







Madison Metro Transit 1101 E. Washington Building Summary

Introduction

- 30,000 riders rely on Madison Metro Transit, with more than 13 million trips a year.
- Forty years ago, this property was designed to house and maintain **140 buses**, but it is now servicing up to **223 buses** for current ridership, with goals for future expansion.
- The facility and infrastructure has had **no significant updates since its original construction**. Nearly all components and workflows are past their useful life or are entirely deficient. This is creating undue hardship and stress on users of the building, resulting in deterioration of the overall work environment.

Current Facility Challenges

- Inadequate ventilation, heating, and cooling have been identified as the most deficient system causing hazards to the occupants within the building, which is even described by users as foggy. Nearly all of the mechanical units are past their useful life and inefficient, if not in complete failure
- The current **open-air wash line is creating the largest hazard** to the building. Through the wash cycle, the buses' idle exhaust and resultant debris removed from the buses creates mass air-borne pollutants.
- Water infiltration is an ongoing challenge. Numerous roof leaks have prompted an expedited 2018 flatroof replacement. Overloaded storm drains have also created floods within the buildings at times.
- The general conditions and quantity of the toilet rooms and fixtures are substandard, with instances of sewer back-up sporadically over the years. Meeting gender equity for toilet/shower facilities is also a current concern.
- **Emergency egress lighting** requires upgrades since the exterior does not have any emergency lighting to lead occupants to the public way. The interior egress lighting levels are also questionable.

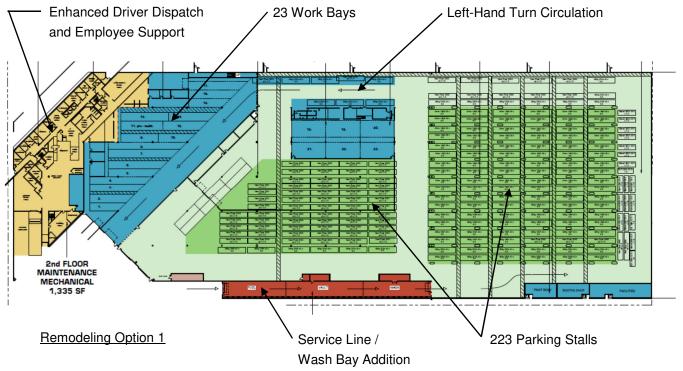
Current Functional Challenges

- The current facility creates noticeable **challenges to driver dispatch and stresses for Metro's drivers**. A renovation to the building, providing very basic amenities, will produce results in creating safer drivers.
- The **limited number of work bays** constrains the ability to provide preventative maintenance, as they are consumed by active break-downs. Poor space layout, with parts, tires, and storage areas located at the far ends of the facilities, **creates hours of lost time** for staff to just traverse this extremely long building.
- The building is currently designed for **right-hand turn circulation** for buses, which creates a blind-spot turn direction for drivers, increasing the potential for incidents. Left-hand turns are the industry standard for current bus facilities, allowing drivers clear views of their path.

Preferred Design Solution Concept

- The development of the program and renovation strategies started with early guidance provided by the City of Madison Engineering group and Madison Metro. At the forefront were the following goals and objectives:
 - Maintain functions generally within the existing footprint.
 - Provide a 20-year solution for the site.
 - Improve workflows by reorganizing functional adjacencies.
 - o **Identify upgrade requirements** for utilities and life safety.

- o Staff safety and retention are key priorities.
- o Reorganize bus traffic flow for **Left-Hand turns** in lieu of current Right-Hand Turns for increased safety.
- o Sustainable Methods and Decreased Maintenance are values for the City.
- Through the charrette process, with staff interviews, surveys, and department head meetings, three key priorities called for improvements of **Ventilation**, **Safety**, **and Toilet Rooms**.
- REMODELING OPTION 1 resolves many of Metro's challenges:



Phasing and Construction Timelines

Phasing strategies were evaluated for system failure, life safety, operational efficiencies, and construction
effect. Each of the projects is self-supportable. The stakeholders' desired schedule and capital budget plan
breaks the project into phases and timelines as follows:

Year	Phase		Design	Construction	Equipment
2018	1	Design: Service Line/Body Shop	\$458,878		
2019	1	Service Line/Body Shop Construction	T	\$4,681,269	
	1	Service Line/Body Shop Equipment		+ 1,001,000	\$1,260,173
	2	Design: HVAC Bus Maint. & Storage	\$711,144		
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2020	2	HVAC Bus Maintenance & Storage		\$7,227,288	
	3	Design: Bus Maint., Dispatch/Support, Bus Storage	\$2,438,010		
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2021	3	Bus Maintenance, Dispatch/Support, & Bus Storage Renovations		\$24,755,843	
	3	Renovation Equipment & Furniture			\$2,738,260
	4	Design: Ongoing Maintenance	\$977,083		
2022	4	Ongoing Maintenance		\$9,911,304	
TOTAL			\$4,126,238	\$46,575,705	\$3,998,434