CDTA COMMITTEE AGENDA

Strategic and Operational Planning Committee

Thursday, January 19, 2023 | 12:00 PM | Microsoft Teams & 110 Watervliet Ave

Committee Item	Responsibility
Call to Order	Mike Criscione
Approve Minutes of Thursday, December 15, 2022	Mike Criscione
Administrative Discussion Items	
• Facility Condition Analysis Report	Jeremy Smith

Next Meeting: Thursday, February 16, 2023 at 12:00 pm via Microsoft Teams and 110 Watervliet Ave.

Adjourn	Mike Criscione

Capital District Transportation Authority

Strategic and Operational Planning Committee
Meeting Minutes – December 15, 2022 at 11:53 am; via Microsoft Teams and 110 Watervliet Ave.

In Attendance: Mike Criscione, Peter Wohl, Pat Lance, Dave Stackrow, Dan Lynch, Georgie Nugent; Carm Basile, Amanda Avery, Mike Collins, Chris Desany, Jaime Kazlo, Vanessa Fox, Jon Scherzer, Emily DeVito, Dave Williams, Trish Cooper, Gary Guy, Thomas Guggisberg

Meeting Purpose

Regular monthly meeting of the Strategic and Operational Planning Committee. Committee Member Jayme Lahut noted that a quorum was present. Minutes from the October 20, 2022 meeting were reviewed and approved.

Consent Agenda Items

FY2024 Preliminary Budget Approval -

- We are required by New York State to approve a preliminary operating budget by December 31, 2022. Staff uses it as a starting point, and we will have several more meetings to work toward developing a final adopted budget. The preliminary budget and five-year capital plan for fiscal year 2024 were provided.

- The preliminary budget is projected to be $128.3 million, a 10.4% increase from this year's budget. We are projecting a $3M increase in the customer revenue and Rail Station revenue lines; no change in federal assistance; and to balance the budget we are adding an additional $9M in STOA.

- We are projecting a higher-than-normal increase in wages and benefits (it is a contract year), and a $1.8M increase in health insurance. Fuel is projected to increase by $3.6M.

- The five-year capital plan was also reviewed, year one of which includes accommodations for the fleet, shelter program, and normal replacement efforts. It also includes the Lo/No grant we received.

- To meet our New York Stat statutory requirement the preliminary FY2024 operating budget of $128,321,806 and a five-year capital plan of $302,104,000 will be recommended to the board for approval.

Next Meeting

Thursday, January 19, 2023, at 12:00 pm via Microsoft Teams and at 110 Watervliet Ave.

Memorandum

January 19, 2023

To: Strategic and Operational Planning Committee

From: Christopher Desany, Vice President of Planning & Infrastructure

Subject: Facility Condition Analysis Report (FCAR) Executive Summary

Background

We conduct facility condition assessments of our fixed building assets to inform the capital planning priorities over the next decade. CDTA retained WSP USA Inc. to perform in-depth visual condition assessments of the three operating visions, both rail stations, 85 Watervliet and a sample of bus stops and shelters. We have been engaged in this work over the last several months.

Led by the Facilities Department, the evaluation team consisted of group of architects, engineers, bus fleet experts and cost estimators managed by WSP with support from Sowinski Sullivan (Architecture), Shumaker Consulting Engineering (Environmental), and Trophy Point (Cost Estimating). The team performed site inspections using industry-standard rating scales and procedures as outlined in the following publications from the Federal Transportation Administration:

- Guidebook: Facility Condition Assessment
- TAM Facility Performance Measure Reporting Guidebook: Condition Assessment Calculation

A more detailed executive summary is attached that provides the overall scope, a summary of project costs to address deficiencies, ratings for various categories, and narratives describing conditions at each facility. The full report is also available covering several hundred pages.

Organization of Report

- The scope, summary ratings, and narratives for each facility
- The FTA assessment procedures and the quantitative methods used by the inspection team to determine asset quantities, assign weighted values, and generate the numerical ratings. The rating systems included the following:
    - FTA Numerical Asset Rating: 5-Excellent; 4-Good; 3-Adequate; 2-Marginal; 1-Poor.
    - Action Recommendation: Repair; Replace; Remove.
    - Urgency Rating: High- 0 to 1 year; Medium- 1 to 5 years; Low- 5 to 10 years.
- Detailed reports on the six facilities
- A summary of the street amenities findings
- Environmental assessments for hazardous materials
- Appendix:
    - Detailed deficiency details with associated costs
    - Accessibility and code assessments
    - Equipment inventories
    - Schematic site plans
    - Environmental tables

- A log of hazardous conditions

Assessments were strictly based on the conditions of existing facilities. Future strategic upgrades were not considered in this report. For example, the concepts of a renovated technical training center, building expansions, office renovations, technology upgrades, and property acquisitions were not addressed. However, the scope of the study *is* part of a larger project that looks at a comprehensive facilities master plan, organizational capabilities, and alternative facilities scenarios. As it progresses, more information will be provided to the Committee on this work.

Findings

There was a total of 594 findings (deficiencies) found, and the facilities ranked between 2.7 and 3.7 (on a scale of 1 to 5) across all the categories (substructure, shell, interiors, conveyance, plumbing, HVAC, fire protection, electrical, equipment, and site).

57 of these findings were considered "high urgency", half of which have been resolved or are in progress. Examples include the bus wash replacement in Troy, switch gear upgrades in Albany, and lift replacements in Albany and Schenectady. Many of these items are due to the age of our facilities. The remainder require more information or were added to a future work plan.

Recommended budgets for repairs and replacements were provided and amount to approximately $16M. "Big ticket" items include repairs needed due to corrosion at trench drains, major cracks and spalling of surrounding concrete, and deterioration of slabs in Albany; replacement boilers and repairs due to water infiltration at RRS; and repairs to address cracks, spalling, slabs, exterior wall panels and flashing in Schenectady.

There were also 278 medium urgency deficiencies and 259 low urgency deficiencies. 15% of these have already been completed through normal routine maintenance. The remainder will be reviewed to determine priority, and financed via operating and capital budgets.

As expected, the Schenectady garage rated the lowest of all our facilities ("Marginal"). As per the report, "Based on the age of the facility, extensive renovations to address the deficiencies are not recommended and a replacement facility should be considered to meet the operational needs for the service area." This information will be useful in our efforts to pursue a new west facility.

