YEAR 2019 PROJECTS

1.1 Project 2019 (MITS-1)

Description: Replace four (4) heavy-duty fixed route transit buses (diesel, hybrid, electric)

Cost: \$1,800,000 diesel; \$2,400,000 hybrid; \$3,400,000 electric

Need: The four (4) buses to be replaced were placed in service in 2005. The Federal Transit Administration's Circular 9030.1C defines the minimum normal service life of a heavy-duty 35 foot transit bus as 12 years or 500,000 miles. All four (4) buses to be replaced have exceeded their minimum normal service life in accordance with the circular and their useful life benchmark.

Benefit: The regularly scheduled replacement of transit buses that have exceeded their minimum normal service life significantly reduces maintenance costs, improves service delivery and reliability, decreases the potential for accidents and injury conserves energy, improves air quality and promotes a positive image and improved usage of the transit system.

Priority: High

1.2 Project 2019 (MITS-2)

Description: Replace two (2) supervisors' vehicles

Cost: \$60,000

Need: The vehicles to be replaced were placed in service in 2006 and 2009. These are a 4-wheel drive vehicles used to provide road supervision for MITS fixed route and paratransit services in all types of weather and conditions. This is critical to insure the operation of safe, reliable service to MITS' patrons and providing assistance to vehicle operators in difficult or emergency situations.

Benefit: The regularly scheduled replacement of supervisor's vehicle improves service delivery and reliability, increases safety and security, and improves response time to emergency situations.

Priority: High

1.3 Project 2019 Funding Needs

	<u>Diesel</u>	<u>Hybrid</u>	<u>Electric</u>
Project 2019 (MITS-1)	\$1,800,000	\$2,400,000	\$3,400,000
Project 2019 (MITS-2)	\$60,000	\$60,000	\$60,000
Total	<u>\$1,860,000</u>	<u>\$2,460,000</u>	<u>\$3,460,000</u>

1.4 Fiscal Year 2019 Funding Sources

Federal Section 5339	\$1,452,000	\$1,932,000	\$2,732,000
Federal Section 5310	\$48,000	\$48,000	\$48,000
Local	\$360,000	\$480,000	\$680,000
Total	<u>\$1,860,000</u>	<u>\$2,460,000</u>	<u>\$3,460,000</u>

2. FISCAL YEAR 2020 PROJECTS

2.1 Project 2020 (MITS-1)

Description: Replace five (5) heavy-duty fixed route transit buses (diesel, hybrid, electric)

Cost: \$2,250,000 diesel; \$3,000,000 hybrid; \$4,250,000 electric

Need: The five (5) buses to be replaced were placed in service in 2005. The Federal Transit Administration's Circular 9030.1C defines the minimum normal service life of a heavy-duty 35 foot transit bus as 12 years or 500,000 miles. All five (5) buses to be replaced have exceeded their minimum normal service life in accordance with the circular and their useful life benchmark.

Benefit: The regularly scheduled replacement of transit buses that have exceeded their minimum normal service life significantly reduces maintenance costs, improves service delivery and reliability, decreases the potential for accidents and injury conserves energy, improves air quality and promotes a positive image and improved usage of the transit system.

Priority: High

2.2 Project 2020 (MITS-2)

Description: Remove and replace roof with new insulation and single-ply membrane at MITS Administrative and Operating Headquarters.

Cost: \$400,000

Need: The MITS' Administrative and Operating Headquarters was dedicated on February 18, 1986. The existing roof membrane has developed numerous leaks and is showing signs of non-reparable deterioration.

Benefit: The replacement of the roof with new insulation and membrane will preserve the integrity of the facility and conserve energy.

Priority: High

2.3 Project 2020 Funding Needs

	<u>Diesel</u>	<u>Hybrid</u>	<u>Electric</u>
Project 2020 (MITS-1)	\$920,000	\$1,220,000	\$1,700,000
Project 2020 (MITS-2)	\$400,000	\$400,000	\$400,000
Total	<u>\$1,320,000</u>	<u>\$1,620,000</u>	<u>\$2,100,000</u>

2.4 Fiscal Year 2020 Funding Sources

Federal Section 5339	\$1,056,000	\$1,296,000	\$1,680,000
Local	\$264,000	\$324,000	\$420,000
Total	<u>\$1,320,000</u>	<u>\$1,620,000</u>	<u>\$2,100,000</u>

3. FISCAL YEAR 2021 PROJECTS

3.1 Project 2021 (MITS-1)

Description: Replace three (3) heavy-duty fixed route transit buses (diesel, hybrid, electric)

Cost: \$1,380,000 diesel; \$1,830,000 hybrid; \$2,550,000 electric

Need: The three (3) buses to be replaced were placed in service in 2005. The Federal Transit Administration's Circular 9030.1C defines the minimum normal service life of a heavy-duty 35 foot transit bus as 12 years or 500,000 miles. All three (3) buses to be replaced have exceeded their minimum normal service life in accordance with the circular and their useful life benchmark.

