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MEETING OF THE

TECHNICAL WORKING GROUP

*Thursday, October 17, 2019
10:00 a.m. – 12:00 p.m.*

SCAG OFFICES

**900 Wilshire Blvd., Ste. 1700
Room Policy B
Los Angeles, CA 90017
(213) 236-1800**

HOW TO PARTICIPATE IN MEETING ON NEXT PAGE

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact John Asuncion at (213) 236-1936 or via email at asuncion@scag.ca.gov. Agendas & Minutes for the Technical Working Group are also available at: www.scag.ca.gov/committees

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How to Participate

In Person

SCAG Downtown Office Policy B
900 Wilshire Blvd., 17th Floor
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Videoconference

San Bernardino County

1170 West 3rd Street, Suite 140
San Bernardino, CA 92410
Telephone: (909) 806-3556

Imperial County

1405 North Imperial Ave, Suite 1
El Centro, CA 92443
Telephone: (760) 353-7800

Ventura County

4001 Mission Oaks Blvd., Ste. L
Camarillo, CA 93012
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Web Meeting

Join from PC, Mac, Linux, iOS or Android:

<https://scag.zoom.us/j/142774637>

Teleconference

Telephone:

Dial: 1-669 900 6833

Meeting ID: 142 774 637



Technical Working Group

September 19, 2019

Attendees Los Angeles Office

Lori Huddleston

Deborah Diep

Warren Whiteaker

Stephanie Cadena

Miles Mitchell

Marika Poynter

Gail Shiomoto-Lohr

Mathew Steig

LA Metro

Center for Demographic Research, California State University Fullerton

OCTA

Gateway Cities COG

City of Los Angeles

City of Irvine

Mission Viejo

Mission Viejo

Attendees Web Meeting/Teleconference

Marnie Primmer

Susan Kim

Caitlin Brooks

Joenne Hwang

Nate Farnsworth

Demi Espinoza

Josh Lee

Ariana Briski

Ben Cacatian

Soyeon Choi

Steve Smith

Marisa Creter

Caitlin Sims

OCCOG

City of Anaheim

VCTC

Anaheim

Yorba Linda

Safe Routes to School

SBCOG/SBCTA

City of Los Angeles

VCAPCD

Los Angeles County

SBCTA

SBGCOG

SGVCOG



Technical Working Group

October 17, 2019
10:00 a.m. – 12:00 p.m.

SCAG Downtown Office – Policy Room B
900 Wilshire Blvd., 17th Floor
Los Angeles 90017

Agenda

Introductions

Discussion Items

- | | | |
|--|-------------------------|---------|
| 1. RHNA Methodology Technical Clarification & Tool Demo | | |
| a. Introduction and Objectives | Ping Chang | |
| b. Estimate Tool Demo on RHNA Data | Kevin Kane | |
| c. Job Accessibility Measure | Kevin Kane & KiHong Kim | |
| d. Transit Accessibility Measure | Philip Law & Jung Seo | 40 mins |
| 2. Connect SoCal Growth Vision Roll-Out to Local Jurisdictions | Kimberly Clark | 10 mins |
| 3. Local Input Base Case GHG Impact Estimation | Kimberly Clark | 15 mins |
| 4. Connect SoCal Draft Plan Performance Outcomes | Michael Gainor | 15 mins |

How to Unmute Phone

Press *6 to unmute your phone and speak

To return to mute *6



Technical Working Group

Agenda Item 1 d.

The following will be included in the forthcoming Connect SoCal, Draft 2020 RTP/SCS Transit Technical Appendix.

HIGH QUALITY TRANSIT CORRIDORS AND MAJOR TRANSIT STOPS

BACKGROUND

The Sustainable Communities and Climate Protection Act of 2008, Senate Bill (SB) 375, requires that Metropolitan Planning Organizations (MPOs) develop a Sustainable Communities Strategy (SCS) to reduce per capita greenhouse gas emissions through integrated transportation, land use, housing and environmental planning. SB 375 creates incentives for residential or mixed-use residential projects that may be exempt from, or subject to a limited review of, the California Environmental Quality Act (CEQA), provided they are consistent with the MPO's adopted SCS. These "transit priority projects" must, among other criteria, be located within one-half mile of a major transit stop or high-quality transit corridor (HQTC).

SB 743, signed into law in 2013, provides further opportunities for CEQA exemption and streamlining to facilitate transit oriented development (TOD). Specifically, certain types of projects within "transit priority areas" (TPAs) can benefit from a CEQA exemption if they are consistent with an adopted specific plan and the SCS. A TPA is an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Federal Transportation Improvement Program (FTIP).

STATUTORY DEFINITIONS

California statute defines [major transit stop](#) and [high quality transit corridor](#) as follows.