EXECUTIVE SUMMARY

ACRONYMS

ACM: Asbestos Containing Materials
ADA: Americans with Disabilities Act
AHU: Air Handling Unit
ATF: Automatic Transmission Fluid
ATI: Access Technology Integration
ATS: Automatic Transfer Switch
BEB: Battery Electric Bus
BMS: Building Management System
CCTV: Closed-Circuit Television
CIP: Cast in Place
CMU: Concrete Masonry Unit
DPF: Diesel Particulate Filter
EDP: Emergency Distribution Panel
ERU: Energy Recovery Unit
FCA: Facility Condition Assessment
FDC: Fire Department Connection
FTA: Federal Transit Administration
HVAC: Heating, Ventilation and Air Conditioning
HID: High Intensity Discharge
IDF: Independent Distribution Frame
MDF: Main Distribution Frame
MTS: Manual Transfer Switch
NEC: National Electric Code
NFPA: National Fire Protection Association
NVR: Network Video Recorder
OWS: Oil Water Separator
PoE: Power over Ethernet
TRU: Roof Top Unit
RPZ: Reduced Pressure Zone
TAM: Transit Asset Management
TERM: Transit Economic Requirements Model
UPS: Uninterrupted Power Supply
VAV: Variable Air Volume
wc: Water Column

SCOPE

The Capital District Transportation Authority conducts a facility condition assessment of its fixed facilities approximately every ten years to inform the capital planning priorities over the next decade. CDTA retained WSP USA Inc. in 2021 to perform in-depth visual condition assessments of the following facilities:

- Albany Facility, 110 Watervliet Avenue, Albany, NY 12206 (ALBNY)
- Secondary Albany Facility, 85 Watervliet Avenue, Albany, NY 12206 (85WVL)
- Schenectady Facility, 2401 Maxon Road, Schenectady, NY 12308 (SCHNC)
- Troy Facility, 40 Hoosick Street, Troy, NY 12180 (TROY)
- Rensselaer Rail Station, 525 East Street, Rensselaer, NY 12144 (RRS)
- Saratoga Springs Rail Station, 26 Station Lane, Saratoga Springs, NY 12866 (SSTS)
- A representative sample of 23 bus stops and shelters (STREET)

The team that contributed to this report consisted of a multi-disciplinary group of architects, engineers, bus fleet experts and cost estimators led by WSP with support from the firms of Sowinski Sullivan (Architecture), Shumaker Consulting Engineering (Environmental), and Trophy Point (Cost Estimating). The team performed site inspections during November and December of 2021 using industry-standard rating scales and procedures as outlined in the following publications from the Federal Transportation Administration:

- *Guidebook: Facility Condition Assessment* https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Facility%20Performance%20Assessment%20Guidebook.pdf
- *TAM Facility Performance Measure Reporting Guidebook: Condition Assessment Calculation* https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-guidance/asset-management/60361/tam-facility-performance-measure-reporting-guidebook-v1-2.pdf
    - Since TAM guidelines only consider equipment valued between $10,000 and $50,000, equipment above this threshold is not factored into the asset ratings.

ORGANIZATION OF REPORT

- Chapter 1 describes the scope and contains the summary ratings and narratives for each facility.
- Chapter 2 describes the FTA assessment procedures and the quantitative methods used by the inspection team to determine asset quantities, assign weighted values, and generate the numerical ratings. The rating systems used include the following:
    - FTA Numerical Asset Rating: 5-Excellent; 4-Good; 3-Adequate; 2-Marginal; 1-Poor.
    - Action Recommendation: Repair; Replace; Remove.

- Urgency Rating: High- 0 to 1 year; Medium- 1 to 5 years; Low- 5 to 10 years.

- Chapters 3-8 contain the detailed reports for the six facilities.
- Chapter 9 contains a summary of the street amenities findings.
- Chapter 10 describes the environmental assessments for hazardous materials.
- Appendix:
  - There are no appendices A-1 or A-2. Appendices A-3 through A-8 are numbered to correspond to chapters 3-8 and contain the following four items for each of the six facilities:
    - Detailed deficiency details with associated costs
    - Accessibility and code assessment
    - Equipment inventory
    - Schematic site plan
  - Appendix A-9 lists the deficiency details and associated costs at the street amenities.
  - Appendix A-10 contains the environmental tables supporting chapter 10.
  - Appendix A-11 includes the log of hazardous conditions and individual reports identified by the inspection team that could constitute a safety concern and require immediate attention.

BUDGET

The recommended budgets for repair leverage both lagging and leading factors to generated estimates for the 2022 total project cost for each of the deficiencies identified by the team. Empirical bid results and forward-looking variables were used to provide an assessment of the cost for each line-item deficiency. Key assumptions include: the use of New York State prevailing wage rates for Albany, Schenectady Rensselaer and Saratoga counties; work to be done during normal working hours while the facilities are occupied; a condensed construction schedule is not required; the use of a competitive bidding process across multiple prime contracts.

Table 1.1 - Budget for Identified Deficiencies

FACILITY ID	CONTRACTS							2022 CONSTRUCTION COST [1, 2]	2022 TOTAL PROJECT COST [3, 4]
	GC	PLUMBING	MECHANICAL	FIRE PROTECTION	ELECTRICAL	VEHICLE EQUIPMENT	CIVIL		
ALBNY	$3,034,968	$244,200	$260,200	$26,050	$842,013	$377,200	$41,615	$4,826,246	$6,032,808
85WVL	$400,272	$26,250	$38,600	$142,000	$101,121	-	$22,860	$731,103	$913,879
SCHNC	$1,404,226	$30,000	$163,450	$54,600	$177,166	$127,000	$79,150	$2,035,592	$2,544,490
TROY	$934,634	$176,800	$149,100	$96,650	$133,016	$240,000	$11,550	$1,741,750	$2,177,188
RRS	$1,512,764	$34,100	$507,750	$31,350	$705,955	-	$46,575	$2,838,494	$3,584,118
SSTS	$114,138	$6,600	-	$4,950	$72,082	-	$128,275	$326,045	$407,556
STREET					$10,225		$173,687	$183,912	$229,890
TOTAL	$7,401,002	$517,950	$1,119,100	$355,600	$2,041,578	$744,200	$503,712	$12,683,142	$15,823,928

1. Includes prime and subcontractor general conditions (10%), overhead and profit (8%), occupied building premium (5%), and design contingency (20%).
2. Asbestos and hazardous material abatement is excluded.
3. Includes soft costs for design fees and construction manager (15%) and owner's change order reserve (10%).
4. Escalation should be added at 4% per year to anticipated midpoint of construction.

Table 1.2 – Deficiencies with an estimated 2022 total project cost of $200,000 or more

FACILITY ID	DEFICIENCY DESCRIPTION	2022 TOTAL PROJECT COST
ALBNY	Corrosion at trench drains and major cracks and spalling of surrounding concrete.	$991,875
ALBNY	Major cracks, spalling, and deterioration of concrete slabs.	$750,000
RRS	Major water infiltration into garage causing structural damage.	$562,500
ALBNY	Limited functionality of in-ground lifts. Replacement recommended.	$450,000
SCHNC	Major cracks, spalling, and deterioration of concrete slabs.	$375,000
RRS	Boilers near end of life in first floor mechanical room.	$375,000
ALBNY	Out of date interior fluorescent lighting in need of replacement.	$371,875
ALBNY	Major cracks, spalling, and deterioration of concrete slabs.	$371,250
RRS	Deteriorated expansion and control joints throughout.	$315,000
TROY	Need for a new bus wash and chassis wash (Project in progress).	$300,000
TROY	Corrosion and rusting of structural framing.	$284.375
TROY	Major cracks, spalling, and deterioration of concrete slabs.	$281,250
ALBNY	Corrosion and rusting of structural framing.	$281,250
SCHNC	Corrosion and deterioration of exterior wall panels and flashing.	$225,000
RRS	Missing daylight and vacancy sensors for compliance with energy code.	$223,500

