

SCAG Model Status Update

Hsi-Hwa Hu

Modeling and Forecasting Department

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1. SCAG Model Peer Review

2. Connect SoCal – SCAG 2020 RTP/SCS

SCAG Model Peer Review

Model Peer Review

- **Objectives:**
 1. Assess Adequacy of SCAG Model
 2. Recommend Future Enhancement
 3. Comment on Technical Reports

The 6th SCAG Model Peer Review Meeting

- **May 31st, 2019 at SCAG**
- **Peer Review Panel Members & Advisors**
 - Federal, MPOs, Metro, Academic, and Professionals
 - Other participants: ARB, Caltrans, OCTA
- **All Day Meeting**
 1. Presentation
 2. Open Discussion
 3. Panel Discussion
 4. Panel Recommendation

Panel Recommendation

- **SCAG Model meets current state of the practice**
 - Some special features go beyond standard practice
- **Model structure is well designed, and reflects travel behavior well**
- **Clever use of Amazon Cloud Services for ABM runs**
- **Also received many recommendations for future enhancement**

Prepared for RTP Model Operation

- **Continued model enhancement**
 - Peer review comments and SCAG internal review
- **Short-term enhancement:**
 - Work location model / Intra-county commuting
 - Mode choice model / Transit boarding
- **Prepared ABM operation for SCAG Plan**
 - Network development
 - Model input data
 - Model output process

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Connect SoCal – 2020 RTP/SCS

Connect SoCal

SCAG Regional Plan for 2020 RTP/SCS



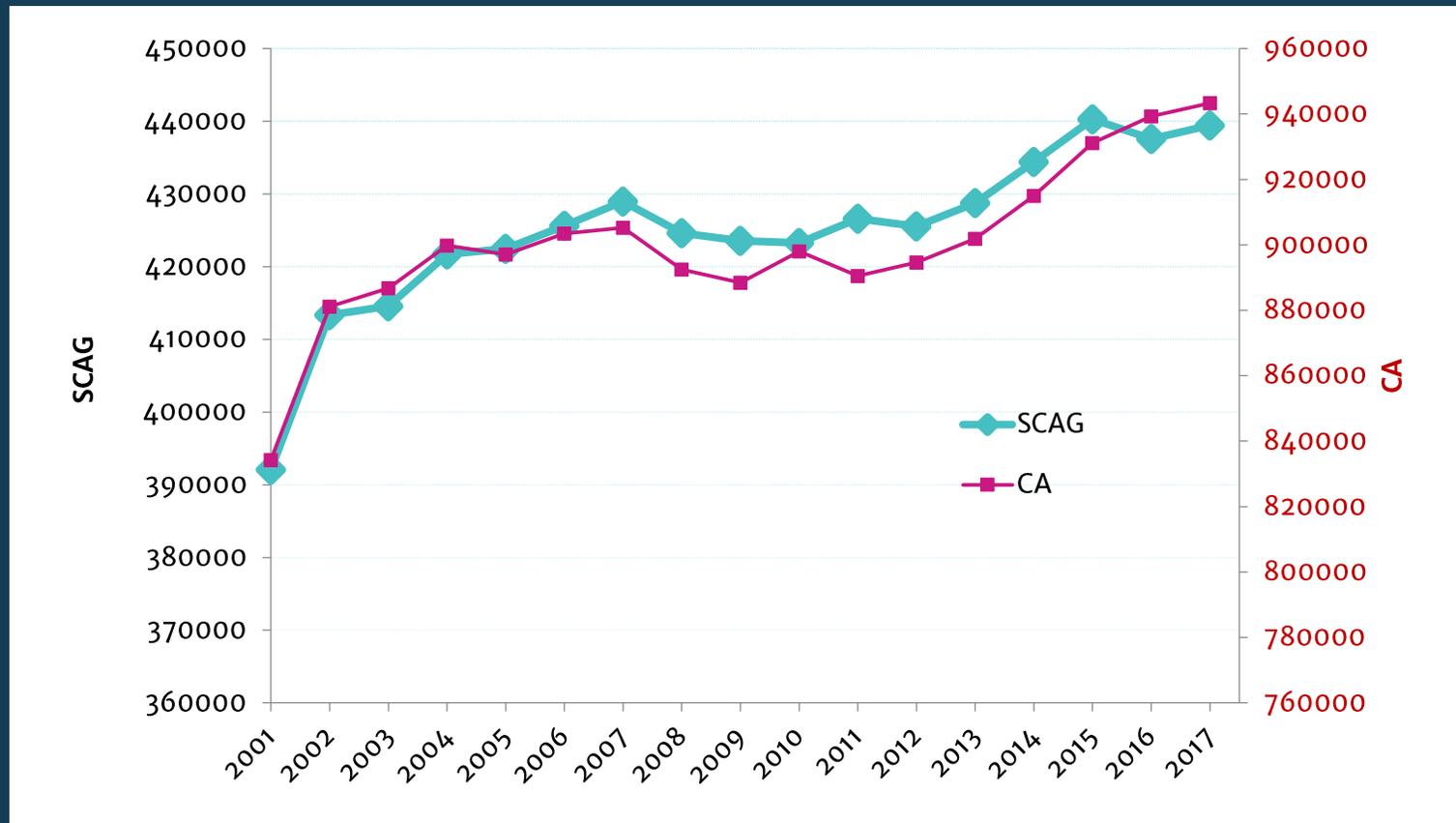
- **Connect SoCal**
 - SCAG 2020-2045 RTP/SCS (Regional Transportation Plan/Sustainable Communities Strategy)
- **Nearly 3,000 transportation projects**
 - Provided by CTCs (County Transportation Commissions)
- **Integrated transportation and land use strategies**

