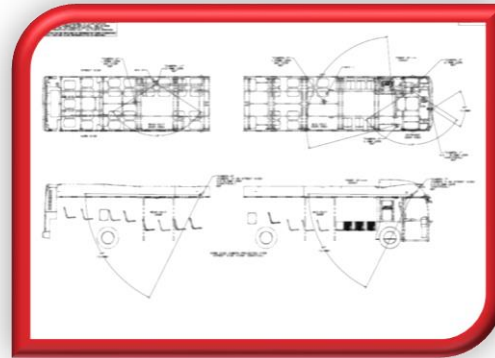
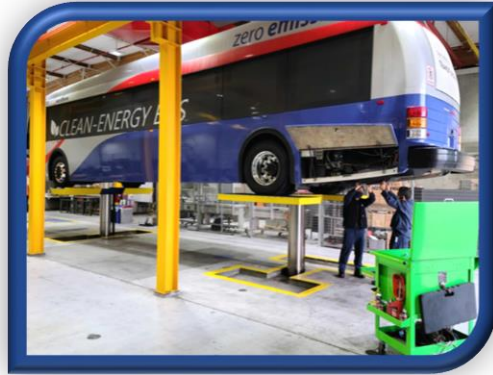


# SamTrans Bus Maintenance Department

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**Dave Harbour**  
**Director, Bus Maintenance**

# The Bus Maintenance Department

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- **Bus Maintenance**



- **Intelligent Transit Systems (ITS)**



- **Operations Training**



# Mission Statement

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The mission of SamTrans Bus Maintenance Department is to provide the District's customers with safe, reliable, innovative, and cost-effective mobility solutions that also focus on improving the environment through utilization of the latest clean-air and zero-emissions technology. Train, qualify, and maintain proficiency of Bus Operators and Maintenance Personnel in Support of the District's operational needs.



# SamTrans Fleet

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- 312 Heavy Duty Transit Buses
  - ❖ Clean Diesel, Diesel-Electric Hybrid, and 100% Battery Electric
- 70 RediWheels Cutaways and Minivans
  - ❖ Gas
- 76 Non-Revenue Operations Support Vehicles
  - ❖ Gas, Hybrid-Electric, and 100% Battery Electric

# Bus Maintenance Overview

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- Responsible for achieving the District's mission of providing safe, reliable, clean, environmentally conscious, and cost-effective transportation.
- Provides the highest-level of maintenance expertise and knowledge to ensure that all fleets meet or exceed regulatory and performance standards.
- Provides materials management and inventory control for Bus and Facilities Maintenance and ITS, including parts and component purchasing, and warranty recovery.

# Intelligent Transit Systems (ITS) Overview

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- Provides direct support to onboard electronics systems such as:
  - ❖ Fare collection systems
  - ❖ Onboard video systems
  - ❖ Computer aided dispatch (CAD) and automatic vehicle locator (AVL)
  - ❖ Cellular wireless systems.
- Researches and recommends new technology to enhance passenger experience, ease of use, and safety.
- Supports Caltrain's' ticket vending machines (TVM)

# Operations Training Overview

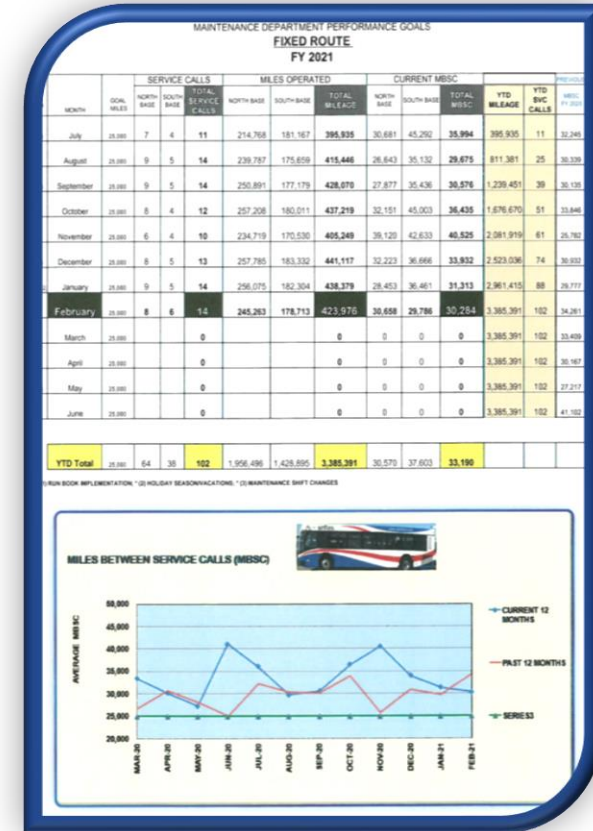
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- Provides all initial qualification and commercial driver's license (CDL) training to all District Operators and Maintenance personnel.
- Insures the workforce maintains the highest level of safety and proficiency.
- Provides subject matter expertise in support of the Transportation and Bus Maintenance Departments.
- FY22 Goal to hire and train 109 new Bus Operators.