FACILITY SUMMARIES

Table 1.3 - Asset FCA Chart

Asset	ALBNY	85WVL	SCHNC	TROY	RRS	SSTS
Substructure	2.90	3.00	2.23	2.78	3.37	3.75
Shell	2.97	2.96	2.00	3.32	2.98	3.26
Interiors	3.12	2.98	2.16	3.18	2.83	3.48
Conveyance	4.00	--	--	--	3.90	--
Plumbing	3.26	3.11	3.35	3.56	4.64	4.91
HVAC	4.16	4.38	4.21	4.54	3.93	4.76
Fire Protection	1.91	4.00	2.80	3.61	3.81	3.80
Electrical	3.33	3.37	2.65	3.26	3.28	3.73
Equipment	2.37	--	2.47	3.75	--	--
Site	3.32	3.30	2.58	4.49	3.50	3.40
Average Weighted Rating	**3.02**	**3.24**	**2.56**	**3.57**	**3.33**	**3.68**

Table 1.4 - Deficiency Chart

Facility	High Urgency	Medium Urgency	Low Urgency	Deficiencies Identified
	0 to 1 Year	1 to 5 Years	5 to 10 Years	
Albany 110 Watervliet	21	67	58	**146**
85 Watervliet	6	30	28	**64**
Schenectady	16	51	47	**114**
Troy	7	41	28	**76**
Rensselaer Rail Station	5	70	70	**145**
Saratoga Springs Rail Station	2	19	28	**49**
Deficiencies Identified	**57**	**278**	**259**	**594**

Table 1.5 – Select ADA Deficiencies: The table identifies general ADA non-compliance. A separate in-depth ADA assessment and design program is recommended to create a thorough inventory of deficiencies and corrective design documents.

Deficiency	ALBNY	85WVL	SCHNC	TROY	RRS	SSTS
Non-compliant slopes at exterior walks & ramps		X	X	X	X	
Inadequate number of ADA parking spaces	X	X	X	X	X	
Non-compliant entry doors and hardware	X	X	X	X	X	X
Missing tactile room signage	X	X	X	X	X	X
Restroom non-compliance for clearances or accessories	X	X	X	X	X	X
Protruding objects	X			X	X	X
Inadequate door widths	X		X			
Inadequate approach clearances at doors	X		X	X	X	
Non-compliant heights for interior casework	X	X	X			
Non-compliant railings at stairs or ramps	X	X			X	

110 WATERVLIET

This facility was rated 3.02, at the threshold between 'Adequate' and 'Marginal' in FTA's score range as further explained in Chapter 2.

Concrete flooring in the storage and maintenance bays needs repair at several locations exhibiting significant spalling and cracking. Sealant at vertical and horizontal expansion and control joints, window perimeters, and other joints needs replacement where deteriorated to prevent water infiltration.

Corrosion on column bases and structural framing can be remedied by removing rust and applying corrosive-inhibitive paint. The damaged steel column at grid line O-5 needs to be closely monitored and further evaluated to determine the effective structural capacity and needed repairs to avoid a structural failure.

For the HVAC system, items that should be replaced include non-functional unit heaters, broken and non-functional electric cabinet heaters, three old exhaust fans and damaged duct supports. Items that should be removed include the two neutralizer filter tanks, the four pumps serving the boilers, and abandoned unit heaters. Items that should be further evaluated and repaired include damaged rooftop units. New items that should be installed include properly sized exhaust and makeup air systems at the Bus Maintenance Shop, Bus

Storage, Brake Shop, and other maintenance and service areas; as well as carbon monoxide sensors wherever carbon monoxide may be present, such as all bus garage spaces.

The main electric service switchboard is 32 years old (installed in 1989), has exceeded its useful life and should be replaced. Most of the panelboards and transformers are in adequate or better condition, but a few date to the 1970s - 1980s and should be replaced. The lighting fixtures are fluorescent and HID and should be replaced with LED in a rolling replacement program to improve energy efficiency. The lighting control system should be extended to add vacancy sensors throughout all spaces to improve efficiency and meet the latest energy code.

The fire alarm system was installed in 2013 and is in adequate condition, but the manufacturer has discontinued this model so eventual replacement should be planned. The main facility generator was installed in 2002, is overloaded and should be replaced. The rooftop photovoltaic system was installed in 2012 and is in good condition, though the inverter's AC and DC disconnect switches were both in the OFF positions during the site inspections.

The plumbing systems for storm water, sanitary, vent, domestic hot and cold water, compressed air, natural gas, and industrial waste are in adequate condition. The underground fuel storage and dispensing are at the end of normal life expectancy and should be upgraded with replacement of the buried tanks, monitoring and inventory controls, and distribution piping. The compressed air plant equipment is no longer able to support the needs of the expanded facility as the diesel particulate filter cleaning machine exceeds the system's available capacity. The compressed air system should be upgraded to account for current demand and use. The adjacent Bus Body and Painting Shop requires retrofit of the compressed air equipment to treat and dry the compressed air with a large desiccant air dryer for the required capacity.

The fire protection systems have passed all inspections though the age of sprinkler heads is estimated at over 20 years. Periodic cleaning and replacement of heads is necessary as those in the employee lunch room appear greasy and those in the bus maintenance areas are covered with soot. The fire department connections need to have identification signage installed.

The in-ground, two-post vehicle lifts function only to raise and lower a vehicle. While the design should allow the front post to move and accommodate different vehicle lengths, the lifts are not fully functional because the front posts have rust and debris buildup in their tracks. These lifts should be replaced to accommodate the needs of the current fleet and future battery electric buses.

Table 1.6 – ALBNY Ten Priority Deficiencies

ID	Asset	Asset Description	Deficiency Description	QTY	UOM	Action	Unit Cost	Total Project Cost
A10-11-ALBNY	Substructure	Foundations | Standard Foundations | Trenches	Major Corrosion/Rusting Major Cracks/Spalling/Deterioration	2,300	SF	REPLACE	$345	$991,875
A10-02-ALBNY	Substructure	Foundations | Standard Foundations | Slab on Grade	Major Cracks/Spalling/Deterioration	40,000	SF	REPAIR	$15	$750,000
I30-01-ALBNY	Equipment	Vehicular Equipment | In-Ground 2-Post Vehicle Lifts	Of the functioning in-ground lifts, only the raise/lower function is working. The movable pistons are unable to move due to rusting cover plates and other components of the lift that should allow the movable piston to move.	8	EA	REPLACE	$45,000	$450,000
H40-04-ALBNY	Electrical	Other Electrical Systems | Generator	Main Generator is overloaded per conversation with the Facility Manager. Upgrade generator or remove unnecessary loads.	1	EA	REPLACE	$150,000	$187,500
B20-07-ALBNY	Shell	Exterior Enclosure | Exterior Walls	Deteriorated caulk joints	6200	LF	REPAIR	$18	$139,500
C30-08-ALBNY	Interiors	Interior Finishes | Floor Finishes	Resinous Flooring at maintenance bays has deteriorated.	5000	SF	REPAIR	$21	$131,250
E50-04-ALBNY	Plumbing	Other Piping Systems | Buried Fuel Tank	Diesel fuel tanks beyond expected useful life.	2	EA	REPLACE	$50,000	$125,000
B20-18-ALBNY	Shell	Exterior Enclosure | Exterior Walls	Exterior Concrete walls exhibit signs of major cracking.	4500	SF	REPAIR	$22	$123,750
B10-03-ALBNY	Shell	Superstructure | Roof Construction | Columns	Major Corrosion/Rusting	600	LF	REPAIR	$205	$153,750
A10-08-ALBNY	Substructure	Foundations | Standard Foundations | Pits	Major Corrosion/Rusting	600	SF	REPAIR	$125	$93,750

85 WATERVLIET

This facility was rated 3.24, within the FTA's 'Adequate' score range as further explained in Chapter 2.