Model Operation & Results for Draft RTP

- Nearly 60 model runs
- Met Conformity
- Met Greenhouse Gas Emission Targets
 - 2020: 8%
 - 2035: 19%

Recent VMT Growth from HPMS

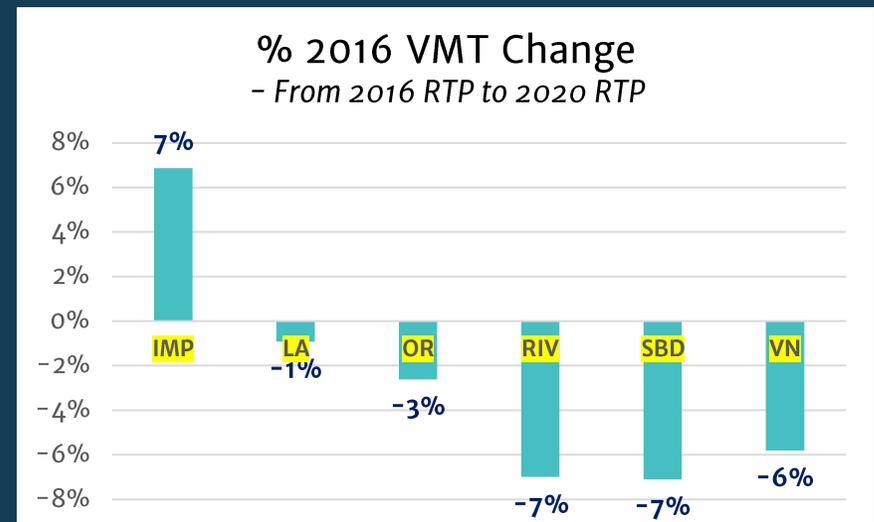
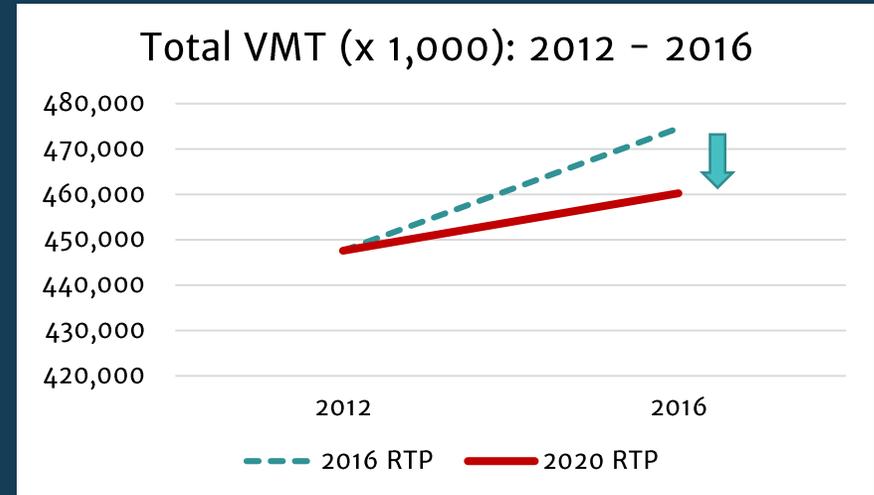
- VMT has shown significant drop in SCAG region in 2016



