General Information on the Data Summary

The MPO data summary is intended to provide key data items which do one or more of the following:

- Quantify key variables across all MPO’s to allow for comparisons of size and scale.
- Document the planning years used by MPO’s across the state, such as the “base year”, and interim and horizon forecast years.
- Compare levels of some key variables which are known to strongly influence travel behavior (e.g. age, income, household size) among MPO’s across the state.
- Document trends for key variables which are known to influence travel behavior, such as aging of population, changes in household income, or changes in the balance of jobs to dwellings.
- Document exogenous variables such as fuel prices or transit fares, as well as forecasted or assumed future changes in those exogenous variable.
- Provide travel demand model outputs for on-road vehicle CO2 emissions, vehicle miles traveled, mode shares, congestion, etc.
- Provide information on the changes planned in the transportation system in each region

This information could be useful in assessing different target setting strategies, and in discussions related to establishing a “level playing field” for modeling of travel demand, which is a key input to emission estimates. However, MPOs regularly update their forecasts of growth and travel models so this data is subject to change based on these future revisions.

The MPO data summary includes five major sections:
1. Demographic Data
2. Land Use Data
3. Travel Model Outputs
4. Transportation System and System Investments
5. Transportation Costs and Pricing

For each of these sections, data “as given” by MPO staff is shown first, along with sections which show computations prepared by ARB or SACOG staff which are intended to “normalize” the data to be more directly comparable. Examples of these computations are “per capita” measures, such as CO2 emissions per capita.

The initial data request for this summary was made in March. Since that time, significant effort has been made, including three statewide teleconferences and innumerable email exchanges and “review drafts” of the summary, to ensure that the most current, consistent, and comprehensive data for each MPO is included in the summary.
There are many blanks in the summary. In some cases, blanks indicate that a particular data item is not collected or forecasted in a given MPO. In some cases, blanks indicate that an MPO was not able to assemble the data in time for this summary. The summary does not indicate what is the reason for blanks.

**Requested Scenarios**

“Base Year” is the representation of present condition, against which future forecasts are compared. Base years ranged from 2000 to 2010.

“RTP Horizon Year” is the end year in the most recently adopted regional transportation plan (RTP). Seventeen of 18 MPO’s provided this information: 12 were 2030; 5 were 2035.

“RTP Interim Year” is a formally specified forecast year between the base year and horizon year. Sixteen MPO’s reported this information: 14 were 2020; 2 were 2018.

The summary allowed for specification of up to two “alternate” scenarios, with an interim and horizon year. In some cases, the formal adoption of an RTP is preceded by an analysis of alternatives. Also, since adoption of an RTP, some MPO’s have embarked on Blueprint or other land use/transportation studies. This section was provided to allow MPO’s to report data for one of these scenarios. Only three MPO’s reported any data for an alternate scenario.

**Normalization of Incomes, Costs and Prices**

Where direct comparisons across MPO’s were desired, dollars were converted from the given basis year as reported by the MPO, to Year 2008 dollars. Conversions were only made to two variables: median household income (using the Consumer Price Index); and fuel prices and auto operating costs (using statewide relative average annual fuel prices).

**Demographic Data (Section 1)**

Section 1 includes data as given by MPO staff on the following variables:

- Household Population (all 18 MPO’s reporting)
- Household Population, Aged 65 Years or Older (only 7 of 18 reporting)
- Number of Households (17 of 18 reporting)
- Number of Jobs (17 of 18 reporting)
- Median Household Income (8 of 18 reporting for base year...)

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Computed from these variables were five other variables: household size, household growth rate, percent of population 65-or-older, jobs per household, and normalized household income.

