Chapter 9 - Congestion Management

A primary measure of a transportation system's success is that system's ability to accommodate traffic demands while minimizing traffic delay and congestion. The Dixie MPO Travel Demand Model forecasts growth in future traffic demands due primarily to the area's expected population growth. Following is a brief analysis of impacts associated with traffic congestion:

For this 2023 plan update, the 2050 "Build" Scenario (meaning all planned projects are constructed by 2050) and the 2050 "No-Build" Scenario (meaning no additional projects are constructed) were compared to render two outputs:

 The "Network Vehicle Delay" comparing the number of vehicle hour delays in 2050 under the two scenarios (chart at the right).



• The "total travel time" or a collective measure of the hours people would spend traveling on an average day in 2050 under each of the two scenarios (chart below).

The build scenario shows an overall reduction in Network Vehicle Delays of 38,500 hours per day (less idling/delayed vehicles). The build scenario also shows a reduction 41,600 hours a day of in Network Travel Times (more efficient travel throughout the network).

The societal cost of travel time delays includes an increase of air pollution as vehicles sit idling in traffic, a loss of productivity as motorists spend more time on the road, an increase in fuel costs, decreased safety, and an increase in motorist stress levels.

Managing congestion on a constrained transportation network (while accommodating population growth) requires careful decision making and the addition of network connections. The proper mix of highways, surface roads, public and private transit, bicycle and pedestrian facilities must be found to help maintain the quality of life and economic vitality desired in Utah's Dixie.

Condition	2050 Daily Network Hours Traveled	
	Travel Time (hours)	
No Build	294,900	

Build

Objectives and Goals

The Dixie MPO recognizes the potential for extreme traffic congestion and will strive to support congestion reducing efforts.

Objective

The Dixie MPO will encourage the reduction and management of traffic congestion through the implementation of useful transportation tools as well as construction of appropriate infrastructure.

Goals

- Support the use of transportation tools including ITS Message Boards, the Traffic Control Center (TOC), Traffic Management efforts, Ramp Metering, Reversible Lanes, Cross-over left turn lanes and other state of the art tools.
- 2. Support the use of appropriate Transit Projects including the implementation of a Transit line from St. George to Springdale and possibly to from St. George to the local airport.
- 3. Identify and support the construction of Transportation infrastructure projects aimed at reducing congestion.
- 4. Encourage and recommend congestion reducing tools in each new project.
- 5. Use the Travel Demand Model to identify congestion delay and measure the reduction progress.