2020 Draft RTP Model Output: Base Year 2016

Compared to 2016 RTP Data

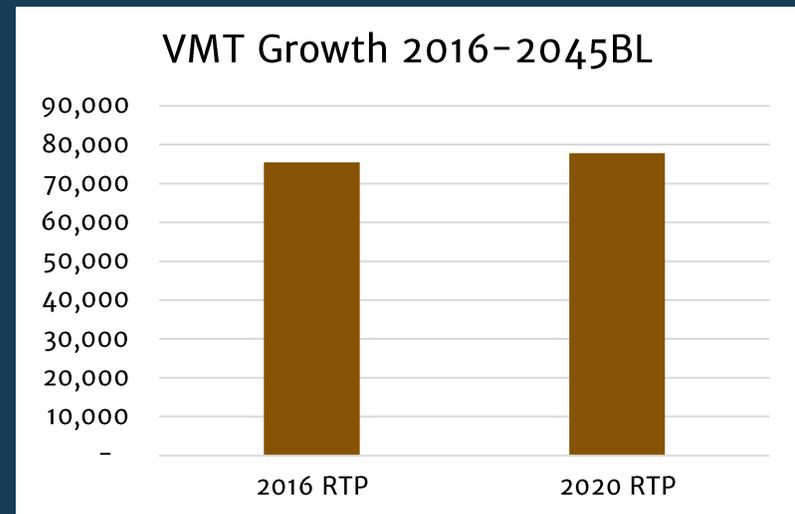
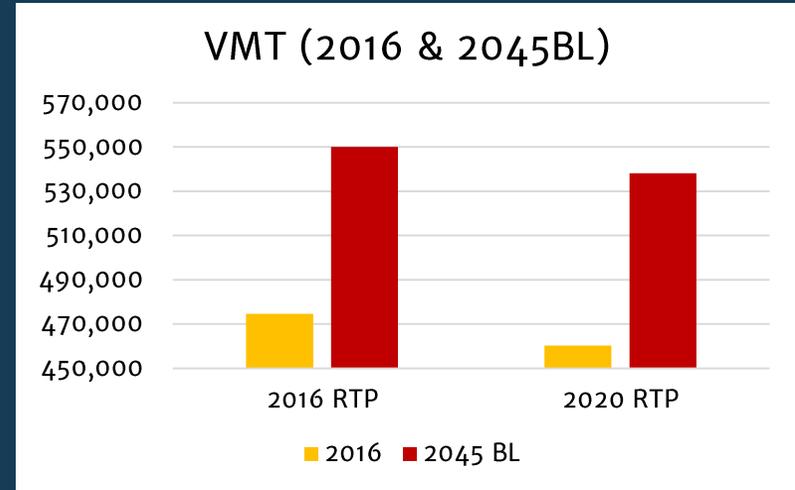
- Total VMT for year 2016 is 3% (or 14 M) lower than 16 RTP, according to HPMS
- 6%-7% lower for Inland and Ventura



2020 Draft RTP Model Output: 2045 Baseline

Compared to 2016 RTP Data

- 2045 Baseline of 2020 RTP is about 2% lower
- VMT growth 2016-2045 Baseline is about the same



2045 baseline VMT for 2016 RTP is estimated based on 2040-2045 household growth

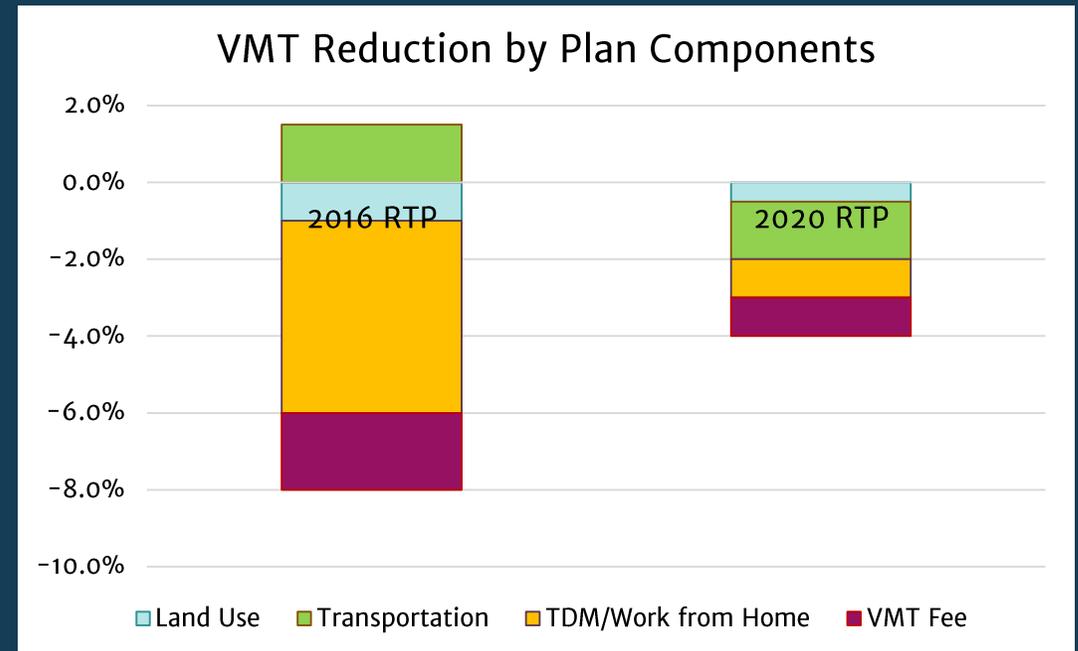
2020 Draft RTP Model Output: Baseline vs. Plan

