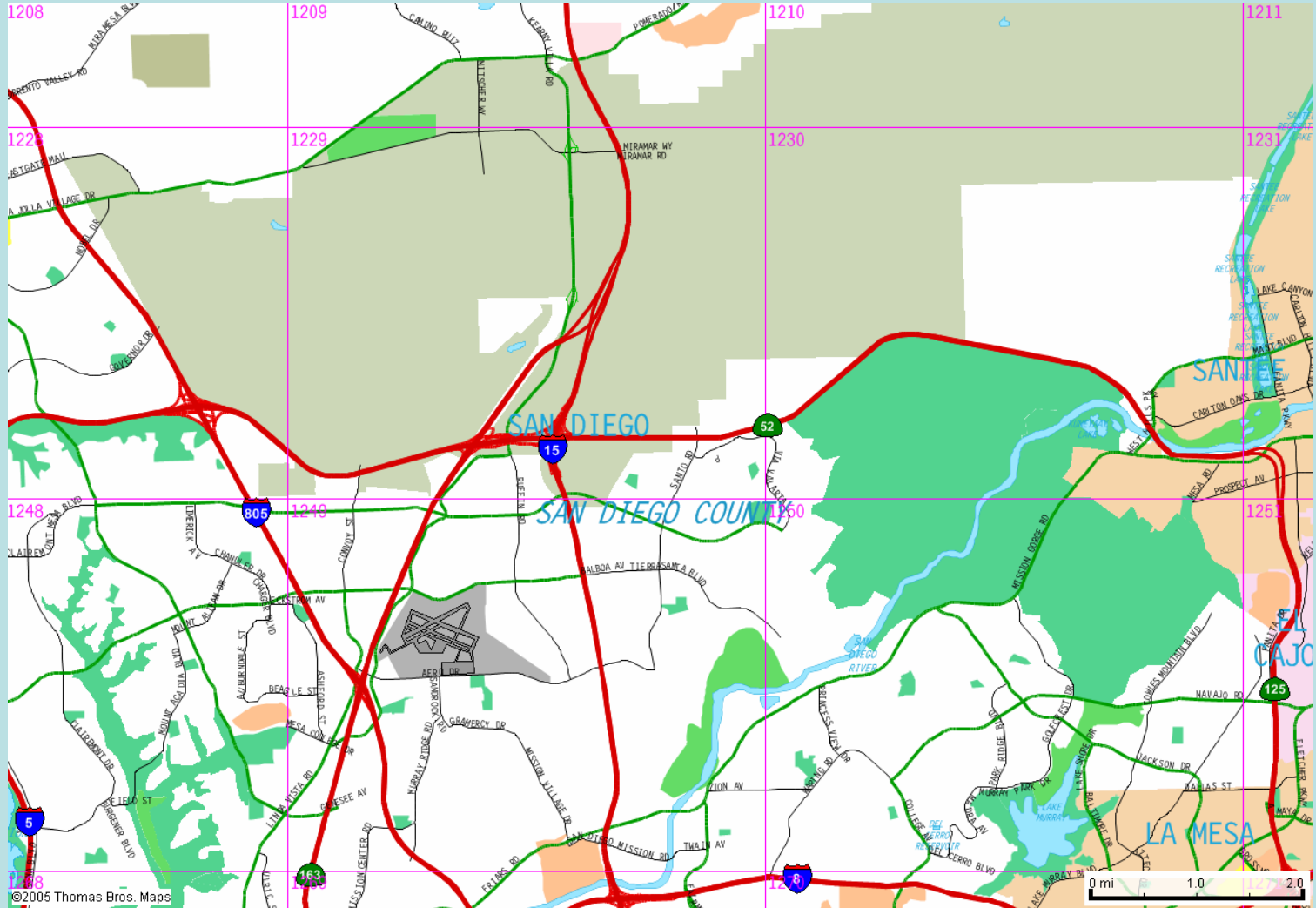
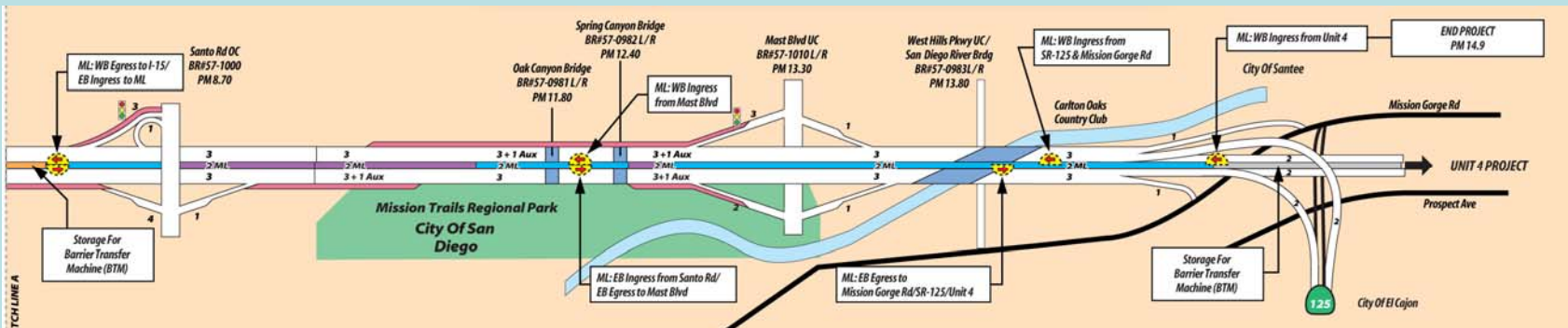
