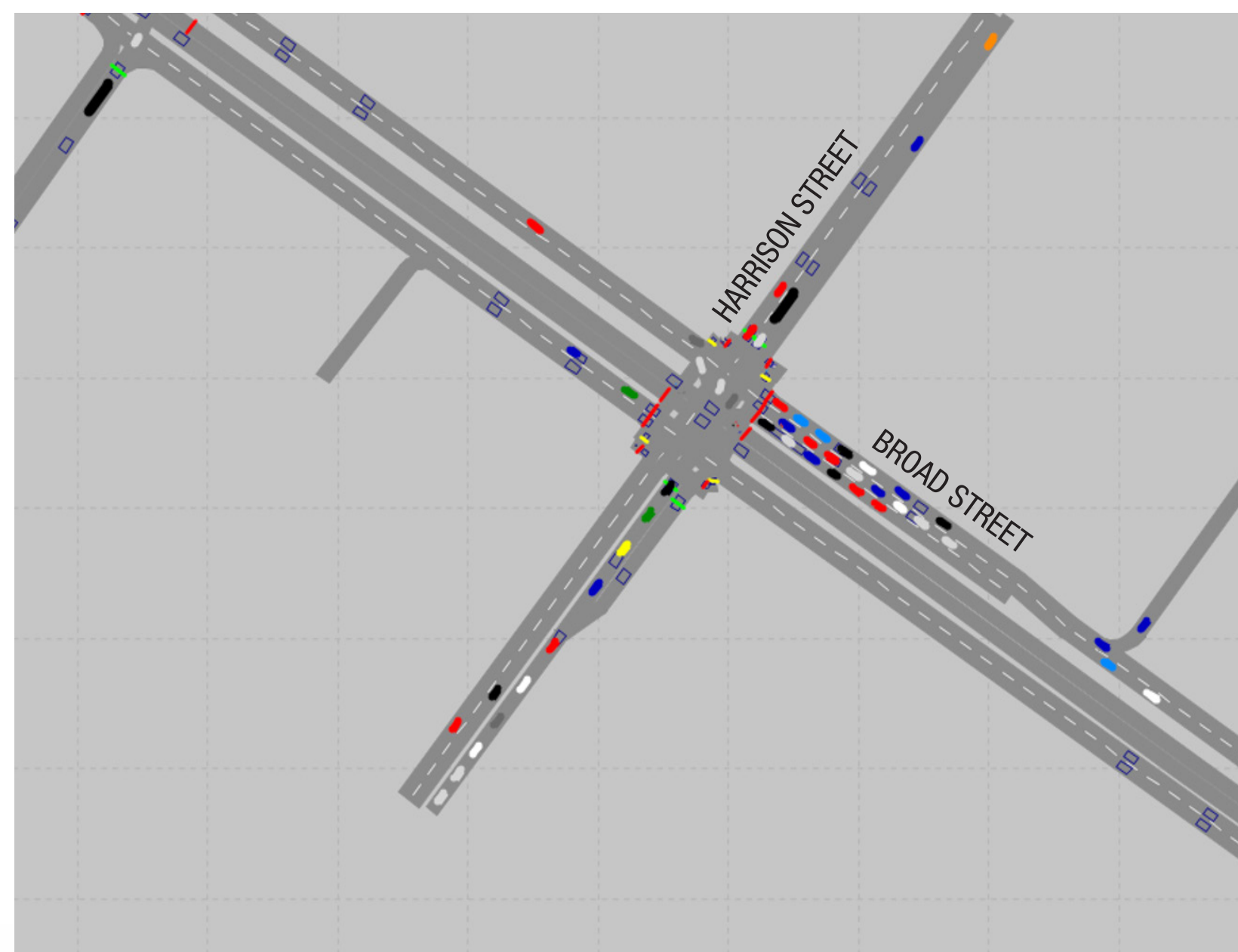