# Measuring Success

## ■ Key Performance Metrics:

- ❖ Miles Between Service Calls (MBSC)
- ❖ National fixed route average : 9,500 miles
- ❖ Samtrans' Goal: 25,000
- ❖ FY 2021 combined base averages:
  - Fixed Route – 33,190 mbsc
  - Redi-Wheels – 31,619 mbsc





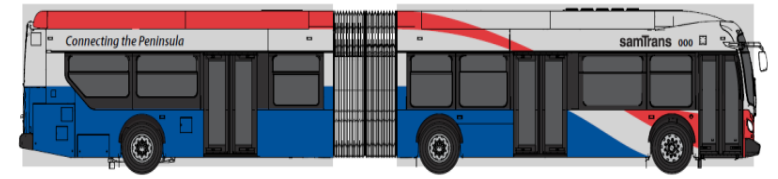
# Measuring Success (Continued)

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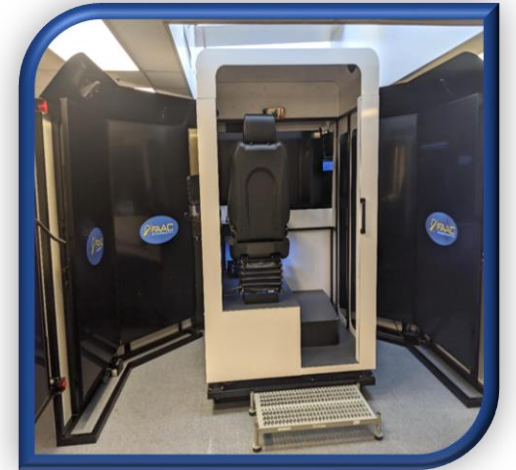
- ❖ Buses Out of Service Due to Parts Availability
  - SamTrans Goal: 2% of fleet
  - FY2021 average: 0.36% per month
- ❖ Annual Stores Inventory Audit
- ❖ Miles Between Preventable Accidents
- ❖ Base Inspections
- ❖ Regulatory Audits and Inspections



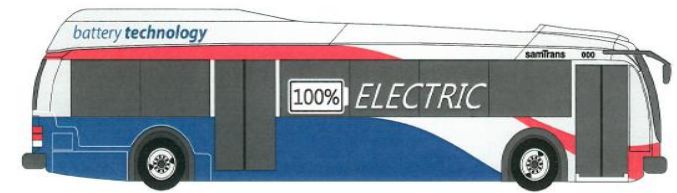
# Recent Projects



- Procurement of fifty five 60' New Flyer Articulated Buses
- Procurement of first two 40' Battery electric buses
- Procurement of FAAC Bus Simulator
- Initial passenger access to cellular Wi-Fi rollout on the FCX fleet
- Wi-Fi connectivity upgrades at both Maintenance bases
- Replacement of 13 Cutaway RediWheels coaches
- Replacement of 14 RediWheels minivans
- Replacement of 14 non-revenue support vehicles which included the District's first zero-emissions vehicles



# Current Projects



- Acceptance of 8 Battery Electric Buses
- Needs assessment and analysis for the replacement of the Computerized Maintenance Management System (SPEAR).
- Procurement of seven 40' Battery Electric Bus expansion fleet for upcoming 101 express lane service.
- Retrofit of entire 312 heavy duty bus fleet with cellular Wi-Fi capabilities.



# Future Projects

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- Full Transition to 100% zero-emissions fleets
- Replacement of the Computerized Maintenance Management System (SPEAR)
- Real-time telematics and onboard systems monitoring



# Moving us Forward

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- Vision:
  - ❖ Fully zero-emissions fleets
  - ❖ Upgrades to customer comfort and rider experience
  - ❖ Transition Bus Maintenance business processes to a current Enterprise Asset Management (EAM) system
  - ❖ Vehicle onboard diagnostics (Telematics)
- ❖ Planning:
  - ❖ Evaluating available technology with current and future operational needs
  - ❖ Keeping up with the industry
  - ❖ Skill-set gap assessment
  - ❖ Training and education
  - ❖ Collaborative Teamwork

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# Questions

