

SAN LUIS OBISPO COUNCIL OF GOVERNMENTS

DRAFT STAFF REPORT

MEETING DATE:	March 7, 2007
SUBJECT:	Regional Traffic Model – Response to Board Concerns

SUMMARY

The Regional Traffic Model was adopted by the SLOCOG Board at its February meeting, subject to staff returning at the March meeting to address the following concerns raised regarding the population and employment forecasts and the model development process.

- The need for a weekend, summer based model scenario.
- Accuracy of 2030 population and employment forecast data.

SLOCOG staff addressed these concerns in several ways, including: conferred with Donald Hubbard of Fehr & Peers regarding the model development process, and David Bergman of ERA regarding the population and employment projections; working with Donald Hubbard to prepare a “user-friendly” description of the model development process which was provided to all planning and public works directors; reviewing the concerns and options to address them with all local agency staff, and reviewing the 2007 UCSB Economic Forecast & 2007 Caltrans Economic Forecasts for the County. The following major findings are the result of this research:

1. The methods and procedures used to develop the population and employment forecasts are consistent with the best available practices and local agencies zoning plans and were carried out correctly.
2. The 2007 UCSB and Caltrans Economic Forecast Reports include estimates that the San Luis Obispo region will experience a 1.5% annual increase in employment during the next five years thru 2011.
3. Unknown variations in economic conditions during the short, medium and long term justify considering the modification of projected growth rates based on the identification of objective criteria.

The discussion section includes more details on these findings and the actions taken by staff to address the concerns raised by Board. The “User Friendly Narrative Description” of the model development process created by Donald Hubbard as directed by the Board is included as Attachment A.

RECOMMENDATIONS

1. Authorize staff to contract for traffic counts during the Summer of 2007 and to issue an RFP for development of a summer weekend based model scenario.

DISCUSSION

To address the Board’s concerns, staff conferred with Donald Hubbard formerly of Fehr & Peers and David Bergman of ERA to identify the range of actions that could be undertaken. A preliminary strategy was later presented to the Executive Committee for review and input. Following are more details on the staff actions.

- A. **Need for a weekend, summer based model scenario** – This issue was raised due to fact that at the beginning of the model development process a decision was made that it would be based on weekday peak hour trip generation, thereby allowing the impacts of a potentially significant amount of visitor related trip generation during the summer on weekends, particularly in the coastal area, to not be addressed.

The regional model is based on weekday peak hour trip generation because travel during the morning and evening commute periods results in the largest and most widespread source of traffic congestion in the region. There may be a value in creating a summer/weekend/holiday based model scenario. To accomplish this work will first require completion of three-days (72 hours) of traffic counts at 25-30 locations in the subject areas (to be determined). The trip generation rates for used in the model would have to be modified, as well as the hotel and motel occupancy rates. The model could then be recalibrated and the new scenario created. Staff estimated cost: traffic counts - about \$5,000; new model scenario - \$10,000-\$15,000. Total: \$15-\$20K.

B. **Accuracy of 2030 Forecast Data** – Based on the concerns regarding the accuracy of the projected number of jobs and/or housing units identified in the ERA forecast for 2030, staff reviewed the methods, procedures, assumptions and data used to develop these forecasts to determine if any corrective action is needed. Staff responded to issue from several different perspectives to assure that it was addressed as comprehensively and correctly as possible.

1.. Review of Population & Employment Forecasts Development Process - Staff reviewed the methods and procedures used to develop the population and employment forecasts to assure that they were based on the best available practices and were carried out correctly.

ERA used a combination of “top-down” and “bottom-up” procedures to develop their forecasts. The top-down portion consisted of analyzing the long-term trends in population growth for the state of California, then examining the Central Coast’s share of the state-wide population, and the County’s share of the Central Coast population to arrive at an estimate of county-wide population in future years.

U.S. Census data was then used to distribute the growth in population among the sub-regions of the county. A “bottom-up” procedure was then followed whereby the local general plans were used to distribute the growth in population within each jurisdiction. A combination of top-down and bottom-up procedures were used for the forecasts of future employment. Forecasts of changes in state-wide employment by economic sector (manufacturing, government, services, etc.) were used to forecast changes in employment for the Central Coast and for SLO County.

Using 2005 employment shares for non-farm employment and adjusted by the projected changes in the shares of employment sectors, ERA established projected jobs by industry for each five-year study period. Then, using the “top-down” countywide forecast of growth a control for predicted growth within the region based on a low, medium, and high growth scenario was established.

To estimate employment growth at the sub-county level, ERA used historical ES-202 data from 1990 to 2000 to determine relative shares of employment concentrations and the land use information as presented in the current transportation model. This allowed ERA to establish estimates for employment totals for incorporated as well as select unincorporated areas based on historical data.