CA Pub. Res. Code § 21155(b)

For purposes of this chapter, a transit priority project shall (1) contain at least 50 percent residential use, based on total building square footage and, if the project contains between 26 percent and 50 percent nonresidential uses, a floor area ratio of not less than 0.75; (2) provide a minimum net density of at least 20 dwelling units per acre; and (3) be within one-half mile of a major transit stop or high-quality transit corridor included in a regional transportation plan. A [major transit stop](#) is as defined in Section 21064.3, except that, for purposes of this section, it also includes major transit stops that are included in the applicable regional transportation plan. For purposes of this section, a [high-quality transit corridor](#) means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. A project shall be considered to be within one-half mile of a major transit stop or high-quality transit corridor if all parcels within the project have no more than 25 percent of their area farther than one-half mile from the stop or corridor and if not more than 10

percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the stop or corridor.

CA Pub. Res. Code § 21064.3

"Major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

METHODOLOGY

For planning and SCS purposes, SCAG identifies a “high quality transit area” as generally a walkable transit village or corridor that is within one-half mile of a major transit stop or HQTC as defined in statute. SCAG’s technical methodology for identifying HQTCs and major transit stops is based on input from the Regional Transit Technical Advisory Committee (RTTAC), as well as consultation with local agencies, other large MPOs in California, and the Governor’s Office of Planning and Research. The methodology and assumptions are discussed below. This methodology may be periodically updated to incorporate revisions or clarifications. Questions should be directed to Steve Fox, at fox@scag.ca.gov, or Philip Law, at law@scag.ca.gov.

SCAG maps and data depicting HQTCs and major transit stops are intended for planning purposes only. SCAG shall incur no responsibility or liability as to the completeness, currentness, or accuracy of this information. SCAG assumes no responsibility arising from use of this information by individuals, businesses, or other public entities. The information is provided with no warranty of any kind, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

Existing HQTCs and Major Transit Stops

SCAG updates its inventory of existing major transit stops and HQTCs with the adoption of a new Regional Transportation Plan (RTP) and SCS, once every four years. Data for the existing (“base year”) condition for the RTP/SCS are typically obtained several years before plan adoption. The base year transit network for *Connect SoCal*, the 2020 RTP/SCS, is based primarily on data for 2016. This inventory of existing major transit stops and HQTCs is therefore only a snapshot in time as of 2016, and does not reflect the existing levels of transit service for any other timeframe.

<insert map of 2016 Base Year “existing” major transit stops and high quality transit corridors>

Transit agencies make adjustments to bus service on a regular basis. Therefore, given the limitations of the RTP/SCS base year transit network, local jurisdictions should consult with the

appropriate transit provider(s) to obtain the latest information on existing transit routes, stop locations, and service intervals before making determinations regarding CEQA exemption or streamlining. It is the responsibility of the lead agency under CEQA to determine if a project meets statutory requirements.

Stop-Based Analysis

SCAG calculates peak commute bus service intervals at the stop level using schedule data published by transit agencies in the General Transit Feed Specification (GTFS) format (see for example, www.transitfeeds.com). An HQTC therefore comprises or is determined by the qualifying stops on an individual bus route.

Peak Period Bus Service Interval (Frequency)

To determine whether the peak commute bus service interval (also called frequency) meets the statutory threshold of 15 minutes or less, SCAG uses the peak period defined in its regional travel demand model. The morning peak is defined as 6am to 9am and the afternoon peak is defined as 3pm to 7pm. A transit operator may have a different, board-adopted or de facto peak period; in such cases SCAG will accept requests to use operator-specific peak-hour periods on a case-by-case basis.

SCAG uses the total population of bus trips during the combined seven-hour morning and afternoon peak periods to determine the peak frequency at a bus stop. This is done for each bus route, by direction. The peak frequency is calculated by dividing 420 minutes (the seven-hour peak converted to minutes) by the total peak bus trips. This average frequency should be 15 minutes or less in order to qualify. The threshold is strict, at 15.0 minutes.

Directional Frequency

A bus route must only meet the 15-minute service interval threshold in one direction to qualify as an HQTC. This is based on RTTAC feedback that transit agencies often operate very peak-directional service or operate predominantly one-way service on a corridor.

Corridors with Multiple Overlapping Bus Routes

Separate but overlapping bus routes that do not individually meet the 15-minute threshold may not be combined in order to qualify as an HQTC. However, based on RTTAC feedback, there are certain corridors where overlapping “line families” or local/bus rapid transit (BRT) lines are intended to function as one bus route. On these corridors, transit riders typically board the first bus available, whether it be a local, express, or BRT line. For these line families or local/BRT corridors, SCAG uses the combined routes to calculate the frequency.

Route Alignment

The entire alignment of a bus route, based on the stops that meet the 15-minute peak frequency threshold, is considered an HQTC. This would include, for example, express bus services that operate along freeways where there are no stops along the freeway right-of-way.

Major Transit Stops and Intersecting Service Transfer Zones

As defined in statute, major transit stops include the intersection of two or more HQTCs. For purposes of transferring between intersecting service, SCAG uses a 500-foot buffer to determine a major transit stop. In other words, two intersecting HQTCs must have stops that are within 500 feet of each other to qualify as a major transit stop. A 500-foot buffer is assumed to be a reasonable limit to the distance that a transit patron would walk to transfer between bus routes. It is also consistent with the Metro Transfers Design Guide definition of a transfer zone.