Benefit: The regularly scheduled replacement of transit buses that have exceeded their minimum normal service life significantly reduces maintenance costs, improves service delivery and reliability, decreases the potential for accidents and injury conserves energy, improves air quality and promotes a positive image and improved usage of the transit system.

Priority: Critical

3.2 Project 2021 (MITS-2)

Description: Replace one (1) maintenance service truck.

Cost: \$45,000

Need: The vehicle to be replaced was placed in service in 2009. The age and condition of this vehicle restricts the maintenance department's availability to address road call or other on-street vehicle mechanical failures.

Benefit: The regularly scheduled replacement of service vehicles improves the performance of maintenance functions, prolongs equipment and facilities, and increase service reliability.

Priority: High

3.3 Project 2021 (MITS-3)

Description: Replace one (1) hybrid supervisor's vehicle

Cost: \$35,000

Need: The vehicle to be replaced was placed in service in 2011. This is a 4-wheel drive vehicle used to provide road supervision for MITS fixed route and paratransit services in all types of weather and conditions. This is critical to insure the operation of safe, reliable service to MITS' patrons and providing assistance to vehicle operators in difficult or emergency situations.

Benefit: The regularly scheduled replacement of supervisor's vehicle improves service delivery and reliability, increases safety and security, and improves response time to emergency situations.

Priority: High

3.4 Project 2021 Funding Needs

	<u>Diesel</u>	<u>Hybrid</u>	<u>Electric</u>
Project 2021 (MITS-1)	\$1,380,000	\$1,830,000	\$2,550,000
Project 2021 (MITS-2)	\$45,000	\$45,000	\$45,000
Project 2021 (MITS-3)	\$35,000	\$35,000	\$35,000
Total	\$1,460,000	\$1,910,000	\$2,630,000

3.5 Fiscal Year 2021 Funding Sources

Federal Section 5339	\$1,104,000	\$1,464,000	\$2,040,000
Federal Section 5307	\$64,000	\$64,000	\$64,000
Local	\$292,000	\$384,000	\$52,000
Total	\$1,460,000	\$1,910,000	\$2,630,000

4. FISCAL YEAR 2022 PROJECTS

4.1 Project 2022 (MITS-1)

Description: Replace two (2) light-duty paratransit vehicles (propane)

Cost: \$220,000

Need: The two (2) paratransit vehicles to be replaced were placed in service in 2015. The Federal Transit Administration's Circular 9030.1C defines the minimum normal service life of a small bus as 4 years or 100,000 miles. The two (2) paratransit vehicles to be replaced have exceeded their minimum normal service life in terms of both years and miles and their useful life benchmark before they are removed from service.

Benefit: The regularly scheduled replacement of paratransit vehicles that have exceeded their minimum normal service life significantly reduces operation and maintenance costs and improves service delivery and reliability, decreases the potential for accidents and injury, and supports the continued compliance with ADA requirements.

Priority: High

4.2 Project 2022 (MITS-2)

Description: Replace two (2) heavy-duty fixed route transit buses (diesel, hybrid, electric)

Cost: \$920,000 diesel; \$1,220,000 hybrid; \$1,700,000 electric

Need: The two (2) buses to be replaced were placed in service in 2007. The Federal Transit Administration's Circular 9030.1C defines the minimum normal service life of a heavy-

duty 35 foot transit bus as 12 years or 500,000 miles. The two (2) buses to be replaced have exceeded their minimum normal service life in accordance with the circular and their useful life benchmark.

Benefit: The regularly scheduled replacement of transit buses that have exceeded their minimum normal service life significantly reduces maintenance costs, improves service delivery and reliability, decreases the potential for accidents and injury conserves energy, improves air quality and promotes a positive image and improved usage of the transit system.