The brick at the site retaining wall and courtyard wall are heavily deteriorated with stepped diagonal cracks and displaced bricks. These walls need prompt repair to prevent further deterioration, displacement, and dislodging of the bricks. Interior signs of water infiltration are evident at windows and building corridors. Exterior sealant joints should be repaired or replaced to prevent further water infiltration.

Lack of proper separation between roof steel joists and CMU partition walls was detected, accompanied with minor cracks below the points of contact. A soft isolation joint is recommended to provide a proper separation between steel framing and CMU to allow differential movement and prevent further cracks.

While the HVAC systems are in good working condition, five RTUs will likely need to be replaced soon due to their age, damaged fins, and corroded roof curbs. The Johnson Controls controlling RTU-8 and RTU-9 should be replaced with another climate control system that can be properly programmed. The mechanical room and electrical meter room should be provided with a ventilation system for exhaust and makeup air. A carbon monoxide detector must be installed in the mechanical room for the gas-fired hot water heater.

The electrical systems are in adequate condition. Most of the panelboards are in good or adequate condition, but there is one older panel that has exceeded its useful life and should be replaced. The lighting fixtures are fluorescent and HID and should be replaced with LED lights in a rolling replacement program to improve energy efficiency. The lighting control system should be extended to add vacancy sensors throughout the Planning section of the building to improve efficiency and meet the energy code. The Fire Alarm system dates to 2011 and is in adequate condition, but the manufacturer has discontinued this model so eventual replacement should be planned. The Call Center Generator and ATS were installed in 2009 and are in adequate and good condition, respectively. The hornet's nest inside the generator enclosure should be removed, and the areas of generator enclosure corrosion should be touched up and regularly monitored for further signs of deterioration.

The plumbing systems for storm water, sanitary, vent, domestic hot and cold water, and natural gas are in adequate condition. Deficiencies to restroom plumbing fixtures are a result of heavy use of faucets, flush valves and debris partially filling floor drains. This can be remedied by regular maintenance and replacement of the components. The gas-fired water heater in the Call Center meter room should have the mechanical ventilation mitigated as described above. Additionally, since there is no floor drain within the room, a drip pan with a leak alarm should be installed.

The facility needs to have an automatic sprinkler system installed.

Table 1.7 – 85WVL Ten Priority Deficiencies

ID	Asset	Asset Description	Deficiency Description	QTY	UOM	Action	Unit Cost	Total Project Cost
G10-01-85WVL	Fire Protection	Sprinklers	Facility has no Sprinkler System.	14000	SF	INSTALL	$8	$140,000
B20-07-85WVL	Shell	Exterior Enclosure | Exterior Walls	Masonry retaining wall is out of plumb.	250	SF	REPAIR	$380	$118,750
B20-09-85WVL	Shell	Exterior Enclosure | Exterior Walls	Caulk joints at building, windows and doors are cracking and delaminating from adjacent surfaces.	3500	LF	REPAIR	$18	$78,750
B20-04-85WVL	Shell	Exterior Enclosure | Exterior Walls	Deteriorated mortar joints	800	SF	REPAIR	$60	$60,250
B20-06-85WVL	Shell	Exterior Enclosure | Exterior Walls	Deteriorated masonry wall with detached mortar and loose bricks is a potential falling debris hazard.	250	SF	REPAIR	$188	$58,594
G40-01-85WVL	Fire Protection	Other Fire Protection Systems - Clean Agent System	Clean Agent Tank located in Storage Room, access to tank is blocked due to storage.	10	SF	RESTORE	$3,000	$37,500
B20-05-85WVL	Shell	Exterior Enclosure | Exterior Walls	Brick - major cracks/spalling	150	SF	REPAIR	$188	$35,156
C30-04-85WVL	Interiors	Interior Finishes | Floor Finishes	Severely damaged carpeting.	3000	SF	REPLACE	$8	$30,000
B30-02-85WVL	Shell	Roofing | Roof Coverings	Metal Coping with deteriorated bed joints	850	LF	REPAIR	$18	$19,125
J30-01-85WVL	Site	Pedestrian Paving | Paving and Surfacing	Deteriorated Concrete Sidewalk	800	SF	REPLACE	$18	$18,000

SCHENECTADY

This facility was rated 2.56, within the FTA's 'Marginal' score range as further explained in Chapter 2. Based on the age of the facility, extensive renovations to address the deficiencies are not recommended and a replacement facility should be considered to meet the operational needs for the service area.

Multiple cracks on the interior masonry partitions indicate differential settlement between the main shallow foundations and the slab-on-grade and grade beams. The slab-on-grade is in marginal to poor condition at the bus storage, pit and degreasing areas. Large sections of deteriorated concrete need to be resurfaced or replaced. Deteriorated sealant at concrete joints also needs replacement. Subsurface investigations, such as ground penetrating radar, are recommended to determine the causes of slab settlement. Improvement or replacement of the subgrade system may be necessary to limit further settlement.

The structural capacity of the tapered steel column at grid line J/12-13 appears compromised due to heavy corrosion and section loss at the column base. Prompt action is recommended to determine necessary repairs to prevent structural failure of this member. The capacity of the lateral bracing system of steel wires and rods should be assessed to determine if replacement with a more robust system of angles, channels, or larger rods is warranted.

The hot water piping insulation in the boiler room requires localized replacement to reduce heat loss. Exhaust and makeup air should be provided for the janitor's closet, mechanical room, and boiler room.

The electrical systems are in marginal condition. The main service switchboard is 49 years old (installed in 1972), has exceeded its useful life and should be replaced. Most of the panelboards are in marginal to adequate condition. Some are older and appear to date back to the original building construction or the renovation in 1987 and have thus exceeded their useful life and should be replaced. While the interior LED lighting fixtures are new, the lighting control system should be extended to add vacancy sensors throughout all spaces to improve efficiency and meet the energy code. The Fire Alarm system is a Honeywell Fire Lite model installed in 2007 and is in marginal condition since it is an older conventional panel and the manufacturer has discontinued the model. The Generator and ATS/MTS were installed in 2001 and are in marginal and adequate condition, respectively.

The plumbing systems for storm water, sanitary, vent, domestic hot and cold water, compressed air, natural gas, and industrial waste are in adequate condition. The abandoned underground oil storage tank under the floor of the air compressor and fluid storage tank room should be removed. It may still contain petroleum residue which could leak as the vessel material deteriorates underground.

The sprinkler heads of the fire protection system are estimated to be more than 20 years old and near the end of their useful life with some covered in grease and soot. Since sprinkler heads fail more as they age, if the head is heavily loaded with dust or grease and difficult to clean, replacement is often a preferable approach. All fire hose valves are plugged and capped and are therefore useless in case of a fire emergency. The fire department connection does not have identification signage which should be provided.