**Land Use Data (Section 2)**

The land use data section was intended to allow for MPO’s to provide more detailed information on some characteristics of land use. The initial data request was keyed to land use concepts common to most Blueprint studies (e.g. percent of development in greenfield vs infill or redevelopment areas, percentage of new dwelling units in small lot single family or attached areas, etc.). Reporting rates on these initial surveys was very low, with four or less MPO’s providing responses to the initial request. Additionally, many MPO’s had unique definitions of variables, making comparisons very difficult. The only variables included in the summary were:

- Dwelling Units (14 of 18 reporting)
- Total Acreage (14 of 18 reporting for base year)
- Developed Acreage (5 or less reporting)
- Commercial Building Area (3 or less reporting)
- Compact Residential Development (Percent Attached or Multi-Family, Percent Small Lot Single Family)-- (3 or less reporting)
- Location of Residential Development (4 or less reporting)
- Location of Commercial Development (4 or less reporting)

Computed from the given data was total development density \[
\frac{(\text{jobs} + \text{dwellings})}{\text{developed acres}}
\] and dwelling unit occupancy.

**Travel or Emissions Model Outputs (Section 3)**

Travel model outputs for vehicle miles traveled and travel mode shares were reported. Carbon dioxide (CO2) emissions, which in all cases were computed using EMFAC2007 with travel-model-estimated vehicle activities (i.e. VMT by speed bin and county) as a primary input. Because of the potential relevance of these measures to target-setting, this is the longest and most detailed section of the summary, and is split into subsections.

**Sub-section 3a. CO2 and VMT Data**

A significant amount of effort was put into making sure that all MPO’s were reporting VMT and CO2 consistently for the summary. The following variables were included:

- CO2 Emissions by Passenger Vehicles per Weekday—This estimate of passenger vehicle CO2 included the following EMFAC2007 vehicle categories: light-duty auto (LDA); light duty trucks-1 (LDT1); light duty
trucks-2 (LDT2); and medium duty vehicles (MDV)\textsuperscript{1}. Also, only direct CO2 emissions were reported, and not the “CO2 equivalent” emissions.

- VMT by Passenger Vehicles per Weekday—This estimate is also drawn from the EMFAC2007 output, for the same four vehicle classes (LDA, LDT1, LDT2, and MDV).
- Total VMT per Weekday, All Vehicles and Purposes—This estimate can be drawn from the tally of all vehicle classes from EMFAC2007, or directly from travel demand model outputs.
- Total External VMT per Weekday, All Vehicles and Purposes—This includes VMT generated by all trips which cross at least one MPO jurisdiction boundary. This includes:
  - trips with an origin in the reporting MPO, and destination in a location outside the reporting MPO (so-called “IX” trips);
  - trips with an origin outside the reporting MPO, and destination inside the MPO (so-called “XI” trips); and
  - trips traveling on roadways within the reporting MPO, but with neither trip end in the MPO (so-called “XX” trips).
  - The VMT reported is only the VMT for that portion of the external trips which occurs in the reporting MPO. For example, say, a trip made by a resident of Davis (in the SACOG region) to Vacaville (in the MTC/ABAG region), the VMT from the residence in Davis to the Yolo-Solano County Line would be reported as external VMT in the SACOG region, and the VMT from the county line to the final destination in Vacaville would be reported in the MTC/ABAG region.

In general, 16 of 18 MPO’s reported the information above, with the exception of total VMT (13 of 18 reporting) and external travel (7 of 18 reporting).

Computed from these given variables are: CO2 Emissions by Passenger Vehicles per Year; Weekday CO2 Emissions by Passenger Vehicles per Capita; CO2 Emissions by Passenger Vehicles Per VMT; Passenger Vehicle Weekday VMT per Capita; Total Weekday VMT per Capita; and External Weekday VMT as a Percentage of Total VMT.

Sub-section 3b. Passenger Mode Share

Passenger travel mode shares are the percentage of person trips made by one of the following modes:

- Single Occupant Vehicles or “SOV” (for work trip purposes only).
- High Occupant Vehicles or “HOV” (a.k.a. carpool/vanpool, also for work trip purposes only).

