FEHR PEERS

MEMORANDUM

Date: July 23, 2020

To: Jeff Hart –City of Beaumont

From: Jason D. Pack, P.E.
Jessica Johnson

Subject: City of Beaumont General Plan Update Roadway Network Assessment

OC17-0488

BACKGROUND

The Beaumont General Plan Update Transportation Impact Analysis (TIA) was recently completed by Fehr & Peers. The City of Beaumont proposed a new roadway connection along 2nd Street to connect Highland Springs Road and Pennsylvania Avenue. Fehr & Peers has completed a network based assessment to evaluate how the proposed change would affect the transportation network. We evaluated the Future Year model[1] outputs and vehicle miles traveled (VMT) consistent with the analysis completed as part of the General Plan Update. These assessments were compared to the original TIA assessment to determine the modifications effect on the previous traffic assessment.

NETWORK ASSESSMENT

An evaluation of the model outputs revealed slight increases and decreases throughout the network. **Attachment A** is a model plot displaying the difference in daily average volumes between the model outputs with and without the connection along 2nd Street. Please note that the approximate 7,000 daily trip reduction along 1St Street near Pennsylvania Avenue is due to the model redistributing traffic from 1st Street to 2nd Street. The remainder of the volumes noted within the network are negligible and would not significantly change the analysis in the original version of the TIA.

[1] Riverside Traffic Analysis Model (RIVTAM) was used in this analysis. The Future Year model was updated with Beaumont General Plan land use and is consistent with Southern California Association of Governments (SCAG) Regional Transportation Plan /Sustainable Communities Strategy (SCS).

VMT ASSESSMENT

A VMT assessment was also completed as a part of this effort. VMT is normalized by dividing it by the total service population, which represents residential population plus employment in the study area. The addition of the roadway connection improves VMT in the Beaumont General Plan area reducing VMT per Service Population (SP) by approximately 0.6% , as shown in the **Table 1**. The new roadway connection also slightly reduces the VMT/SP for the Western Riverside Council of Government Region (WRCOG) by approximately 0.2%. Some trip lengths are shortened within the network as the new connection improves access in the southeast portion of the City.

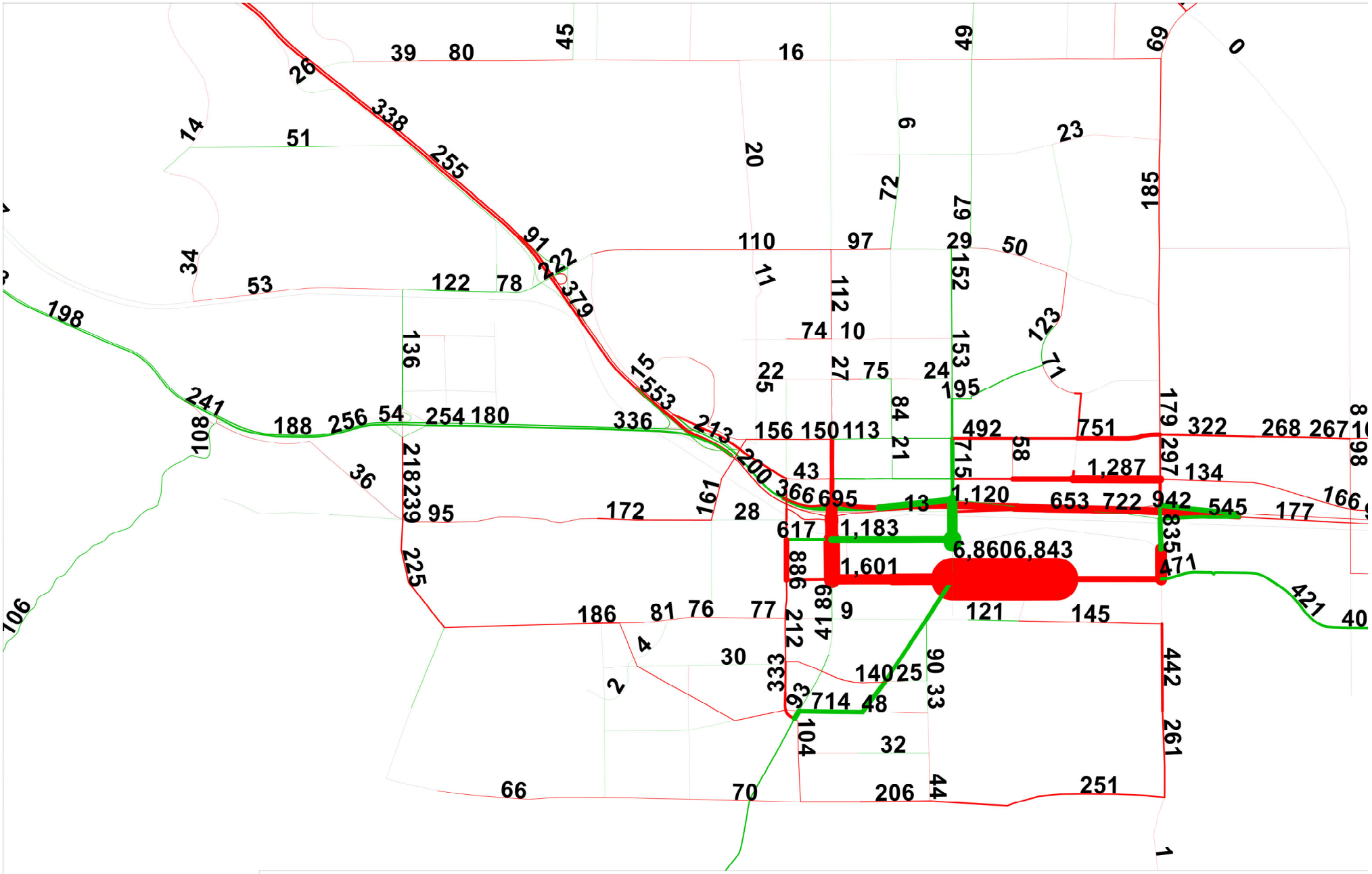
Scenario	2020 TIA Version	2019 TIA Version	Delta VMT/SP
	VMT/SP	VMT/SP	
Total Beaumont General Plan Update Area	29.5	29.7	-0.2 (-0.6%)
WRCOG Region	33.5	33.6	-0.1 (-0.2%).

Source: Fehr & Peers, 2020

The network-based assessment indicates that the new connection would not significantly change the analysis of the previous 2019 version of the Beaumont General Plan Update TIA.

We hope this information is helpful. If you have any questions or concerns, please do not hesitate to contact us at (949)-308-6300.

ATTACHMENT A - Model Plot


Beaumont General Plan Future Year Daily Volume Comparison Model Plot
Daily Volumes selection sets
Decrease in Daily Volumes
Increase in Daily Volumes
0
.4
.8
Miles
This model plot displays the difference between daily volumes with and without 2nd Street Connection