Priority: Critical

4.3 Project 2022 Funding Needs

	<u>Diesel</u>	<u>Hybrid</u>	<u>Electric</u>
Project 2022 (MITS-1)	\$920,000	\$1,220,000	\$1,700,000
Project 2022 (MITS-2)	\$220,000	\$220,000	\$220,000
Total	\$1,140,000	\$1,440,000	\$9,920,000

4.4 Fiscal Year 2022 Funding Sources

Federal Section 5339	\$736,000	\$976,000	\$1,360,000
Federal Section 5310	\$176,000	\$176,000	\$176,000
Local	\$228,000	\$288,000	\$384,000
Total	\$1,140,000	\$1,440,000	\$1,920,000

5. FISCAL YEAR 2023 PROJECTS

5.1 Project 2023 (MITS-1)

Description: Replace three (3) heavy-duty fixed route transit buses (diesel, hybrid, electric)

Cost: \$1,380,000 diesel; \$1,830,000 hybrid; \$2,550,000 electric

Need: The three (3) buses to be replaced were placed in service in 2007. The Federal Transit Administration's Circular 9030.1C defines the minimum normal service life of a heavy-duty 35 foot transit bus as 12 years or 500,000 miles. The three (3) buses to be replaced have exceeded their minimum normal service life in accordance with the circular and their useful life benchmark.

Benefit: The regularly scheduled replacement of transit buses that have exceeded their minimum normal service life significantly reduces maintenance costs, improves service delivery and reliability, decreases the potential for accidents and injury conserves energy, improves air quality and promotes a positive image and improved usage of the transit system.

Priority: Critical

5.2 Project 2023 (MITS-2)

Description: Replace two (2) light-duty paratransit vehicles (propane)

Cost: \$220,000

Need: The two (2) paratransit vehicles be replaced were placed in service in 2017. The Federal Transit Administration’s Circular 9030.1C defines the minimum normal service life of a small bus as 4 years or 100,000 miles. The two (2) paratransit vehicles to be replaced have exceeded their minimum normal service life in terms of both years and miles and their useful life benchmark before they are removed from service.

Benefit: The regularly scheduled replacement of paratransit vehicles that have exceeded their minimum normal service life significantly reduces operation and maintenance costs and improves service delivery and reliability, decreases the potential for accidents and injury, and supports the continued compliance with ADA requirements.

Priority: High

5.3 Project 2023 Funding Needs

	<u>Diesel</u>	<u>Hybrid</u>	<u>Electric</u>
Project 2023 (MITS-1)	\$1,380,000	\$1,830,000	\$2,550,000
Project 2023 (MITS-2)	\$220,000	\$220,000	\$220,000
Total	\$1,600,000	\$2,050,000	\$2,770,000

5.4 Fiscal Year 2023 Funding Sources

Federal Section 5339	\$1,104,000	\$1,464,000	\$2,040,000
Federal Section 5310	\$176,000	\$176,000	\$176,000
Local	\$320,000	\$410,000	\$554,000
Total	\$1,600,000	\$2,050,000	\$2,770,000

7. FIVE YEAR INVESTMENT FUNDING NEEDS

OPTION 1 (DIESEL)			
YEAR	FEDERAL	LOCAL	TOTAL
2019	\$1,500,000	\$360,000	\$1,860,000
2020	\$1,056,000	\$264,000	\$1,320,000
2021	\$1,168,000	\$292,000	\$1,460,000
2022	\$912,000	\$228,000	\$1,140,000
2023	\$1,280,000	\$320,000	\$1,600,000
TOTALS	\$5,916,000	\$1,464,000	\$7,380,000

OPTION 2 (HYBRID)			
YEAR	FEDERAL	LOCAL	TOTAL
2019	\$1,980,000	\$480,000	\$2,460,000
2020	\$1,296,000	\$324,000	\$1,620,000
2021	\$1,528,000	\$382,000	\$1,910,000
2022	\$1,152,000	\$288,000	\$1,440,000
2023	\$1,640,000	\$410,000	\$2,050,000
TOTALS	\$7,596,000	\$1,884,000	\$9,480,000

OPTION 3 (ELECTRIC)			
YEAR	FEDERAL	LOCAL	TOTAL
2019	\$2,780,000	\$680,000	\$3,460,000
2020	\$1,680,000	\$420,000	\$2,100,000
2021	\$2,104,000	\$526,000	\$2,630,000
2022	\$1,536,000	\$384,000	\$1,920,000
2023	\$2,216,000	\$554,000	\$2,770,000
TOTALS	\$10,316,000	\$2,564,000	\$12,880,000