\textsuperscript{1} Note that these categories can only be extracted from the EMFAC2007 “comma-delimited” format output, and not from the standard “Burden” reports. The main inconsistency was differing definitions of “medium duty vehicles” across the two reports.
• All Auto modes (for both work and non-work trip purposes).
• Public Transit (fixed route, common-carrier transit services for all access modes, reported for both work and non-work trip purposes).
• Bike + Walk or Non-Motorized modes (reported for both work and non-work trip purposes).

Eight of 18 MPO’s reported mode of travel information. Most of the non-reporting MPO’s use “auto only” travel models which do not account for other modes of travel.

Sub-section 3c. Congested Travel
The RTAC requested that this measure be added to the summary. The measure reported is based on the most commonly used definition of congested travel for most MPO’s: VMT on heavily congested roadways. For purposes of the summary, “heavily congested roadways” are those with a forecasted volume-to-capacity ratio of greater than 1.0, based on the operational roadway capacities used by the MPO’s in their travel demand models. This congestion measure was split into two categories:
• Congested Weekday VMT on Freeways
• Congested Weekday VMT on All Other Roadways

Only 5 of 18 MPO’s reported congested travel measures. Four variables were computed from the reported data: Congested Weekday VMT on All Roadways; Congested Weekday Travel Growth Rate (i.e. the annual average change in congested travel from the base year to a given forecast year); Congested Weekday VMT as a Percentage of Total Weekday VMT; and Congested Weekday VMT per Capita.

Transportation System Changes (Section 4)
This section of the summary provides information which characterizes the types of changes planned to transportation systems in each MPO.

Sub-section 4a. Planned Investments by Category
This sub-section includes the total planned investments from the base year through to the reported forecast year, split out by investment category:
• Highway Capacity (new freeways or state highways, or widening of existing freeways or state highways)
• Other Roadway Capacity (other new roadways, or roadway widenings)
• Transit Capital (Right of way, guideway, station or stop improvements, vehicles or rolling stock, plus necessary facilities for maintenance and storage)

2 Some MPO’s reported using delay-based measures of congestion, such as passenger- or vehicle- hours of delay. However, these measures were used by fewer MPO’s than the VMT on congested roadways measure, and there was a greater variety of definitions of “standard” or “desired” travel speed, which are required to estimate delay.
• Transit Operations (costs of operating and maintaining buses, trains, and other facilities).
• Bike and Pedestrian Projects (capital costs of new facilities dedicated to bikes or pedestrian travel).
• Roadway Maintenance and Operations (costs of maintaining roadway facilities of all types).
• Other (all other project types).

For the RTP horizon year, 8 of 18 MPO’s reported this information. Relative percentages of each investment category were computed from this information.

Sub-section 4b. Lane Miles of Roadway Added
This sub-section reports the system totals of lane mileage of roadways, for two classes of roadways:
• Freeway General Purpose Lanes—defined as freeway facilities which allow any user (e.g. mixed flow mainline lanes, auxiliary lanes, etc.).
• Freeway Managed Lanes—defined as a freeway facility which restricts use to specific types of users (e.g. HOV lanes, truck-only lanes, or tolled/priced lanes).

For the base year and RTP horizon year, only 5 of 18 MPO’s reported this data. Four variables were computed from the reported data: Planned Added Lane Miles for both reported classes of roadways; and Lane Miles Per Capita for both classes of roadways.

Transportation User Costs, Pricing and Other Parameters (Section 5)
This section reports gasoline prices and auto operating costs, and transit fare assumptions used by MPO’s. Only 5 of 18 MPO’s reported this information.