Amtrak Stations and Ferry Stations

Amtrak intercity passenger rail stations with only limited long-distance service are not automatically included as a major transit stop unless requested by a local agency. Similarly, ferry stations with seasonal and/or non-commuter based service (and that are served by bus or rail transit) are not automatically included as a major transit stop unless requested by a local agency.

Planned HQTCs and Major Transit Stops

Planned HQTCs and major transit stops are future improvements that are expected to be implemented by transit agencies by the RTP/SCS horizon year of 2045. These are assumed by definition to meet the statutory requirements of an HQTC or major transit stop. SCAG updates its inventory of planned major transit stops and HQTCs with the adoption of a new RTP/SCS, once every four years. However, transit planning studies may be completed by transit agencies on a more frequent basis than the RTP/SCS is updated by SCAG. Local jurisdictions should consult with the appropriate transit provider(s) to obtain the latest information on planned transit routes, stop locations, and service intervals/frequencies before making determinations regarding CEQA exemption or streamlining.

<insert map of planned (2045) major transit stops and high quality transit corridors>



Technical Working Group

Agenda Item 4



Draft Connect SoCal Performance Assessment & Monitoring

Technical Working Group
October 17, 2019

Mike Gainor
Compliance & Performance Monitoring

www.scag.ca.gov



Connect SoCal is a Performance-Based Plan

- **Regional Goals:** More sustainable, location-efficient communities; improved public health & safety; enhanced mobility & accessibility; better quality of life.
- **Federal Requirements:** MAP-21/FAST Act performance measures & targets; Environmental Justice; transportation/air quality conformity.
- **State Mandates:** Regional greenhouse gas (GHG) reduction targets (ARB)

Connect SoCal Performance Analysis

8 performance outcome categories were designated for evaluating Connect SoCal:

- Location Efficiency
- Mobility & Accessibility
- Safety & Public Health
- Environmental Quality
- Economic Opportunity
- Investment Effectiveness
- Transportation System Sustainability
- Environmental Justice



Connect SoCal Performance Results



Connect SoCal will serve to improve travel conditions and air quality throughout the SCAG region, while ensuring an equitable distribution of benefits among our various communities.

Location Efficiency

Share of Regional Household
Growth in HQTAs: +10%

Share of Regional Employment
Growth in HQTAs: +24%

Rural Lands Converted to Urban
Use: -36%

Daily VMT per capita: -4%

Mobility & Accessibility

Person Delay per capita: -23%

Person Delay (HOV): -70%

Person Delay (Arterials): -19%

Truck Delay (Freeways): -21%

Truck Delay (Arterials): -25%

Connect SoCal Performance Results



Safety & Public Health

Air Pollution Related Health Incidents: -4%

Air Pollution Related Health Costs: -4%

Active Transportation Mode Share: +2%

Daily Driving Time per capita: -7%

Environmental Quality

GHG Emissions Reduction (2020): -8%

GHG Emissions Reduction (2020): -19%

PM 2.5 Daily Emissions: -4%

Carbon Monoxide (CO) Daily Emissions: -5%

Economic Opportunity

Annual New Jobs Generated Due to Improved Economic Competitiveness: 195,000+

Annual New Jobs Generated Due to Connect SoCal Investments: 167,000+

Connect SoCal Performance Results



Investment Effectiveness

Connect SoCal Benefit/Cost Ratio:
\$1.00 Investment = \$1.54 Benefit

Transportation System Sustainability

Annual Cost per capita to Maintain System
in State of Good Repair: \$556 (\$1.50 daily)

Environmental Justice

SCAG conducted a comprehensive EJ stakeholder outreach & technical analysis process to ensure that Connect SoCal does not disproportionately impact minority or low income communities & its benefits are equitably distributed



Connect SoCal Co-Benefits



Benefit Category	Comparative Benefit Performance			
	2045 Baseline	Connect SoCal	Savings	% Savings
Local Infrastructure & Services Costs: Capital, operations, & maintenance costs to support new growth: 2016-2045	\$39.9 billion	\$36.1 billion	\$3.8 billion	9.5%
Household Costs: Annual transportation & home energy/water use: 2045	\$13,758	\$13,225	\$533	3.9%
Land Consumption: New (greenfield) land consumed to accommodate new growth: 2016-2045	101 square miles	65 square miles	36 square miles	35.6%
Building Energy Use: Residential & commercial buildings: Cumulative 2016-2045 (British Thermal Units)	15,670 trillion	15,464 trillion	206 trillion	1.3%
Building Energy Costs: Residential & commercial buildings: Cumulative 2016-2045	\$678 billion	\$670 billion	\$8 billion	1.2%
Building Water Use: Residential & commercial buildings: Cumulative 2016-2045 (Acre Feet)	85.7 million	84.7 million	1.0 million	1.2%
Building Water Costs: Residential & commercial buildings: Cumulative 2016-2045	\$117.1 billion	\$115.7 billion	\$1.4 billion	1.2%
Total Annual Vehicle Miles Traveled (VMT): 2045	485.2 million	465.1 million	20.1 million	4.1%



Thank you!



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