APPENDIX 'A'

- f. Minimum Useful Life of Federally Assisted Property. FTA provides a minimum useful life policy for capital rolling stock, trolleys, ferries, and facilities in this circular. If property is prematurely withdrawn from service, FTA must be immediately notified (See Section 4.o.(3) of this Chapter, "Disposition or Inappropriate Use Before the End of the Asset's Useful Life").
- (1) Determining Minimum Useful Life for Federally Assisted Property. The recipient should identify the method used to determine the minimum useful life. Acceptable methods to determine minimum useful life include but are not limited to:
- (a) Generally accepted accounting principles;
 - (b) Independent evaluation;
 - (c) Manufacturer's estimated useful life;
 - (d) Internal Revenue Service guidelines;
 - (e) Industry standards
 - (f) Recipient experience;
 - (g) The recipient's independent auditor who needs to provide his or her concurrence that the useful life assigned to the property is reasonable for depreciation purposes; and
 - (h) Proven useful life developed at a federal test facility.
- (2) FTA Minimum Useful Life Policy for Rolling Stock and Ferries. The useful life of rolling stock and ferries begins on the date the vehicle is placed in revenue service and continues until it is removed from revenue service. The minimum useful life in years refers to total time in transit revenue service, not time spent stockpiled or otherwise unavailable for regular transit use. The minimum useful life in miles refers to total miles in transit revenue service. Non-revenue miles and periods of extended removal from service do not count towards useful life. Changes in operating circumstances, including unforeseen difficulty maintaining vehicles, FTA C 5010.1E Page IV-25 higher cost of fuel, and changes in local law limiting where vehicles can be operated do not excuse minimum useful life requirements.

Recipients of federal assistance need to specify the expected minimum useful life in invitations for bids when acquiring new vehicles. Minimum useful life is determined by years of service or accumulation of miles whichever comes first, by asset type as follows:

- (a) Buses:
- 1 Large, heavy-duty transit buses including over-the-road buses (approximately 35' – 40' or larger including articulated buses):

At least 12 years of service or an accumulation of at least 500,000 miles.
 - 2 Small size, heavy-duty transit buses: At least 10 years or an accumulation of at least 350,000 miles.
 - 3 Medium-size, medium-duty transit buses: At least seven years or an accumulation of at least 200,000 miles.
 - 4 Medium-size, light-duty transit buses: At least five years or an accumulation of at least 150,000 miles.

- (b) **Light Duty Vehicles:** Other light-duty vehicles used as equipment and to transport passengers (revenue service), such as regular and specialized vans, sedans, and light-duty buses including all bus models exempt from testing in the current 49 CFR part 665:
- At least four years or an accumulation of at least 100,000 miles.
- (c) **Trolleys:**
The term “trolley” is often applied to a wide variety of vehicles. Thus, the useful life depends on the type of trolley. FTA classifies trolleys and the suggested useful life as described below. For disposition actions, FTA will use the following minimum useful life determinations:
- 1 A fixed guideway steel-wheeled “trolley” (streetcar or other light rail vehicle): At least 25 years,
 - 2 A fixed guideway electric trolley-bus with rubber tires obtaining power from overhead catenary: At least 15 years, and Page IV-26 FTA C 5010.1E
 - 3 Simulated trolleys, with rubber tires and internal combustion engine (often termed “trolley-replica buses”). Please refer to bus useful life criteria above.
- (d) **Rail Vehicles.** At time of application, the recipient may propose an alternative useful life to be reviewed by FTA. A recipient that regularly measures lifespan by hours of operations, or by any other measure, may develop an appropriate methodology for converting its system to years of service. The reasonableness of such methodologies will be subject to examination, particularly if the recipient proposes to retire a rail vehicle before reaching FTA’s useful life. At least 25 years.
- (e) **Ferries.** The useful life of a ferry depends on several factors, including the type and use of the ferry. FTA recommends using one of the methods outlined in Chapter IV, subsection 4.f.(1) above or offers the following suggested minimum service lives: 1 Passenger ferries: At least 25 years, 2 Other ferries (without overhaul): At least 30 years, and 3 Other ferries (with overhaul): At least 60 years.
- (f) **Facilities.** Determining the useful life of a facility must take into consideration such factors as the type of construction, nature of the equipment used, historical usage patterns, and technological developments. Based on any of the methods identified above in Chapter IV, Paragraph 4.f(1), a railroad or highway structure has a minimum useful life of 50 years, and most other buildings and facilities (concrete, steel, and frame construction) have a useful life of 40 years.