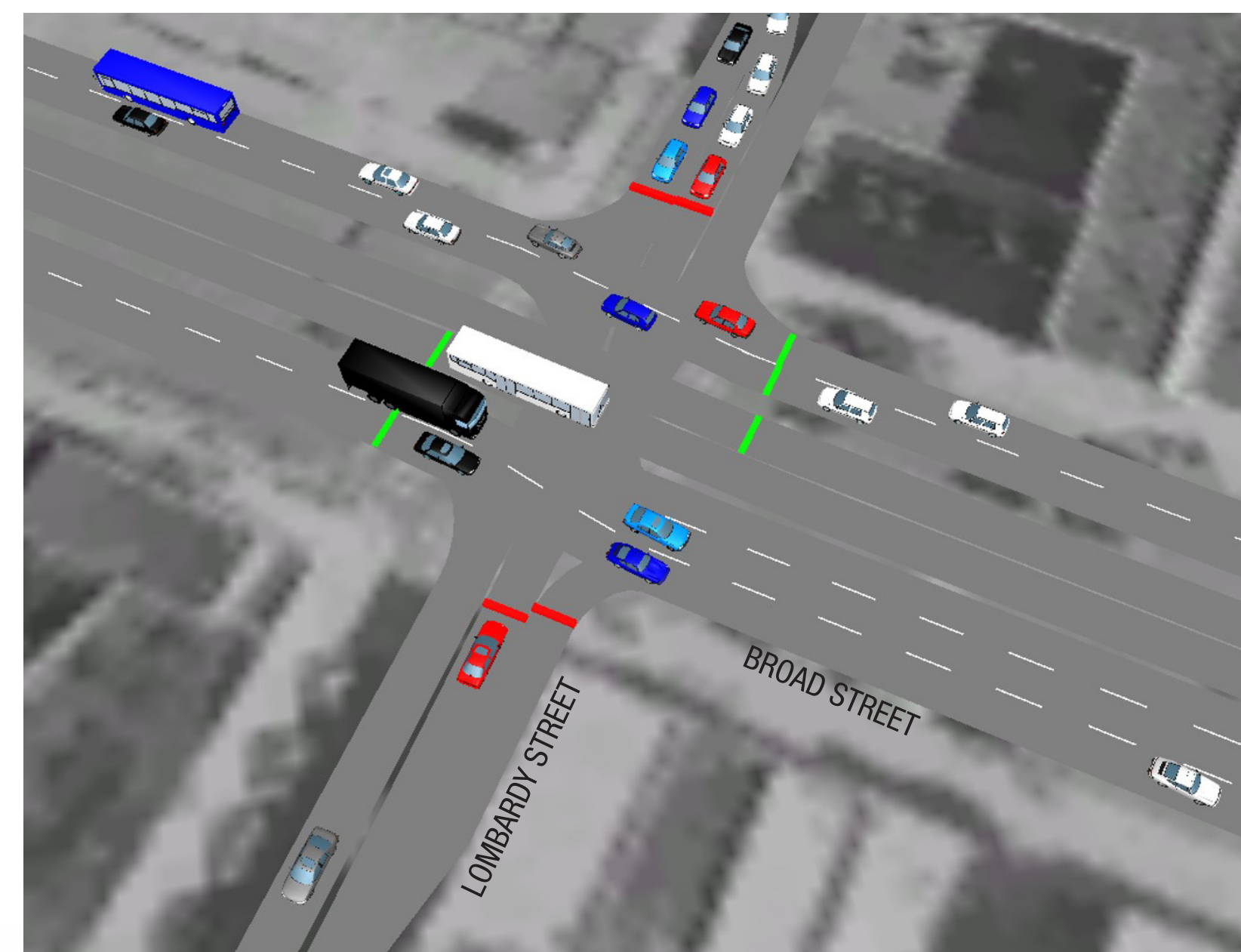


