Appendix P: Congestion Hotspot Analysis

To: San Diego Association of Governments and Caltrans District 11

Form: North County Comprehensive Multimodal Corridor Plan Project Team

Date: October 2022

Subject: North County Comprehensive Multimodal Corridor Plan – Congestion Hot Spot

Analysis

Project Information

The North County Comprehensive Multimodal Corridor Plan (CMCP) will identify integrated transportation solutions that enhance the way people travel throughout North County. To help the project team identify issues within the study area and develop a transportation solutions strategy, Kimley-Horn performed a traffic congestion analysis using Esri's World Traffic Service and data from HERE.

Traffic congestion impacts the demand on the regional and local transportation network, contributes to the region's greenhouse gas (GHG) emissions, and affects mobility within the North County study area. Road traffic congestion can lead to delays, time loss, human stress, energy consumption, and environmental pollution. This analysis was conducted to identify the congestion hotspots in North County, identify congestion hotspots within the study area and to better inform the development of the transportation solutions.

Methodology

The traffic speeds represented in the analysis display the flow of traffic during the PM peak period in March 2019 as a percentage of free flow speeds and are color coded as follows:

Green (fast): 85 – 100% of free flow speeds

Yellow (moderate): 65 – 85%

Orange (slow): 45 – 65%

• Red (stop and go): 0 – 45%

Free-flow speeds are typically the speed limit of how fast cars tend to travel when unencumbered by other vehicles. Esri's historical, live, and predictive traffic feeds come directly from HERE. HERE collects billions of GPS and cell phone probe records per month and, where available, uses sensors and toll-tag data to augment the probe data collected.







Findings

The congestion analysis highlights congestion hotspots in the following locations:

- Escondido west of the I-15 and SR 78 Interchange
- SR 78 from San Marcos to Escondido
- Intermittent congestion along I-5
- San Marcos Blvd./Palomar Airport Road
- Intermittent congestion along El Camino Real

Figure 1: Congestion Hot Spot Locations