APPENDIX 'B'

Default Useful Life Benchmark (ULB) Cheat Sheet

Source: 2017 Asset Inventory Module Reporting Manual, Page 53

Transit Agencies will report the age of all vehicles to the National Transit Database. FTA will track the performance of revenue vehicles (Rolling Stock) and service vehicles (Equipment), by asset class, by calculating the percentage of vehicles that have met or exceeded the useful life benchmark (ULB).

FTA has set a default ULB as the expected service years for each vehicle class in the table below. ULB is the average age-based equivalent of a 2.5 rating on the FTA Transit Economic Requirements Model (TERM) scale. Transit agencies can adjust their Useful Life Benchmarks with approval from FTA.

Vehicle Type		Default ULB (in years)
AB	Articulated Bus	14
AG	Automated Guideway Vehicle	31
AO	Automobile	8
BR	Over-The-Road-Bus	14
BU	Bus	14
CC	Cable Car	112
CU	Cutaway Bus	10
DB	Double Decked Bus	14
FB	Ferryboat	42
HR	Heavy Rail Passenger Car	31
IP	Inclined Plane Vehicle	56
LR	Light Rail Vehicle	31
MB	Minibus	10
MO	Monorail Vehicle	31
MV	Minivan	8
	Other Rubber Tire Vehicles	14
RL	Commuter Rail Locomotive	39
RP	Commuter Rail Passenger Coach	39
RS	Commuter Rail Self-propelled Passenger Car	39
RT	Rubber-tired Vintage Trolley	14
SB	School Bus	14
	Steel Wheel Vehicles	25
SR	Streetcar	31
SV	Sport Utility Vehicles	8
TB	Trolleybus	13
TR	Aerial Tramway	12
VN	Van	8
VT	Vintage Trolley	58

APPENDIX 'C'

The following is a summary of the facility condition assessment requirements.

Facility Condition Assessment Requirements

- Transit agencies reporting to the NTD are required to report the overall condition of each administrative, maintenance and passenger facility listed in the NTD Asset Inventory Module.
- Transit agencies must update facility conditions every three years at a minimum.
- The overall condition of a facility is specified using the following scale:
 - 5 – Excellent
 - 4 – Good
 - 3 – Adequate
 - 2 – Marginal
 - 1 – Fair

Note that a facility is deemed to be in good repair if it has a condition rating of 3, 4, or 5 on this scale and is deemed to not be in good repair if it has a rating of 1 or 2.

- To establish the overall condition of a facility an agency must first assess the condition of major facility components, and then aggregate the component level data to obtain an overall condition rating.
- Major facility components include:
 - Substructure
 - Shell
 - Interiors
 - Conveyance (Elevators and Escalators)
 - Plumbing
 - HVAC
 - Fire Protection
 - Electrical
 - Equipment (Administrative and Maintenance Facilities only)
 - Fare Collection (Passenger Facilities only)
 - Site
- Component-level conditions are aggregated to obtain an overall condition for the facility. Alternative approaches are provided for aggregation depending on data availability.

It is recommended that agencies document their procedures for performing condition assessments, including procedures for performing inspections, and assuring/controlling data quality. Similar to other aspects on an agency's activities related to NTD reporting, these procedures may be subject to review by FTA.

FTA Facility Condition Assessment Guidebook 10 2.3 Summary. The following is a summary of the facility condition assessment requirements described above. Facility Condition Assessment Requirements. Transit agencies reporting to the NTD are required to report the overall condition of each administrative, maintenance and passenger facility listed in the NTD Asset Inventory Module. Transit agencies must update facility conditions every three years at a minimum.

The overall condition of a facility is specified using the following scale:

- 5 – Excellent
- 4 – Good
- 3 – Adequate
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- 1 – Fair
- Note that a facility is deemed to be in good repair if it has a condition rating of 3, 4 or 5 on this scale and is deemed to not be in good repair if it has a rating of 1 or 2.

To establish the overall condition of a facility an agency must first assess the condition of major facility components, and then aggregate the component level data to obtain an overall condition rating.