What is VISSIM?

- A modeling tool used to simulate multimodal traffic flow on a roadway network by considering each individual vehicle, bus, pedestrian, and bicycle
- It provides highly accurate and detailed simulation for all modes of transportation
- It is calibrated to the real-world conditions of the network in order to produce realistic results
- It produces graphics that show both the results and performance of a proposed improvement
- The outputs of the model help with decision-making



▲ 2D graphic output from VISSIM



▲ 3D graphic output from VISSIM

Why Use VISSIM for GRTC BRT?

- It offers multimodal simulation
- It models traffic signals, transit operations, and Transit Signal Priority
- It produces performance measures and visual illustrations of design concepts

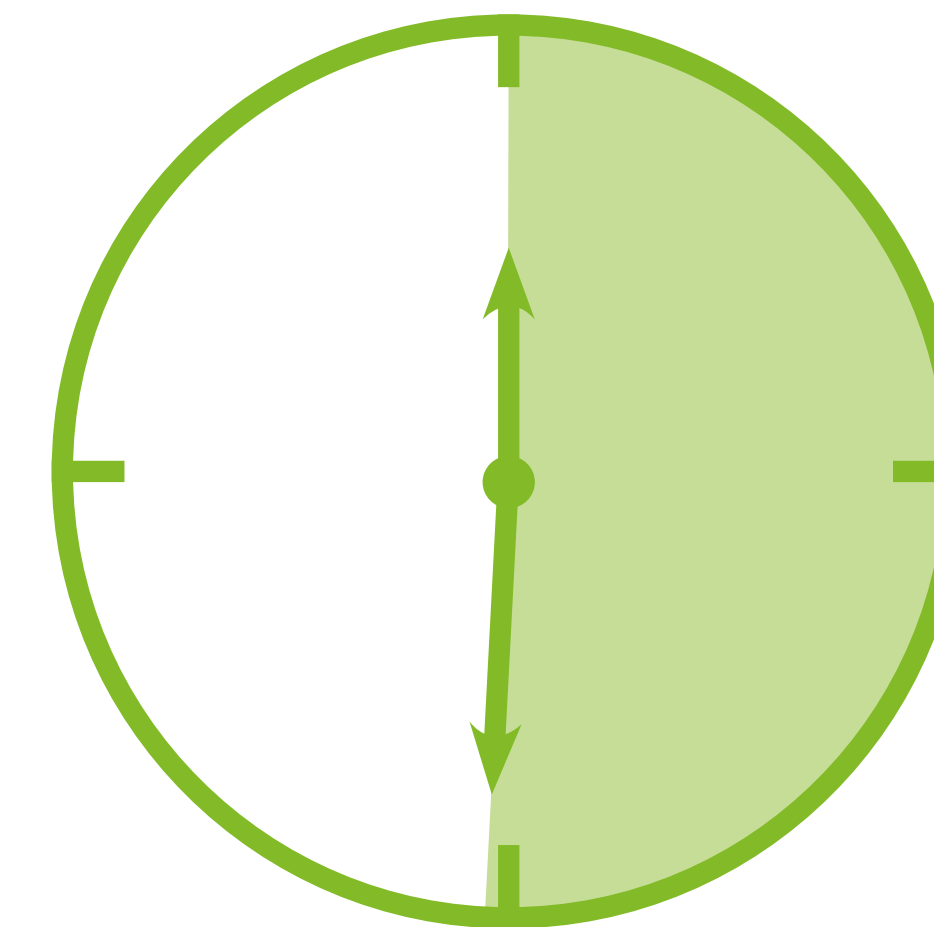
Measures of Effectiveness (MOEs)

VISSIM produces MOEs including delay and speed. The MOEs for the GRTC BRT Project are travel time and average running speed. For traveling the 7.6 mile BRT corridor from the Willow Lawn Station to the Rocketts Landing Station, the VISSIM model results are:

EASTBOUND

Willow Lawn Station to
Rocketts Landing Station

Total Travel Time
31.0
minutes



COMPARE TO CURRENT:

GRTC Local Bus Travel Time: 1 hour 3 minutes
Passenger Car Travel Time: 33.7 minutes

Average BRT Bus Speed
13.4
mph

Note: This speed includes BRT station stops, delay at signals, etc.