Other Information Provided by MPO’s

Southern California Association of Governments (SCAG)
• Regarding reported compound population growth rate: SCAG maintains population projections (2003-2035) on an annual basis. Rates were derived using the compound growth rate based on 2003, 2020, and 2035.
• For current year %s reported for housing growth that is either attached, small lot single family, and other: DOF data were used. % attached = single dwelling attached and multiple family housing; % small lot single family = single family not attached including small, medium, and large lot; % other = mobile home and others
• For % housing growth that is either attached, small lot single family, and other: values reported represent percent housing growth between 2003 and 2035.
• For amount of commercial sq. ft. in new/replaced development: the value reported is an estimate based on an assumption of 750 sq ft per retail/service employee; increased retail/service sq. ft. from 2003 to 2035.
• For % infill development that is housing units: Redevelopment/infill area is defined as areas with development in 2003. Therefore all housing units were in redevelopment area in 2003. 62% represents % redevelopment (sq ft) from 2003 to 2035 that is housing; 27% represents percent of housing (unit) growth from 2003 to 2035 that is in redevelopment area.
• For % infill development that is commercial sq ft: Redevelopment/infill area is defined as areas with development in 2003. Therefore, all commercial was in redevelopment area in 2003. 5% represents % redevelopment (sq ft) from 2003 to 2035 that is retail/service; 54% represents % of retail/service (sq ft) growth from 2003 to 2035 that is in redevelopment area.
• For % greenfield development that is housing units: Greenfield (vacant) area is defined as areas without any development in 2003. Therefore, no housing units were in greenfield area in 2003. 73% represents % of housing (unit) growth from 2003 to 2035 that is in vacant area.
• For % greenfield development that is commercial sq ft: Greenfield (vacant) area is defined as areas without any development in 2003. Therefore, no housing units were in greenfield area in 2003. 46% represents % of retail/service (sq ft) growth from 2003 to 2035 that is in vacant area.
• For data reported on transportation system transit access data metric is households.
• For data reported on transportation investment, SCAG reported funds dedicated to ‘OTHER’, funds labeled ‘OTHER’ include grade separation, HSRT, Debt Service, Railroad Capacity. Also, funds reported under Road Maintenance and Operations should be understood to include O&M for both Highway and Other Road Capacity. In generating investment values, the following assumed inflations rates were used: Capital = 5.3%, O&M = 3.8%.
• For data reported on VMT per day: VMT data includes passenger autos, light- and medium-duty trucks, and motorcycles.
• For data reported on CO2e tons per day: Data includes CO2 emissions only; includes passenger autos, light- and medium-duty trucks, and motorcycles; includes CO2 emissions from all trips occurring inside SCAG region; and the 2020 and 2030 CO2 emissions are overestimated because EMFAC2007 assumes a dirtier vehicle fleet than EMFAC2010 which is scheduled to be used for calculating final GHG emissions for 2012 RTP.
Metropolitan Transportation Commission / Association of Bay Area Governments (MTC/ABAG)

- For 2020 RTP scenario data MTC provided supplementary forecast data produced at the same time as the RTP forecasts. It is not used in either the Plan itself, or in the Conformity Analysis.
- For the 2035 additional scenario data MTC provided data from a "2035 Project + Land Use + Pricing" Alternative, a "supplementary" forecast that is neither a part of their RTP or Conformity Analysis.
- For median household income: value reported represents 'mean' household income.
- For total passenger vehicle CO2e per day: MTC reported CO2e values that included Pavley II and did not include Pavley II. CO2e values that did not include Pavley II were represented in this summary sheet.

San Diego Association of Governments (SANDAG)