The vehicle equipment assessed included vehicle lifts, lubrication storage, and fueling equipment. A bus wash was not present as construction for a new wash was underway at the time of the inspections. The in-ground vehicle lift in one bay is a deficiency item of concern due to the poor condition of the lift pit and the inability of the front post to move as designed. The emergency stop button was also missing for this lift. The portable lifts in the chassis wash building all had rust due to their use in a wet environment. Both the in-ground and portable lifts should be replaced.

Table 1.8 – SCHNC Ten Priority Deficiencies

ID	Asset	Asset Description	Deficiency Description	QTY	UOM	Action	Unit Cost	Total Project Cost
A10-02-SCHNC	Substructure	Foundations | Standard Foundations | Slab on Grade	Major Cracks/Spalling/Deterioration	20,000	SF	REPAIR	$15	$375,000
I30-01-SCHNC	Equipment	Vehicular Equipment | Portable Lift	Portable lifts used in the Chassis Wash building not rated for a wet environment and each exhibit significant rust. While not past useful life, continued use conditions could reduce the integrity and strength of the units.	4	EA	REPLACE	$18,000	$90,000
A10-07-SCHNC	Substructure	Foundations | Standard Foundations | Trenches	Major Corrosion/Rusting Major Cracks/Spalling/Deterioration	200	SF	REPLACE	$345	$86,250
B10-06-SCHNC	Shell	Superstructure | Roof Construction | Columns	Major Corrosion/Rusting	500	LF	REPAIR	$205	$128,125
H10-01-SCHNC	Electrical	Electrical Service & Distribution | Switchgear	Old switchgear appears to have exceeded its useful life	1	EA	REPLACE	$60,000	$75,000
I30-02-SCHNC	Equipment	Vehicular Equipment | In-Ground 2-Post Lift	In-Ground lifts do not have ability for wheelbase adjustment. Past useful life. Missing Emergency Stop button. Not suitable for Battery Electric Buses.	1	EA	REPLACE	$55,000	$68,750
F40-01-SCHNC	HVAC	Distribution Systems	No supply or exhaust air in locker rooms. Install outdoor air supply and exhaust air systems per Mechanical Code requirement.	1	EA	INSTALL	$37,500	$46,875
B20-13-SCHNC	Shell	Exterior Enclosure | Exterior Windows	Exterior Windows and transom panels are deteriorated.	6	EA	REPLACE	$4,200	$31,500
B10-02-SCHNC	Shell	Superstructure | Roof Construction | Roof Framing	Major Corrosion/Rusting	3,000	SF	REPAIR	$8	$30,000
F60-01-SCHNC	HVAC	Controls and Instrumentation	Exhaust air systems are manually controlled, which may allow high levels of CO/CO2 gases. Install CO/CO2 detection systems to control exhaust fans.	1	EA	INSTALL	$22,500	$28,125

TROY

This facility was rated 3.57, within the FTA's 'Adequate' score range as further explained in Chapter 2. As a result of the completion of recent additions and renovations, this was the highest ranked bus facility with some asset categories in the 'Good' score range.

The slab-on-grade of the bus storage area is in adequate to marginal condition with portions of deteriorated concrete in need or resurfacing or replacement. Localized subsurface investigations, such as ground penetrating radar, are recommended in areas that will undergo future renovations to determine the causes of differential slab settlement. Improvement or replacement of the subgrade system may be necessary to limit settlement in those areas.

While the HVAC systems are in good condition, the hot water piping insulation in the boiler room requires localized replacement to reduce heat loss. Exhaust and makeup air should be provided for the janitor's closet, mechanical room, and boiler room.

The electrical systems are in adequate condition. The main service switchboard is 41 years old (installed in 1980), has exceeded its useful life and should be replaced. Most of the panelboards are in good or adequate condition, but there is one much older panel that has exceeded its useful life and should be replaced. The lighting control system should be extended to add vacancy sensors throughout all spaces to improve efficiency and meet the latest energy code. The fire alarm system is a Honeywell Fire Lite model installed in 2007 and is in marginal condition as it is an older conventional panel that has been discontinued by the manufacturer. Replacement should be planned. The Generator and ATS were installed in 2009 and are in good condition.

The plumbing systems for storm water, sanitary, vent, domestic hot and cold water, compressed air, natural gas, industrial waste, are in adequate condition. The specialized underground fuel storage and dispensing system appear to be at the end of normal life expectancy and should be upgraded, with replacement of the buried tanks, monitoring and inventory controls, and distribution piping. Deficiencies to plumbing fixtures in the driver lounge restrooms are minor. Periodic housekeeping to contain small oil spills and leaks is recommended for safety and to address the slip and fall hazard observed in the compressor room. Trench drains throughout the bus storage and wash area require maintenance to remove accumulated grit and restore full drainage flow. The bus chassis wash pit drainage also requires cleaning of the underdrain piping.

Fire protection is provided through a sprinkler system with fire extinguishers located throughout. The server/record storage room is protected by a wet sprinkler system but should be protected by a Clean Agent fire suppression system instead. The fire department connection does not have identification signage which needs to be provided.

The vehicle maintenance equipment was in adequate condition. The fuel dispensers were dirty and the bases showed signs of rust but were in good working order. The lifts in the maintenance bays were installed in June of 2020 and had no issues of concern. The bulk fluid storage tanks are old but still in good working condition. Only one of the two bus wash lanes were in use at the time of the assessment, and the condition was adequate to poor. However, both bus washes are scheduled to be replaced.

Table 1.9 – TROY Ten Priority Deficiencies

ID	Asset	Asset Description	Deficiency Description	QTY	UOM	Action	Unit Cost	Total Project Cost
I30-01-TROY	Bush Wash Equipment	Bush washer	Only one bus wash is in use and the other was not in use/working at the time of the assessment. One bus wash will be replaced with a new bush wash while the other will be replaced and used as a chassis wash bay.	2	EA	REPLACE	$120,000	$300,000
A10-02-TROY	Substructure	Foundations | Standard Foundations | Slab on Grade	Major Cracks/Spalling/Deterioration	15,000	SF	REPAIR	$15	$281,250
E50-01-TROY	Plumbing	Other Plumbing Systems | Other Piping Systems	Buried diesel fuel tanks (2EA) beyond expected useful life.	15,000	GAL	REPLACE	$10	$187,500
A10-06-TROY	Substructure	Foundations | Standard Foundations | Trenches	Major Corrosion/Rusting Major Cracks/Spalling/Deterioration	700	SF	REPLACE	$95	$83,125
G10-03-TROY	Fire Protection	Sprinklers | Sprinkler Heads and Release Devices	Sprinkler Heads are outdated	150	EA	REPLACE	$300	$56,250
H10-05-TROY	Electrical	Electrical Service & Distribution | Switchgear	Old switchgear appears to have exceeded its useful life	1	EA	REPLACE	$37,500	$46,875
G10-04-TROY	Fire Protection	Sprinklers | Sprinkler Heads and Release Devices	Sprinkler Heads are outdated and covered with soot	150	EA	REPLACE	$225	$42,188
B20-04-TROY	Shell	Exterior Enclosure | Exterior Doors	Damaged overhead door - major	5	EA	REPLACE	$5,500	$34,375
F60-01-TROY	HVAC	Controls and Instrumentation	Missing CO/CO2 detectors (except at new section of bus storage).	1	EA	INSTALL	$22,500	$28,125
F20-06-TROY	HVAC	Heat Generating Systems	Missing boiler emergency shut-off switch outside boiler room.	1	EA	INSTALL	$15,000	$18,750

RENSSELAER RAIL STATION

This facility was rated 3.33, within the FTA's 'Adequate' score range as further explained in Chapter 2.