Major facility components include:

- Substructure
- Shell
- Interiors
- Conveyance (Elevators and Escalators)
- Plumbing
- HVAC
- Fire Protection
- Electrical
- Equipment (Administrative and Maintenance Facilities only)
- Fare Collection (Passenger Facilities only)
- Site

Component-level conditions are aggregated to obtain an overall condition for the facility. Alternative approaches are provided for aggregation depending on data availability. It is recommended that agencies document their procedures for performing condition assessments, including procedures for performing inspections, and assuring/controlling data quality. Similar to other aspects of an agency's activities related to NTD reporting, these procedures may be subject to a review by FTA.

APPENDIX 'D'

CONDITION INSPECTION GUIDELINES	
1. Building Roof	
Equipment	Task
Roof/Mechanical	<p>HVAC – Inspect unit for any visible damage, leaks or excessive corrosion</p> <p>Inspect any roof-mounted building structures including storage and workshop areas</p> <p>Exhaust fans – look/listen for damage and weather related plenum deterioration</p> <p>If equipped, look for missing parts and listen for strange noises coming from the methane evacuation pumps</p> <p>Inspect any plumbing and drainage for damage, leaks, or missing components including strainers</p> <p>Check skylights for hail damage and boiler flues for damage and proper anchoring</p> <p>Inspect all electrical components including conduit, boxes, solar panels and mountings, lightning arresters and cabling, for any damage, wire chaffing, loose or corroded connections</p>
Roof/Structural	<p>Inspect stem walls and walls for missing flashing, broken brick. Crumbling concrete or other physical damage.</p> <p>Check ladders, catwalks and stairs for damage, corrosion and insecure mounting</p>
Roof/Surfaces	<p>Inspect exposed rubber membrane for indications of having been breached</p> <p>Look for missing or crumbling roof tiles and uneven pea gravel distribution</p> <p>Check flashing and hardware for damage, and painted or coated surfaces for needing renewed</p> <p>Check for broken or missing roof tiles. Look for excessive vegetation growing in the cracks</p>
2. Building Shell	
Building Shell/Mechanical	<p>Inspect down spouts and electrical conduit and boxes for impact damage or missing parts</p> <p>Look at exterior lighting for secure mounting</p> <p>View the roll-up doors for being out of their tracks and for worn/tattered bottom edges</p>

	Check for broken windows and any damaged/corroded plumbing
Building Shell/Structural	Inspect walls for crumbling and severe cracking Look at foundations, columns, and pillars for deterioration and indications of shifting or settling
Building Shell/Surfaces	Inspect paint, coatings, siding, concrete or masonry for deterioration
3. Parking Lots	
Parking Lots/Mechanical	Inspect lighting for lamp heads that are damaged and poles that are badly corroded, have fallen, or are leaning Look for physical damage to plumbing, electrical conduit and boxes
Parking Lots/Structural	Inspect concrete for severe settling/cracking and curbs for damage Visually inspect parking blocks for dislocation and Ballard post for vehicle damage
Parking Lots/Surfaces	Check the asphalt surfaces for pot holes, wide cracks and "alligating" Note the striping and handicap parking indicators' condition
4. Grounds & Landscape	
Grounds & Landscape/Mechanical	Inspect gates for secure mounting, vehicle damage, and missing hardware or damaged wheels on roller gates Look at the picnic tables and benches for being intact and secure Check lighting fixtures and poles for damage Note any damage or corrosion to conduit and electrical boxes. Inspect plumbing for corrosion and indications of leaks Look for missing or crushed sprinkler heads
Grounds & Landscape/Structural	Inspect fencing for bent and insecure posts or piping and distorted chain link Note damaged curbing Look at the sidewalks for cracking, heaving, and settling or other potential tripping hazards Check for ineffective landscape drainage
Grounds & Landscape/Surfaces	Look around for large areas of dying grass and weed overgrowth See that there is adequate mulch coverage that is fairly evenly distributed Note any damaged, dead or dying trees and shrubbery Check any painted or coated surfaces for fading, peeling or otherwise in need of repair
5. Vehicle Wash Bay & Fuel Island	
	Visually inspect electrical boxes, plumbing, chemical tanks, wash