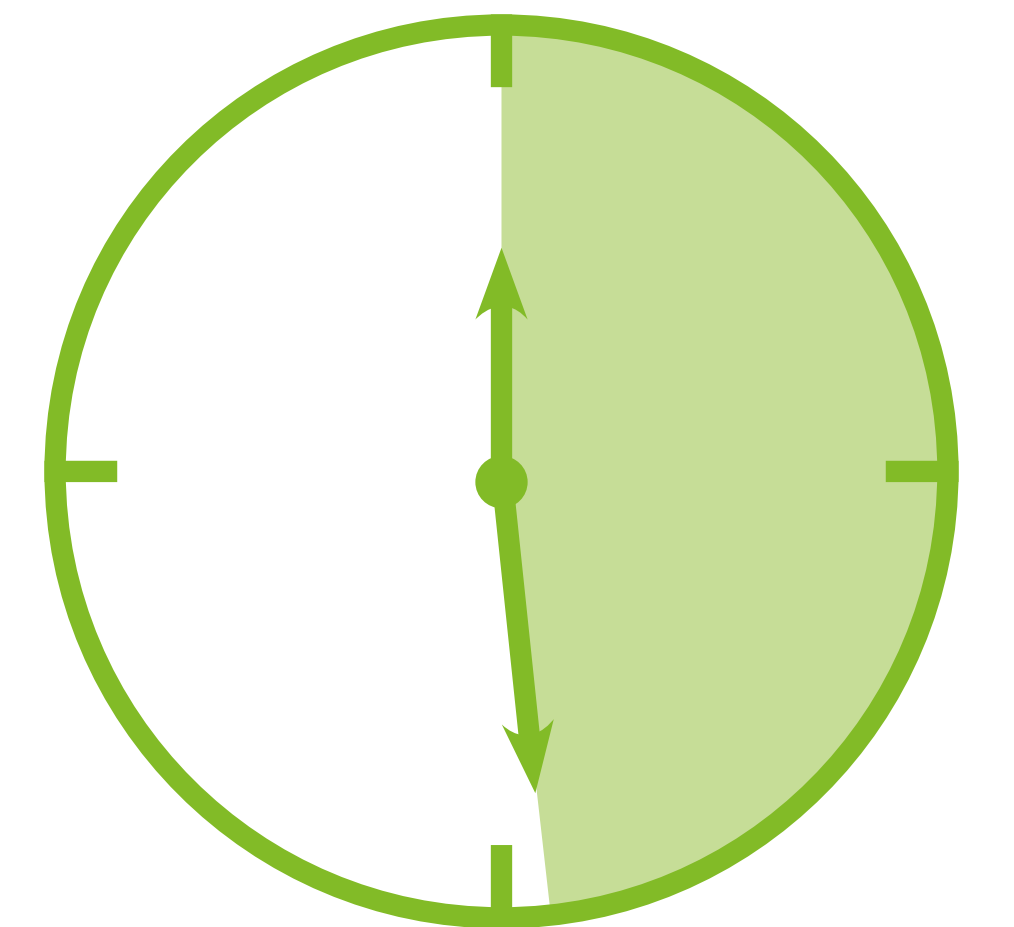
COMPARE TO CURRENT:

GRTC Local Bus Speed: 8 mph

WESTBOUND

Rocketts Landing Station to
Willow Lawn Station

Total Travel Time
28.2
minutes



COMPARE TO CURRENT:

GRTC Local Bus Travel Time: 1 hour 3 minutes
Passenger Car Travel Time: 28.4 minutes

Average BRT Bus Speed
14.5
mph

Note: This speed includes BRT station stops, delay at signals, etc.

COMPARE TO CURRENT:

GRTC Local Bus Speed: 8 mph