No significant structural issues were detected at the station building or the pedestrian overpass (Passarelle) bridge. The Herrick Street bridge has settlement between the ramp structure and the abutments on both sides. Monitoring of the long-term settlement is recommended to prevent further damage as witnessed at sidewalks and cladding around the ramp.. The expansion joints at each end of the main bridge structure and between the parking garage and Herrick Street should also be repaired.

The parking garage requires localized repairs in multiple locations to address concrete spalling, remove rust, and apply corrosive-inhibitive protection at exposed post-tensioning steel cables of the double-tee precast concrete. Vertical cracks on the east concrete retaining wall that supports the second and third floor framing also need repair. Deteriorated joint sealants are a likely cause of the significant efflorescence noted in several areas of the second and third floors. Joints in need of replacement include those between the horizontal framing and the east retaining wall and those at the northeast stair shaft and walkway. Painted steel railings at open stair shafts are heavily corroded from de-icing salts and in need of repair or replacement.

The HVAC systems are in good condition but some AHU's are not easily accessible for maintenance. An elevated platform should be installed for safety to replace the current ladder access. VAV's should be evaluated to ensure there are no hot water leaks. Air curtains at the track level should have a guard or cover installed on one side to deflect air to the desired direction. Items in need of replacement to ensure proper functionality of systems include the boilers, burners, hot water pumps, RTU's with signs of corrosion, old pumps in the mechanical rooms, the vibration isolators for the outdoor chillers, and thermostats. Makeup air and exhaust systems should be installed as required, such as in electrical rooms and power rooms.

The electrical systems are in adequate condition. The two main service switchboards are 19 years old (installed in 2002) and are in good condition. All of the panelboards and transformers were installed within the last 20 years and are in adequate or good condition, with the majority dating back to the original building construction in 2002. The two motor control centers are in adequate condition. The interior lighting is predominantly fluorescent fixtures in marginal to adequate condition. All non-LED interior fixtures should be replaced with LED in a rolling replacement program to improve energy efficiency. The lighting control system should be extended to add daylight and vacancy sensors throughout all spaces to improve efficiency and meet the energy code. The fire alarm system is a Simplex 4020 addressable control panel model installed in 2003 and is in good condition. The generator was installed in 2002, is in marginal condition and has a corroded natural gas line, silencer, and dunnage. The areas of corrosion should be touched up and monitored. The abandoned garage ramp snow melting equipment has never been operational and should be removed as it is severely corroded.

The plumbing systems for storm water, sanitary, vent, domestic hot and cold water, natural gas, and parking lot waste are in good condition. Minor deficiencies to plumbing fixtures in the back of house, tenant and public usage restrooms can be remedied by normal maintenance or component replacement. A gas leak odor from the gas generator located in the parking garage may be due to rust at a flange joint with a deteriorated gasket. This should be further inspected and repaired.

The fire protection system is a combined sprinkler and fire standpipe system. A dry sprinkler system serves the Passarelle bridge and is well maintained. Wall plate signage needs to be cleaned for ease of identifying each of the three fire department connections on the lowest floor of the parking garage for the main wall hydrant, sprinkler connection and standpipe connection.

The three parking attendant booths in the north surface lot need to be completely replaced due to heavy corrosion of the heat pumps, conduits, flooring and cladding.

Table 1.10 – RRS Ten Priority Deficiencies

ID	Asset	Asset Description	Deficiency Description	QTY	UOM	Action	Unit Cost	Total Project Cost
F20-02-RRS	HVAC	Heat Generating Systems	Boilers near end of life.	2	EA	REPLACE	$150,000	$375,000
B20-05-RRS	Shell	Exterior Enclosure | Exterior Walls	Deteriorated expansion/control joint - CMU	14000	LF	REPAIR	$18	$315,000
B10-06-RRS	Shell	Superstructure | Floor Construction | Floor Framing	Major Corrosion/Rusting Major Cracks/Spalling/Deterioration	9,000	SF	REPAIR	$9	$95,625
B10-11-RRS	Shell	Superstructure | Floor Construction | Pavement	Major Corrosion/Rusting Major Cracks/Spalling/Deterioration	4,000	SF	REPAIR	$15	$75,000
C10-04-RRS	Interiors	Interior Construction | Partitions	Parking booth floors are completely rusted through to subfloor.	3	EA	REPLACE	$20,000	$75,000
C20-02-RRS	Interiors	Stairs | Stair Finishes	Concrete stairs and patches are spalling and damaged and structural rebar is exposed in multiple locations.	80	SF	REPAIR	$425	$42,500
F30-01-RRS	HVAC	Cooling Generating Systems	Likely not enough cooling in leased space. Add wall-mounted split systems as needed.	2	EA	INSTALL	$15,000	$37,500
F40-02-RRS	HVAC	Distribution Systems	CHW/HW pumps near end of life.	2	EA	REPLACE	$15,000	$37,500
F40-03-RRS	HVAC	Distribution Systems	Boiler pumps near end of life.	2	EA	REPLACE	$15,000	$37,500
F50-01-RRS	HVAC	Terminal & Package Units	Poor access to AHU-3. Install platform instead of ladder for safe access to AHU.	1	EA	INSTALL	$22,500	$28,125

SARATOGA SPRINGS RAIL STATION

This facility was rated 3.68, within the FTA's 'Adequate' score range as further explained in Chapter 2. Most asset categories rated in the 'Good' and 'Adequate' score ranges. The facility underwent a major redesign and reconstruction in 2002-2004 and most systems date to that project.

The base of exterior steel canopy posts require control joints with sealant to allow for differential movement between the steel and concrete and prevent further cracking and spalling of the concrete. Removal of rust and application of corrosive-inhibitive paint is recommended for the canopy steel framing. For the wood canopy framing, cleaning and refinishing of the exposed wood is recommended to prevent further water damage.

Poorly-functioning public doors and a rusted utility door need repairs. Minor damage to the seamless interior flooring needs localized replacement. Sealant joints around windows and doors should be replaced to prevent water infiltration.

While the HVAC systems are in good condition, the hot water piping insulation in the boiler room requires localized replacement to ensure continuous insulation and minimal heat losses. The boiler condensate should be piped with a neutralizer tank filter to prevent corrosion in the condensate drain. Exhaust and makeup air should be provided for the janitor's closet, mechanical room, and boiler room.