- SANDAG data for 2020 and 2030 RTP scenarios represent their 2020 and 2030 'Reasonably Expected' scenarios, as opposed to their 'Revenue Constrained' Scenarios. The 'Reasonably Expected' scenarios are described by the following narrative: A higher level of investment than the Revenue Constrained Scenario was directed by the SANDAG Board, given that traditional revenue sources in the Revenue Constrained Scenario would fall short of the funds necessary to complete the investments in our priority corridors. The Reasonably Expected Revenue Scenario is a more optimistic forecast, which includes all the sources of funding in the revenue constrained forecast, plus additional sources of transportation revenue that may be reasonably expected to become available through 2030. The additional sources include higher levels of state and federal discretionary funds, increases in state and federal gas taxes based on historical trends, and other potential federal, state, and local sources. This more optimistic scenario is the basis for the 2030 RTP.
- SANDAG data for the 2035 additional scenario represent their 2030 RTP Smart Growth Scenario. The 'Smart Growth' scenario is described by the following narrative: To evaluate the potential benefits of implementing all of the potential smart growth areas in the region, a travel forecast was run using the Reasonably Expected Revenue transportation network and the Enhanced Smart Growth land use assumptions, which reflect all of the potential smart growth areas, as well as existing and planned smart growth areas developing by 2030.
- All monetary projections provided are based on 2006 dollar values.
- For data reported on % of Housing Growth in Multi-Family, Small Lot Single Family, and Other categories, SANDAG projected growth in three primary structure type categories, based on U.S. Census Bureau general classifications: Single-family (incl. attached and detached), Multi-family, and Mobile Home / Other. SANDAG tracks "large-lot" single family as...
houses located on parcels of 1 acre or larger. To estimate "small lot" single family, SANDAG subtracted the large lot units from the single family total.

- For data reported on % of housing units that are infill, redevelopment, or greenfield, SANDAG defined "greenfield" development as any development occurring on previously vacant land. "Infill" is considered to be any intensification of the same (existing) use, even if the existing structure is demolished in the process. "Redevelopment" is any change in use (e.g. from single-family to multi-family, from commercial to residential, etc...)

- In addition to Average Housing Density, SANDAG provided Net Residential Density data as described by the following narrative: the SANDAG region includes large tracts of military land, national forest, and state parks that are considered "developed" although they are predominantly open space. In the residential density calculations the SANDAG region's density should be adjusted accordingly.

- For data reported on Vehicle Operations Costs and Price of Gasoline: The model considers three types of auto costs: auto operating costs, parking costs, and tolls. Auto operating costs are assumed to be $0.135 per mile (1999 dollars) and reflect existing fuel costs. Vehicle depreciation costs are not included since these costs are not usually considered when making a mode choice decision. While fuel costs are expected to increase over time, the SANDAG standard forecasts assume constant auto-operating costs. One reason for this assumption is that fuel cost increases can be offset by use of more fuel efficient vehicles. Because there is no generally accepted source for future fuel cost and fuel efficiency forecasts, standard modeling practice is to use base-year auto costs and transit fares for future-year forecasts. It should be noted that cost and fare assumptions can be varied for scenario testing purposes.

- For data reported on Fuel Economy: SANDAG relies on CA EMFAC for all MPG calculations.

- For data reported on Average Transit Fare: Transit fares varying depending on mode choice (bus, express bus, light rail, commuter rail) and distance travelled.

- For data reported on Mode Split, SANDAG provided % split by Auto SOV, Transit Trips, Bike/Walk Trips, and Auto HOV trips.

- For data reported on Transportation Investment in Shared Capacity, SANDAG defined shared capacity as ML/HOV Lanes: The 2030 RTP includes a large investment in shared use facilities such as High Occupancy Vehicle (HOV)/Managed Lanes. These facilities will be used by HOVs and transit.

- For data reported on Transportation Investment SANDAG reported two additional categories of investment: TSM/TDM: TSM programs includig funding new technologies that allow for better management of existing infrastructure, freeway service patrol, FasTrak, 511, Compass Card. TDM includes funding for regional vanpool and bicycle locker programs and
other incentives through our RideLink Program. And Goods Movement: While these projects are not typically covered under SB 375, SANDAG does include additional funding for goods movement projects that improve the transportation system's performance.