2. Review of Model Development Process – Staff worked with Donald Hubbard to prepare a “user friendly” narrative description of the model development process which was distributed to planning and public works directors and other staff involved in the model development process for their review and comment. Staff then reviewed the procedures used by Fehr & Peers to use the population and employment forecasts developed by ERA to prepare the future year model to assure that it was carried out correctly.

Fehr & Peers converted ERA’s forecasts for future population by TAZ into percentage increases for the periods 2005 to 2015 and from 2005 to 2030 and applied the percentages to each residential land use category (single-family dwellings, multi-family dwellings, mobile homes, and rural residential) to produce future year residential land uses by Traffic Analysis Zone (TAZ).

Fehr & Peers then applied ERA’s projections for the growth in office, health services, light industry, heavy industry, and hotel jobs as percentage increases to existing land uses based on the existing distribution of land use types by TAZ.

3. Review of Economic Forecast Data – Staff reviewed economic forecasts by the UCSB Economic Forecast Project and Caltrans for State, San Luis Obispo County and adjacent counties that were recently released in late 2006 or early 2007 to determine whether the projections developed by ERA were consistent.

The 2007 San Luis Obispo County Economic Outlook released by the UCSB Economic Forecast Project in November 2006 projected that “While the 2006 economy has been slow, we forecast a bit stronger economic growth in 2007 and 2008, with job growth of 1.3 percent, and 1.6 percent in 2008.” The report projected a 1.5% annual rate of growth for employment for 2009 thru 2011.

The 2006 Caltrans Office of Transportation Economics long range forecast for San Luis Obispo County noted that nearly 1,700 wage and salary jobs were created in San Luis Obispo County in 2005, representing a growth rate of 1.6 percent. The report forecast employment growth to remain modest over through 2010 in the county at an average of 1.5 percent per year.

4. Review of Forecast Data for Santa Barbara County Model – Staff reviewed forecasts used in the development of the model developed by SBCAG for Santa Barbara County to determine consistency between the projected rates of population and employment growth for its communities and those in San Luis Obispo County. Staff determined that employment in the Santa Maria area was forecast to increase from 45,075 in 2005 to just over 45,000 in 2030 (a 35% increase). It appears that the projected increases in employment in northern Santa Barbara County are consistent with the projected increases in San Luis Obispo County.

Major Findings and Conclusions – It appears that the procedures and data used to develop the population and employment forecasts were appropriate, and it appears that the process by which the projections were used to develop the model was carried out correctly.

However, basic economic history tells us that our ability to predict future development activity accurately is very limited, particularly over the long term. Further, growth does not take place at a constant rate, but varies over time. This is due to economic conditions varying over time as a variety of unknown and uncontrollable macro and/or micro level socio-economic and demographic circumstances continue to change. We must take into account that the amount of development that a local agency identifies in their general plan at “build out” is often an estimate, and the date at which it has been “determined” to occur is a “best guess” – and general plans will be modified to establish new “build-out” targets during the course of time covered by these projections.

Therefore, in consideration of the research carried out by staff and the findings noted above, we conclude that it is appropriate to consider modification of the growth rates to account for objective criteria identified by local agencies.

The following table (presented to the Board by Donald Hubbard in February) has been expanded to provide additional information about the employment projections: population per dwelling unit (Pop P/DU); the percentage of the total jobs in the region (%Tot); the percentage increase in jobs (%Inc); and the percentage increase in jobs per year (Inc/Yr).

**SLOCOG Regional Travel Demand Model: 2-21-2007
Population Jobs Housing Forecast: Medium Growth Scenario**

Jurisdiction	Pop P/DU	2005				2030						
		Pop	Jobs	%Tot	DU	Pop	Jobs	%Tot	Inc	%Inc	Inc/Yr	DU
Arroyo Grande	2.34	16,330	7,940	8.1%	6,985	20,300	13,040	8.4%	5,100	39.1%	1.6%	8,683
Atascadero	2.53	25,940	8,550	8.8%	10,237	33,000	12,950	8.4%	4,400	34.0%	1.4%	13,023
Grover Beach	2.50	13,100	3,160	3.2%	5,251	15,000	4,530	2.9%	1,370	30.2%	1.2%	6,012
Morro Bay	1.97	10,310	3,390	3.5%	5,231	12,100	5,450	3.5%	2,060	37.8%	1.5%	6,139
Paso Robles	2.65	27,580	14,270	14.6%	10,427	40,900	23,060	14.9%	8,790	38.1%	1.5%	15,463
Pismo Beach	1.95	8,620	3,160	3.2%	4,418	10,600	5,260	3.4%	2,100	39.9%	1.6%	5,433
San Luis Obispo	2.20	42,660	42,010	43.1%	19,409	48,200	66,040	42.8%	24,030	36.4%	1.5%	21,929
Rural County	2.56	100,390	15,000	15.4%	39,246	139,530	24,000	15.6%	9,000	37.5%	1.5%	54,547
TOTALS		244,930	97,480		101,202	319,630	154,330		56,850	36.6%	1.5%	131,228