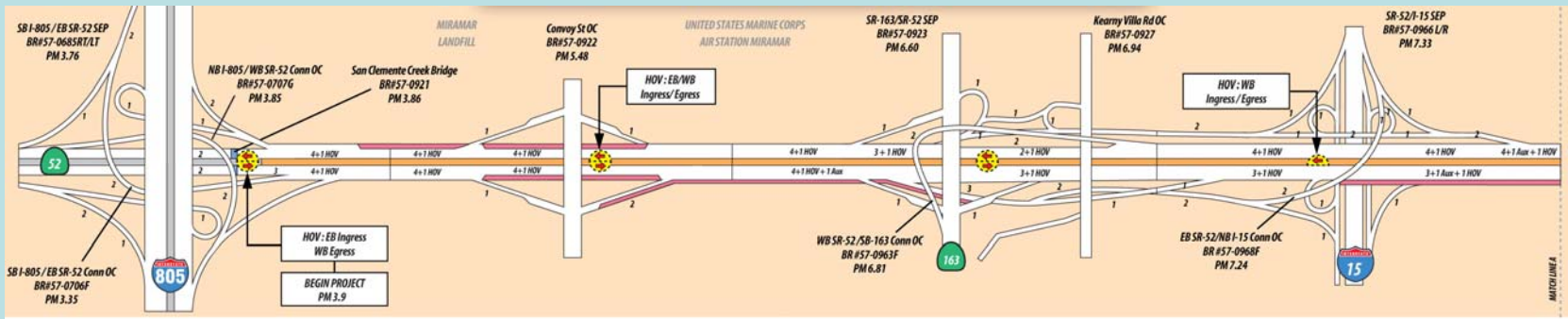