Sacramento Area Council of Governments (SACOG)

- SACOG data for 2020 and 2035 additional scenarios represent their 2020 and 2035 Blueprint + TOD Enhancement scenarios. These are Blueprint land use scenarios, with emphasis on transit-oriented-development, which were developed by SACOG for use by Sacramento Regional Transit District in their recent masterplan project. The TOD emphasis, in total, reallocated approximately 11% of Year 2005-to-2035 dwelling unit growth to LRT station areas, streetcar corridors, and corridors with very high-frequency bus service. The transportation scenario includes an assumed front-loading of most transit services planned in the RTP for deployment by Year 2035 to Year 2020.
- SACOG provided 2 different sets of CO2e estimates based on 2 different sets of fuel economy and fuel cost assumptions: 1) Using the EMFAC07 defaults on fuel economy and inferring the fuel cost, and 2) Using the MTP assumptions on fuel economy and fuel cost. CO2e estimates using EMFAC07 assumptions were used for the summary spreadsheet and include all light and medium duty vehicle travel (not just household-generated travel).
- For data provided on % of Housing Growth that is Attached, Small Lot Single Family, or Other: Base year split is TOTAL; all future year splits are GROWTH.
- For data provided on % of Housing Growth that is Small Lot Single Family, Small Lot Single Family development is defined as lot size < 5500 sq. ft.
- For data provided on % of Housing Growth that is Other, Other includes a subset of detached development types, including large lot, farms, ranchettes, and other rural development.
- For data provided in the Land Use category, Base year split is TOTAL; all future year splits are GROWTH (e.g. numbers and %s for 2018 RTP represent ’05-’18 growth, for 2035 RTP they represent ’05-’35 growth, etc.)
- For data provided on Work and Other Travel mode splits: Mode assignments are based on SACSIM travel model TOUR trip purpose and mode. Available tabulations combined bike and walk.
- For current year transit access data reported numbers represent households.
Council of Fresno County Governments (Fresno COG)

- For data provided on work and other trip mode splits, % of walk and bike trips were combined.

Kern Council of Governments (Kern COG)

Association of Monterey Bay Area Governments (AMBAG)

San Joaquin Council of Governments (SJCOG)

Stanislaus Council of Governments (StanCOG)

Tulare County Association of Governments (Tulare CAG)

Santa Barbara County Association of Governments (SBCAG)

- For data provided on emissions or miles associated with passenger vehicles, passenger vehicles include only light-duty autos (LDA), light-duty trucks (LDT 1 & 2), and medium-duty trucks weighing between 5,750 and 8,500 pounds (MDV).

- Modeling data input are from 2002 Regional Growth Forecast (02’RGF). SBCAG is in the process of updating our travel model for consistency with our newer (2007) adopted growth forecast. Our revised travel model data will be available by the end of the year. Adopted in 2007 by SBCAG, the growth projections on a countywide basis show approximately 30% less employment, 30% less population, and 10% less housing between 2000 and 2030 than the 2002RGF. The SBCAG travel model database will be updated with the adopted 2007 RGF by the end of 2009.

- For data provided on Housing Units that are Attached, Small Lot Single Family, or Other: data source is the Department of Finance 2008 and 2009 E-5 report countywide data.

- For data provided on All New/Replaced Development # Housing Units and Sq. Ft. Commercial Space: As defined by the CMP, numbers reflect all development projects approved or under construction as of December 2008, data represents just projects that are in the pipeline, possibly in place by 2020.

- For data provided on Work Travel Mode Split: HBW person trips were provided with % of auto trips including carpool person trips.