- **Plan VMT/Emission is lower than Baseline**
- **Main Plan Input/Assumptions**
 1. Land Use Strategies
 2. Highway Projects
 3. Transit Projects
 4. TDM / Work from home/ Telecommuting
 5. VMT Fee (Auto Operating Cost)

2020 Draft RTP Model Output: Baseline vs. Plan

Compared to 2016 RTP

- VMT reduction from baseline to plan is about 4%; 6.5% for 16RTP
- **Main difference is attributed to:**
 - TDM Plan
 - Auto Operating Cost / VMT Fee
 - Model Sensitivity
 - Model Enhancement



2016 RTP: 2040; 2020 RTP: 2045

2020 Draft RTP Model Output: Plan Input

Change between Baseline and Plan

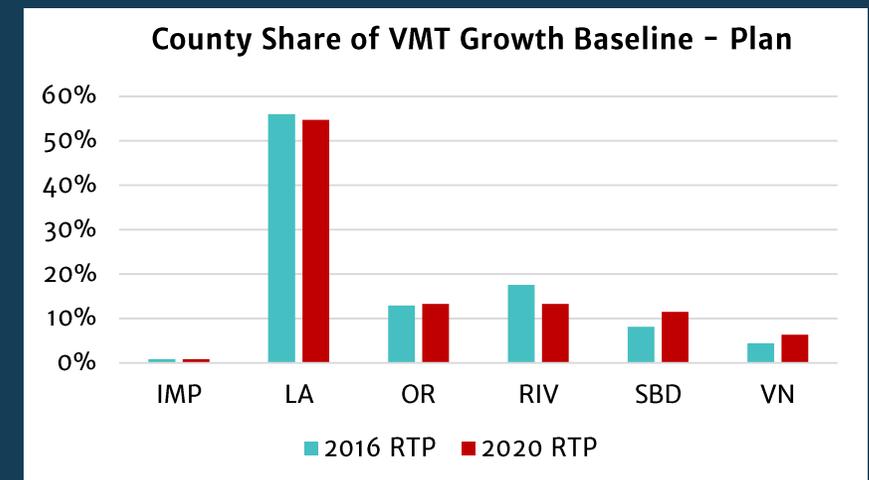
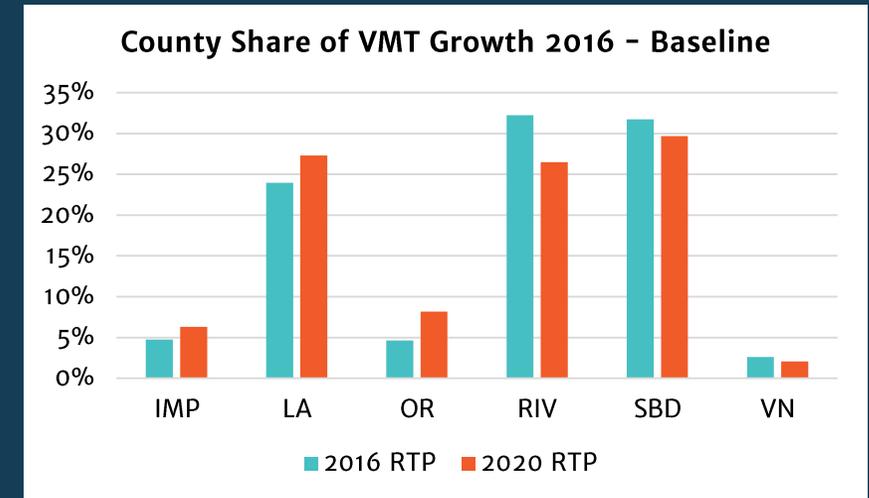
	2016 RTP	2020 RTP	Note for 2020 RTP
<u>Projects</u>			
Change Highway Lane Miles	+6,850	+5,200	Less highway investment
% Rail&BRT / Total Rev Miles	28%	47%	More rail enhancement
% AOC Change	+9%	+7%	ARB methodology
% TDM Workers (delta)	+10%	+3%	SCAG
<u>Model</u>			
AOC Elasticity to VMT	-0.25	-0.15	ARB short-term elasticity
Work from Home Rebound	0	25%	Model enhancement

2016 RTP: 2040; 2020 RTP: 2045

2020 Draft RTP Model Output: By County

Share of VMT Growth by County

- Share of VMT growth between 2016 and Baseline is consistent between 2 RTPs
- Share of VMT growth between Baseline and Plan is consistent between 2 RTPs



2016 RTP: 2040; 2020 RTP: 2045

Thank you



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