The electrical systems are in adequate to good condition. The main service switchboard is in good condition. Both distribution transformers are in good condition. All panelboards are in good or adequate condition. All interior fixtures have been upgraded to LED and are in good condition, but exterior lighting is a mix of HID fixtures in adequate condition and newer LED fixtures in excellent condition. One lighting fixture at the southern side of the waiting room is missing and should be replaced. The remaining HID fixtures should be replaced with LED in a rolling replacement program to improve energy efficiency. The lighting control system should be extended to add vacancy sensors throughout all spaces to improve efficiency and meet the energy code. The fire alarm system is in adequate condition but should be replaced with a newer addressable system when it reaches end of life. The natural gas generator and ATS are in adequate condition with minor signs of corrosion on the outdoor enclosure. The areas of corrosion should be touched up and regularly monitored for further signs of deterioration.

The plumbing systems for sanitary, vent, domestic hot and cold water, natural gas, and industrial waste are in excellent to good condition. Only a few minor plumbing deficiencies were noted. Leaks from the canopy gutters are causing wood rot to the soffits, and minor corrosion was detected on the gas pipe feeding the outdoor standby generator.

Fire protection is provided by a sprinkler system with fire extinguishers at various locations. Deficiencies detected include an abandoned sprinkler test and drain valve assembly that is a protruding element hazard on the platform side, missing firestopping at pipe penetrations through walls, and missing covers on fire department connections.

Table 1.11 – SSTS Ten Priority Deficiencies

ID	Asset	Asset Description	Deficiency Description	QTY	UOM	Action	Unit Cost	Total Project Cost
H10-02-SSTS	Electrical	Electrical Service & Distribution | Panelboards	Panels BMS, Heat Trace, PP-MDA, LP1 & LP2 have water pipes installed above in NEC required dedicated equipment space. Drip trays only meet code where the pipes and tray are 6ft above top of panel.	5	EA	REPAIR	$3,609	$22,556
B20-01-SSTS	Shell	Exterior Enclosure | Exterior Doors	Wood Door - minor deterioration with damaged hardware at Door 103A	6	EA	REPAIR	$1,500	$11,250
A10-01-SSTS	Substructure	Foundations | Standard Foundations | Curbs	Major Cracks/Spalling/Deterioration	50	SF	REPAIR	$110	$6,875
B20-04-SSTS	Shell	Exterior Enclosure | Exterior Walls	Deteriorated expansion/control joint with damaged caulking.	60	LF	REPLACE	$65	$4,875
E40-02-SSTS	Plumbing	Rain Water Drainage | Downspouts	Damaged downspouts improperly repaired with duct tape	8	EA	REPAIR	$450	$4,500
B20-02-SSTS	Shell	Exterior Enclosure | Exterior Doors	Metal Door and Frame - major deterioration	1	EA	REPLACE	$3,300	$4,125
E40-01-SSTS	Plumbing	Rain Water Drainage | Downspouts	Deteriorated eaves through seams are leaking	1	EA	REPAIR	$3,000	$3,750
G10-02-SSTS	Fire Protection	Sprinklers | Water Supply Equipment	Water Meter Room used for storage limits access to Sprinkler Control Valve Assembly	1	EA	RESTORE	$3,000	$3,750
C30-05-SSTS	Interiors	Interior Finishes | Wall Finishes	Wood composite baseboard trim is damaged.	240	LF	REPLACE	$12	$3,600
J30-02-SSTS	Site	Pedestrian Paving | Paving and Surfacing	Deteriorated concrete sidewalk and ramp slab	30	SF	INSTALL	$90	$3,375

Facilities Department
Facilities Condition Analysis Report

Strategic & Operational Planning Committee
January 19, 2023

Updated Facility Condition Analysis Report & Comprehensive Master Plan

- Started work over a year ago
- Part of a broader project of seven tasks:
  - Facility Condition Analysis Report
  - Updated as-builts (facility layouts)
  - Comprehensive Master Plan
  - Maintenance procedures manual
  - Organizational Capabilities
  - 25% Electrification of Albany Concept
  - Alternative Facilities Scenarios
- Nine workshops
- Estimated Completion February 2023
- Third FCAR in past 15 years
- Provides roadmap for capital investments

Facility Condition Analysis Report

- Looks at major systems (based on FTA guidelines)
  - Substructure, Shell, Interiors, Conveyance, Plumbing, HVAC, Fire Protection, Electrical, Equipment, Security/Site

- Ratings:
  - Excellent, Good, Adequate, Marginal, Poor
- Actions:
  - Repair, Replace, Remove
- Urgency:
  - Low, Medium, High

Table 1.3 - Asset FCA Chart

Asset	ALBNY	85WVL	SCHNC	TROY	RRS	SSTS
Substructure	2.90	3.00	2.23	2.78	3.37	3.75
Shell	2.97	2.96	2.00	3.32	2.98	3.26
Interiors	3.12	2.98	2.16	3.18	2.83	3.48
Conveyance	4.00	--	--	--	3.90	--
Plumbing	3.26	3.11	3.35	3.56	4.64	4.91
HVAC	4.16	4.38	4.21	4.54	3.93	4.76
Fire Protection	1.91	4.00	2.80	3.61	3.81	3.80
Electrical	3.33	3.37	2.65	3.26	3.28	3.73
Equipment	2.37	--	2.47	3.75	--	--
Site	3.32	3.30	2.58	4.49	3.50	3.40
Average Weighted Rating	3.02	3.24	2.56	3.57	3.33	3.68

Facility Condition Analysis Report

DEFICIENCY DETAILS - Schenectady Bus Facility

Discipline	ID	Asset	Asset Description	Deficiency Description	Location	QTY	UOM	Urgency	Action	STATUS	Photo ID	Photo	Unit Cost	Total Project Cost
EQUIP	I30-01-SCHNC	Equipment	Vehicular Equipment | Portable Lift	Portable lifts used in the Chassis Wash building not rated for a wet environment and each exhibit significant rust. While not past useful life, continued use conditions could reduce the integrity and strength of the units.	Chassis Wash Building	4	EA	HIGH	REPLACE	NA	RR-SCH (122) CHSS-WASH-BLDG		$18,000	$90,000
ELEC	H10-01-SCHNC	Electrical	Electrical Service & Distribution | Switchgear	Old switchgear appears to have exceeded its useful life	Bus Garage Storage	1	EA	HIGH	REPLACE	Open	DF-SCH(125)		$60,000	$75,000
EQUIP	I30-02-SCHNC	Equipment	Vehicular Equipment | In-Ground 2-Post Lift	In-Ground lifts do not have ability for wheelbase adjustment. Past useful life. Missing Emergency Stop button. Not suitable for Battery Electric Buses.	Maintenance Building Lift Bay	1	EA	HIGH	REPLACE	IN Progress	RR-SCH (213) MTN-LIFT-BAY		$55,000	$68,750
MECH	F60-01-SCHNC	HVAC	Controls and Instrumentation	Exhaust air systems are manually controlled, which may allow high levels of CO/CO2 gases. Install CO/CO2 detection systems to control exhaust fans.	Bus Garage	1	EA	HIGH	INSTALL	Complete	MY-SCH(102)		$22,500	$28,125
MECH	F40-03-SCHNC	HVAC	Distribution Systems	Exhaust Fan likely undersized for space. Provide adequate exhaust air.	Oil Grease Storage	1	EA	HIGH	INSTALL	COMPLETE	MY-SCH(243)		$15,000	$18,750
STRUCT	B10-07-SCHNC	Shell	Superstructure | Roof Construction | Columns	Damaged/Deteriorated	Bus Stg. Col. next to Grid Lines J-12/13, Grid Line C-3	50	SF	HIGH	REPLACE	Open	ET-SCH-ORIGSTOR(236)		$240	$15,000
MECH	E50-01-SCHNC	Plumbing	Other Plumbing Systems | Other Piping Systems	Service Fluid Stations Missing Face/Eyewash.	Bus Wash Fluid Maintenance Bay	1	EA	HIGH	INSTALL	COMPLETE	DL_SCH(318)		$7,500	$9,375
MECH	G20-05-SCHNC	Fire Protection	Standpipes | Piping Valves and Fittings	Fire Hose Valves Plugged	Bus Wash Area and Maintenance Area	6	EA	HIGH	REPLACE	NA	PR-SCH(130)		$450	$3,375