- For data provided on Transportation Investment: All dollar figures are approximate, in year of expenditure dollars. The RTP assumed a cost inflation rate of 4% and revenue growth rate assumptions varied by funding source.
• The base year for transportation investments is 2007 rather than 2000.
• For base year data on Block Grid Texture: Sources include - 2,498.35 centerline miles - State's Public Roads Data report; 2,737.01 square miles - 2000 Census; for 2020 and 2035 RTP scenarios only a few new roads proposed in SB County (e.g. Union Valley Parkway).
• For data on bicycle lanes: Existing (179 mi.) and proposed (153.85 mi.) data from Regional Bike Plan.
• For data reported on transit access: Only included SB Metro Transit District (SBMTD), Santa Maria Area Transit (SMAT), and City of Lompoc Transit (COLT) service areas. Rural areas are not included.
• Median Household Income: Both 2000 base year from Census and 2008 inflated income based on CPI.
• Lane miles for GP lanes and HOV were computed for 2000 and 2030 horizon year excluding all freeway ramps.
• IIXX and XX VMT estimates were computed based on VMT within Santa Barbara County boundary.
• For passenger mode share: work trips and non-work trips are reported for 2000 base year and horizon year (2030).

San Luis Obispo Council of Governments (SLOCOG)

• Demographics:
  o RTP 2035 population figures were recently revised; however, these figures have not yet been approved by the SLOCOG Board. Population estimates for 2035 is 130,800.
  o Population 65+ years old: Current year figures provided are based on 2005-2007 American Community Survey 3-Year Estimates. The population figure (> 65 years old) for RTP 2035 is an estimate; 101,000 in SLO County are age 30-64 years old (2005-2007 ACS 3-Year Estimate).
  o Average annual compound population growth rate: 1.20% for 1990-2008; 0.76% for 2008-2035.
  o Persons per household: For RTP 2035, persons per household of 2.25 is an estimate.
  o Median Household Income: $55,942 (in 2008 $); Source: U.S. Census Bureau

• Housing:
  o Housing growth figures are derived from spatial data developed of residential building permits from all eight jurisdictions for years 2000 through 2007. Attached housing matches Regional Place Types Attached Single Family/Condo and Apartment Living, Mixed Use (2 Story) and Mixed Use (3 Stories or More). Small lot single family matches Regional Place Type Residential Single Family (Small-Lot). All other housing growth includes Regional Place Types Residential Single Family (Large-Lot), Rural Residential, Mobile Home Park and Agriculture-Residential.
Small-lot single family housing development is defined as 4,500 to 6,000 square feet.

- Land Use:
  - No responses are available at this time.

- Employment:
  - RTP 2035 employment figures were recently revised; however, these figures have not yet been approved by the SLOCOG Board. Employment estimates for 2035 is 138,100.

- Transportation:
  - No assumptions are currently being used for Vehicle Operations Cost, Price of Gasoline, Fuel Economy, or Average Transit Fare.
  - Passenger Vehicle VMT (miles per day): An accurate figure for this indicator is not currently available. Land use and transportation model is in development; we should have the capacity to produce this figure soon.

- Transportation Investment:
  - We were unable to gather this information due to time constraints. We will keep it on the radar.

- Transportation System:
  - Block Grid Texture: There are 3,304 square miles of land in San Luis Obispo County.
  - There are 6,940 centerline miles of roadway in San Luis Obispo County.
  - The Block Grid Texture is 2.10 CL miles/sq mile
  - Sidewalks: A sidewalk study was recently completed. The study area included the 7 incorporated cities and the 9 Census Designated Places in the county. Areas outside of the study area are rural areas; roadways generally do not have sidewalks. Of the 1,061 miles of roadway included in the study area, there were 455 miles of full or partial sidewalks (42.9%). Of the total mileage of roadway (6,940 centerline miles) in the region, those with sidewalks account for about 6.6% of all roadways.
  - Bicycle lanes (all classes): There are 213 miles of existing bikeways in San Luis Obispo County. This is 3.1% of the 6,940 centerline miles in the region.
  - Transit Access: Housing units within ½-mile of 30-minute service:
    - There are four local fixed transit routes in the region that offer 30-minute service; all four routes operate 7 days a week. There are 12,824 housing units, and 6,279 on-campus beds (Cal Poly) within a half-mile of 30-minute transit service. In order to equate on-campus beds to housing units, it is assumed that 2.5 on-campus beds equates to 1 housing unit. Therefore, there are 2,512 equivalent housing units on-campus, for a total of 15,336 housing units within a half-mile of 30-minute transit service. There are 116,171 housing units in the region. This equates to 13.2% of all housing units. However, these figures do not account
for the relatively high vacancy rate of 9.3% in the region. We do not currently have 15-minute service in our region.