# Simulation Approach for Analyzing Managed Lanes Operations on SR 52

John El Khoury, CH2M HILL, San Diego, CA  
Loren Bloomberg, CH2M HILL, Santa Ana, CA



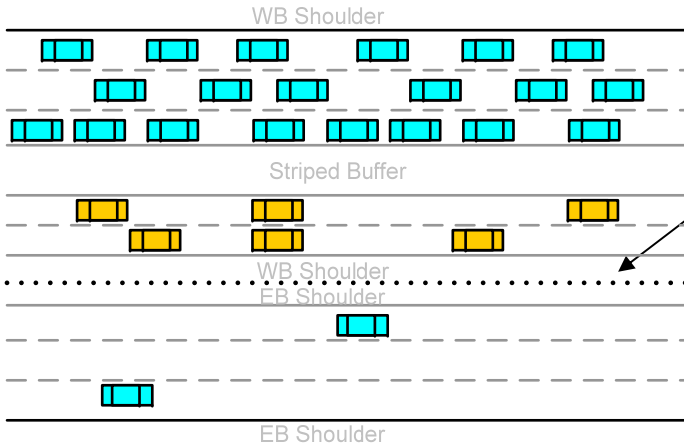


### Legend

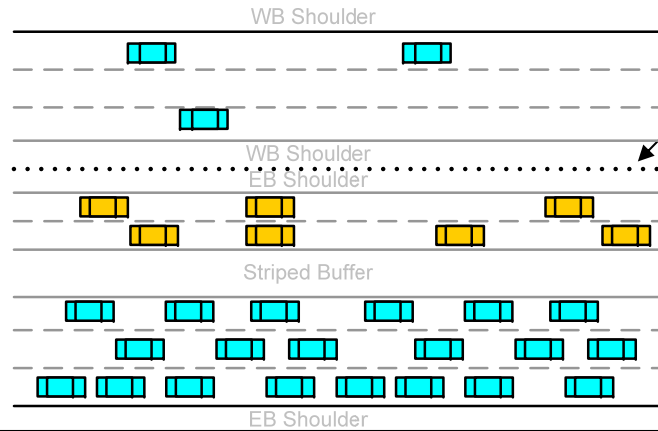
- Auxiliary Lane
- HOV Lanes (1 each direction in median)
- 2 Managed Lanes (fixed barrier)
- 2 Managed Lanes (moveable barrier)
- Ingress/Egress Points

**Example Section with One Moveable Barrier & No Fixed Barrier**

**AM Period, Managed Lanes WB (Both Alts)**

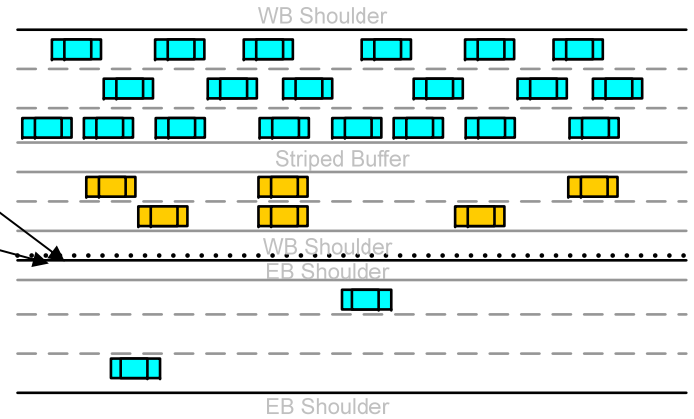


**PM Period, Managed Lanes EB (Both Alts)**

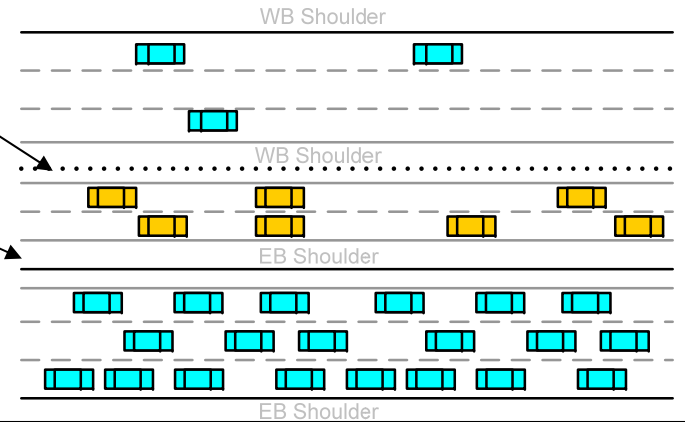


**Example Section with One Moveable Barrier & One Fixed Barrier**

**AM Period, Managed Lanes WB (Alt 2 Only)  
(Moveable Barrier Placed Against Fixed Barrier)**



**PM Period, Managed Lanes EB (Alt 2 Only)  
(Moveable Barrier Placed to Separate EB/WB Traffic)**



Moveable Barrier  
Fixed Barrier

**NOT TO SCALE**

# Simulation Approach and Issues

- CORSIM
- Localized origin-destination coding
- Managed lane access/egress
- Validation of input parameters