Facility Condition Analysis Report

Table 1.4 - Deficiency Chart

Facility	High Urgency 0 to 1 Year	Medium Urgency 1 to 5 Years	Low Urgency 5 to 10 Years	Deficiencies Identified
Albany 110 Watervliet	21	67	58	146
85 Watervliet	6	30	28	64
Schenectady	16	51	47	114
Troy	7	41	28	76
Rensselaer Rail Station	5	70	70	145
Saratoga Springs Rail Station	2	19	28	49
Deficiencies Identified	57	278	259	594

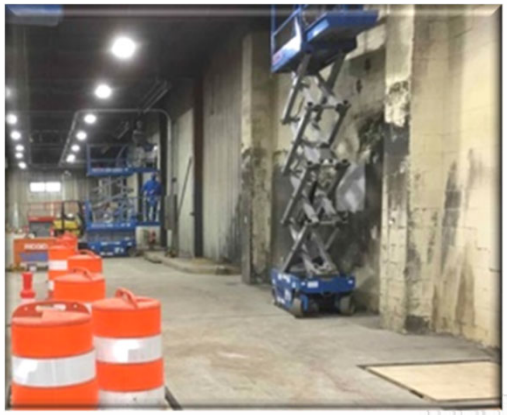
Examples of High Urgency Deficiencies

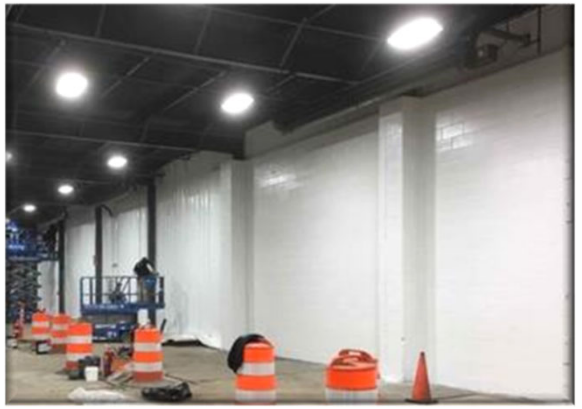
- Corroded/Deteriorated gas or electrical conduit
- Deteriorated equipment (beyond useful life)
- Exit Sign, Emergency Lights, Lighting
- Major Code issues

Facility Condition Analysis Report

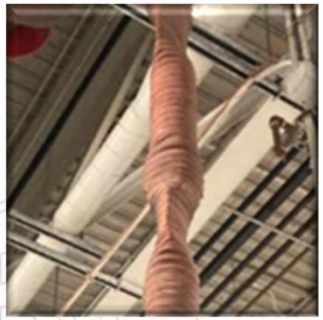
High Urgency Deficiencies (0-1 year)

- 57 Total High Urgency Deficiencies
- 4 Categories
  - Open (added to annual workplan)
  - Open (further information needed)
  - In Progress
  - Completed
- 50% completed or in progress
- 35% further information (before adding to plan)
- 25% added to FY24 work plan (year 1 of 5-year plan)





Facility Condition Analysis Report



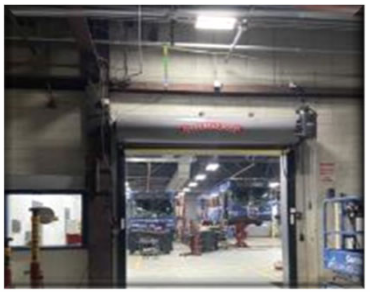
Examples of Completed/In Progress Work:

- Bus Wash replacement in Troy
- Switch gear upgrades in Albany
- Lift replacement/Rebuild in Albany & Schenectady
- Emergency lighting replacement/additions
- HVAC upgrades at 85 & Schenectady
- Vehicle exhaust repair/replace
- Gas line replacement at RRS
- Lighting repair/replacement at RRS

Facility Condition Analysis Report

Remaining Deficiencies:

- 278 Medium Urgency Deficiencies (years 1-5)
- 259 Low Urgency Deficiencies (Years 5-10)
- 15% already completed through normal routine maintenance
- All to be reviewed to determine CDTA priority
- Priority work to be added to years 2-5 of 5-year plan
- Many funded through operating budget
- Some may be combined for capital expense/budget



Facility Condition Analysis Report

Schenectady Facility Condition Summary

Table 5.1 - SCHNC Facility ID and Condition Assessment Summary

Inspection Date	11/03/2021
Facility Name	Schenectady Facility / SCHNC
Address/Location	2401 Maxon Road, Schenectady, NY 12308
Facility Type	Maintenance
Site Area	370,300 SF
Year Built	1972
Building SF	44,700 SF
Additions	1987 (+15,500 SF)
Floor Levels	1
Parking Spaces	82

ID #	Name	Asset Quantity	Unit of Measure	Assigned Weight Value	Condition Rating	Percent of Asset Quantity by Condition				
						5	4	3	2	1
						Excellent	Good	Adequate	Marginal	Poor
A	Substructure	47,500	SF	15	2.23	-	-	29.0%	65.0%	6.0%
B	Shell	118,469	SF	20	2.00	-	-	20.7%	58.8%	20.5%
C	Interiors	194,024	SF	10	2.16	-	-	33.3%	49.2%	17.6%
D	Conveyance	0	EA	0						
E	Plumbing	57	EA	5	3.35	1.6%	53.9%	30.5%	6.2%	7.8%
F	HVAC	8,056	LF	10	4.21	40.0%	48.5%	7.4%	0.8%	3.3%
G	Fire Protection	33	EA	5	2.80	-	48.8%	9.7%	13.9%	27.6%
H	Electrical	17,301	LF	5	2.65	11.5%	11.5%	23.8%	37.2%	16.0%
I	Equipment	20	EA	20	2.47	-	20.0%	8.5%	70.0%	1.5%
J	Site	109,100	SF	10	2.58	-	3.2%	60.4%	28.0%	8.5%

Average Condition Rating	2.72
Average Weighted Condition Rating	2.56

"This facility was rated 2.56, within the FTA's 'Marginal' score range as further explained in Chapter 2."

"Based on the age of the facility, extensive renovations to address the deficiencies are not recommended and a replacement facility should be considered to meet the operational needs for the service area."