<p>Vehicle Wash Bay & Fuel Island/Mechanical</p>	<p>components, fuel dispensers, and vacuum systems for obvious signs of damage, wear or disrepair</p> <p>Inspect lighting fixtures for proper mounting/suspension</p> <p>Check roll-up doors for frayed edges and being out of their tracks</p> <p>Look at ventilation ducting for damage or joint separation</p> <p>Drains should have strainer on them and not clogged</p> <p>Check vehicle lifts for damage or missing parts</p> <p>Note the clarity and legibility of the area's signage</p>
<p>Vehicle Wash Bay & Fuel Island/Structural</p>	<p>Inspect walls, columns, and pillars for cracking, crumbling or corrosion</p> <p>View the foundation and floors. Note any signs of shifting, heaving or settling</p>
<p>Vehicle Wash Bay & Fuel Island/Surfaces</p>	<p>Inspect paint and coatings for peeling and for missing/damaged wall tiles</p> <p>Ensure that the floor gates are not damaged</p>
<p>6. Administration Offices & Break Room</p>	
<p>Administration Offices & Break Room/Mechanical</p>	<p>Do a brief visual check on the lighting fixtures, exposed electrical conduit and boxes</p> <p>Look for signs of leaking plumbing</p> <p>Doors should be square in their frames and windows free from broken panes</p> <p>Ask occupants about any known problems in their area that we should be aware of</p>
<p>Administration Offices & Break Room/Structural</p>	<p>Inspect walls for water damage</p> <p>Notice if the floors feel uneven or not level</p> <p>Stairs should feel solid and if made of concrete, not crumbling or have any trip hazards</p> <p>Look at the foundations that may be exposed for shifting or settling</p>

Administration Offices & Break Room/Surfaces	<p>Inspect floor tiles and carpeting for severe wear and tear</p> <p>Look at drywall and ceiling tiles for crumbling or signs of water damage that could be from leaking plumbing or storm water</p> <p>Note paint and other coatings that are in need of renewal</p>
7. Maintenance Shop	
Maintenance Shop/Mechanical	<p>Inspect electrical conduit, fixtures and boxes for physical damage and corrosion</p> <p>Look for damaged or leaking plumbing</p> <p>Doors are to be square in their frames and hardware tight</p> <p>Check ventilation ducts for distortion and separation</p> <p>Drains need to be intact and unobstructed</p> <p>Vehicle lifts should show none-to-minimal signs of hydraulic leakage or other damage</p>
Maintenance Shop/Structural	<p>Inspect walls for major cracks or other indications of shifting</p> <p>Look for signs of settling floors such as gaps along walls and curbing, or cracks that pose a tripping hazard</p> <p>Check foundations, columns and pillars for concrete deterioration, vehicle damage, or signs of movement</p> <p>Look for indications of water leaking from the ceiling</p>
Maintenance Shop/Surfaces	<p>Note paint and epoxy coatings that are in need of renewal</p> <p>Concrete flooring should be relatively smooth and free from large areas of spalling</p>
8. Storeroom & Parts Storage	
Storeroom & Parts Storage/Mechanical	<p>Inspect electrical conduit, fixtures and boxes for physical damage and corrosion</p> <p>Look for damaged or leaking plumbing</p> <p>Doors are to be square in their frames and hardware, tight</p> <p>Check ventilation ducts for distortion and separation</p> <p>Drains need to be intact and unobstructed</p>
Storeroom & Parts Storage/Structural	<p>Inspect stairwell walls for major cracking</p> <p>Steps should not shift under load or pose any tripping hazards</p> <p>Framework of metal stairs needs to be solid with no broken welds or severe corrosion</p>

	Handrails used in stairways need to be solidly mounted and present no sharp edges
Storeroom & Parts Storage/Surfaces	Note paint and glazed coatings that are in need of renewal Check for excessively worn carpet, floor tiling, or traction strips Look for perturbances on the surface that may cause a tripping hazard
9. Stairs & Stairways	
Stairs & Stairways/Mechanical	Inspect electrical conduit, fixtures, and boxes for damage or corrosion Note any plumbing that is damaged or leaking in stairwell areas Doors need to be square in their frames and hardware, tight Check ventilations ducts for distortion and separation Drains need to be intact and unobstructed
Stairs/Stairways/Structural	Inspect stairwells walls for major cracking Steps should not shift under load or pose any tripping hazards Framework of metal stairs need to be solid with no broken welds or severe corrosion Handrails used in stairways need to solidly mounted and present no sharp edges
Stairs/Stairways/Surfaces	Note paint and glazed coatings that are in need of renewal Check for excessively worn carpet, floor tiling, or traction strips Look for perturbances on the surface that may cause a tripping hazard