



# Capital MetroRail

## Rail Startup Board Update

September 28, 2009

# Progress Since Last Update

- Communication System improvements
  - Completed Design of New Primary Communication System (Radio System)
- Train Detection System Relocation
  - Completed
- Hazard Analysis / Risk Assessment
  - Completed Analysis Process with full FRA Participation



# Hazard Analysis / Risk Assessment

- Identified Potential Risks in the System
- Team defined solutions to the risk issues
  - Developed mitigation strategies
- Solutions for addressing issues were agreed upon
- Consensus that analysis was comprehensive
- Two Primary Categories of Issues:
  1. Issues requiring programming
    - changes to the 30 Centralized Traffic Control devices
  2. Issues requiring new / revised operating procedures



# Hazard Analysis / Risk Assessment

## 1. Issues requiring programming modifications

- Reduce opportunities for human error through changes in the vital logic of the Centralized Traffic Control System
- Other programming changes in parallel to address other field issues

## 2. Issues requiring operating procedure modifications

- Clarifying procedures for
  - Emergency situations
  - Worker protection
  - Signal operations
- Improve “Gate Down Time” at Lamar, Braker, Kramer intersections
- Comprehensive Functional Specification / System Integration Document



# Work Remaining

- Complete Programming modifications
- Review Programming modifications
- Complete Operating procedure modifications
- Complete “Gate Down Time” operation improvements
- Final Validation and testing of the modified system
- Install New Primary Communication System (Radio System)
- Complete Comprehensive Functional Specification / System Integration
- Contact FRA within 30 days of opening



# Estimate for Work Remaining

- Programming Changes, Review and Procedures:
  - Expected to be complete before January
- Remaining Tasks
  - Expected to be complete in 1<sup>st</sup> quarter of 2010
- Estimated Cost of Modifications
  - \$750,000 - \$1,000,000