- Environment
  - Total Passenger Vehicle GHGs (CO2e per day): An accurate figure for this indicator is not currently available. Land use and transportation model is in development; we should have the capacity to produce this figure soon. Additionally, all or nearly all jurisdictions are developing on GHG inventories in the region, which would also provide this figure.

**Merced County Association of Governments (MCAG)**

**Butte County Association of Governments (BCAG)**

- **GENERAL INFORMATION:** It should be noted that the BCAG region is one of only two MPOs in the nation that is not served by an interstate freeway and there is no continuous 4 lane roadway through the county. In addition, the BCAG travel model is lacking 4D analysis capabilities which may lead the existing model to not be accurately accessing the impacts (i.e., over stating trips, vmt, and congestion) of future land use or smart growth on the transportation system. Travel model has been calibrated to the year 2006 and interpolated to the RTP base year of 2008.


- **LAND USE DATA:** Dwelling unit information from *Butte Regional Growth Projections 2006-2030* extrapolated to the year 2035. Note - base year number is greater than the 2008 DOF estimate of 95,844. Total county acreage developed from countywide GIS. Information regarding specific classes and densities of land development, other than commercial, has not been generated at the regional level. BCAG is currently working to obtain funds for 4D implementation, which would develop and analyze this data.

- **MODEL OUTPUT DATA:** VMT and CO2 data reported using BCAG regional travel model VMT and speed bin totals and post processed using EMFAC2007. EMFAC2007 output is generated from a winter run with data provided from CSV files and separated based on total or passenger vehicle requests. Reliable external (ix/xx/xi) VMT information for the
BCAG region is not readily available. The BCAG model does estimate that 94 percent of all trips are internal to Butte County. Work trip mode share data provided is based on 2000 Census.

- **TRANSPORTATION INVESTMENT:** Financial information generated from 2008 BCAG RTP and does not include locally funded projects of regional significance. Revenues are based on historical trends and project costs reflect a compounded annual increase of 3.5% for inflation. Note - the RTP does not present financial information based on the categories listed, but rather by funding source, this is staff's best attempt to convert the information into the requested classes.

- **TRANSIT ACCESS:** While no data was reported, there are currently no 15 minute headways on the system and very few 30 minute headways are available. The 2008 RTP did determine that 58% of the population lives within 1/4 mile of a transit route.

### Shasta County Regional Transportation Planning Agency (Shasta RTPA)

- For data reported on population, assumptions in the RTP and Shasta County travel model were used, although it should be noted that recent population growth has slowed to less than half of these assumptions.

- While complete data was not provided on % of Housing Growth that is Attached, Small Lot Single Family, or Other: It should be noted that Regional blueprint current trend scenario inputs for residential development = 17% multifamily, 56% medium density (average 1/4 acre lot size), and 27% low density and rural (average 4 acre and average 10 acre/unit categories).

- For data reported on Total Acres in region: two different numbers were reported 1) includes only GP areas available for development and 2) includes Valley floor & Lower foothills where nearly all development will occur. The first was reflected in the summary sheet.

- For data reported on Work and Other Travel Mode Splits: Bicycle and Walk trips are combined.

- For transit access, it should be noted that currently 12% of homes are within 1/4 mile of a transit stop, neighborhood retail, and a school, with the current trend 2050 blueprint indicating 9%.

### Kings County Association of Governments (KCAG)

- Housing Unit data was obtained using DOF vacancy percentages for Kings County.

### Madera County Transportation Commission (MCTC)
Tahoe Regional Planning Agency (TRPA)