



**ROUTE 156 WEST**  
*Monterey County*  
**CORRIDOR PROJECT**

**Growth Inducement Study**

**Presentation**

For the

**Community Advisory Group**

Parsons Transportation Group

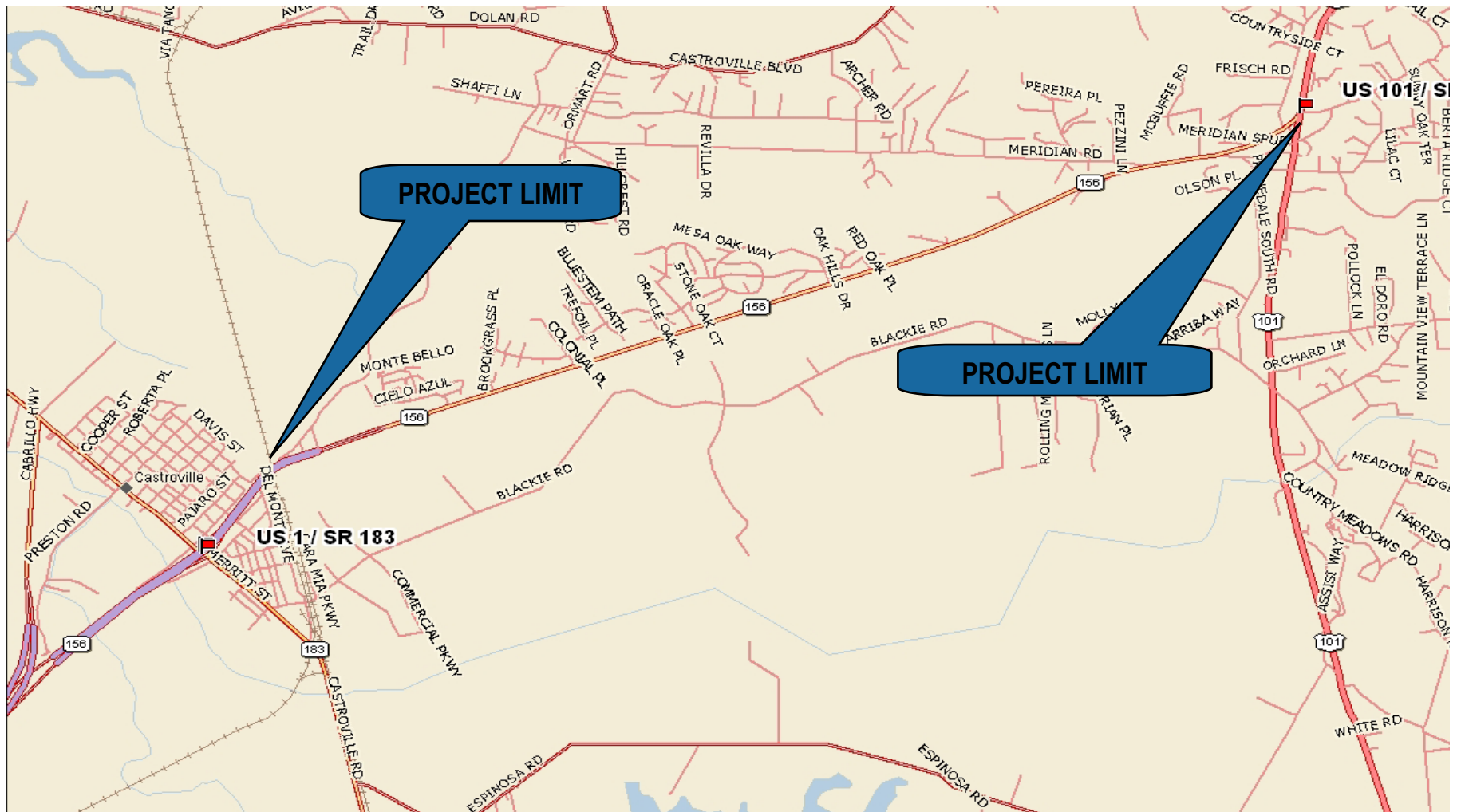
**January 2008**





## State Route 156 West Growth Inducement Study

# Proposed Route 156 Improvements





## Proposed Route 156 Improvements

### Build Alternatives

- **Alternative 11 – Construct a four-lane freeway on a new alignment south of the existing SR-156. Also, convert existing SR-156 from a two-lane conventional highway to a frontage road.**
- **Alternative 12 – Convert the existing SR-156 from a two-lane conventional highway to a four-lane expressway by adding two lanes south of the existing SR-156 alignment.**



# State Route 156 West Growth Inducement Study

## Proposed Alternative 11





# State Route 156 West Growth Inducement Study

## Proposed Alternative 12





## Research Method

- **Gravity Model to compute changes in accessibility to jobs**
- **Consideration of growth-related factors such as:**
  - **Local government plans and policies**
  - **Growth trends**
  - **Housing quality and price**
  - **Other infrastructure and amenities**



## **Study Methodology Steps**

- **Select Analysis Areas**
- **Develop Data on Growth Factors**
- **Growth Model Analysis**
- **Overall Growth Inducement Assessment**
- **Expert Panel**



State Route 156 West Growth Inducement Study

# Transportation Growth Factors

- **Commute time**
- **Access**
- **Infrastructure**
- **Highway constraints**



# Commute Time Savings

## Estimated 2036 Commute Time Savings

- **North Prunedale to Castroville/Seaside/Monterey**
  - 11.5 to 11.9 minutes for Alternative 11
  - 10.9 to 11.3 minutes for Alternative 12
- **Oak Hills Drive to Santa Cruz/Watsonville/Castroville/Seaside/Monterey**
  - 5.1 to 5.5 minutes for Alternative 11
  - 4.9 to 5.2 minutes for Alternative 12
- **Marina to Silicon Valley (San Jose)**
  - 1.4 minutes for Alternative 11
  - 1.3 minutes for Alternative 12



## Other Growth Factors

- **Cost of land**
- **Local government plans and policies**
- **Articulated public attitudes**
- **Terrain and land use**
- **Cost and labor pool**



## Growth Indices Calculated

***Growth index--a relative comparison of access to all regional jobs from selected areas***

**For the microcosm of five growth areas:**

- **Planned growth index**
- **Unconstrained growth pressure index**
- **Constrained growth pressure index**



## Growth Indices Calculated

### Planned Residential Growth Index

- **The percentage of the total residential growth planned within five growth areas that is planned for an individual growth area (totaling 100% for the entire project)**



## Growth Indices Calculated

### Unconstrained Residential Growth Pressure Index

- **Considers only accessibility to jobs**
- **Proportional to the jobs accessed from a zone and inversely proportional to the square of the access time during the peak hour**



## Growth Indices Calculated

### Constrained Residential Growth Pressure Index

- **Considers planned growth limits along with accessibility to jobs**
- **Proportional to jobs accessed from a zone times the planned population growth capacity of the zone and inversely proportional to the square of the access time during the peak hour**



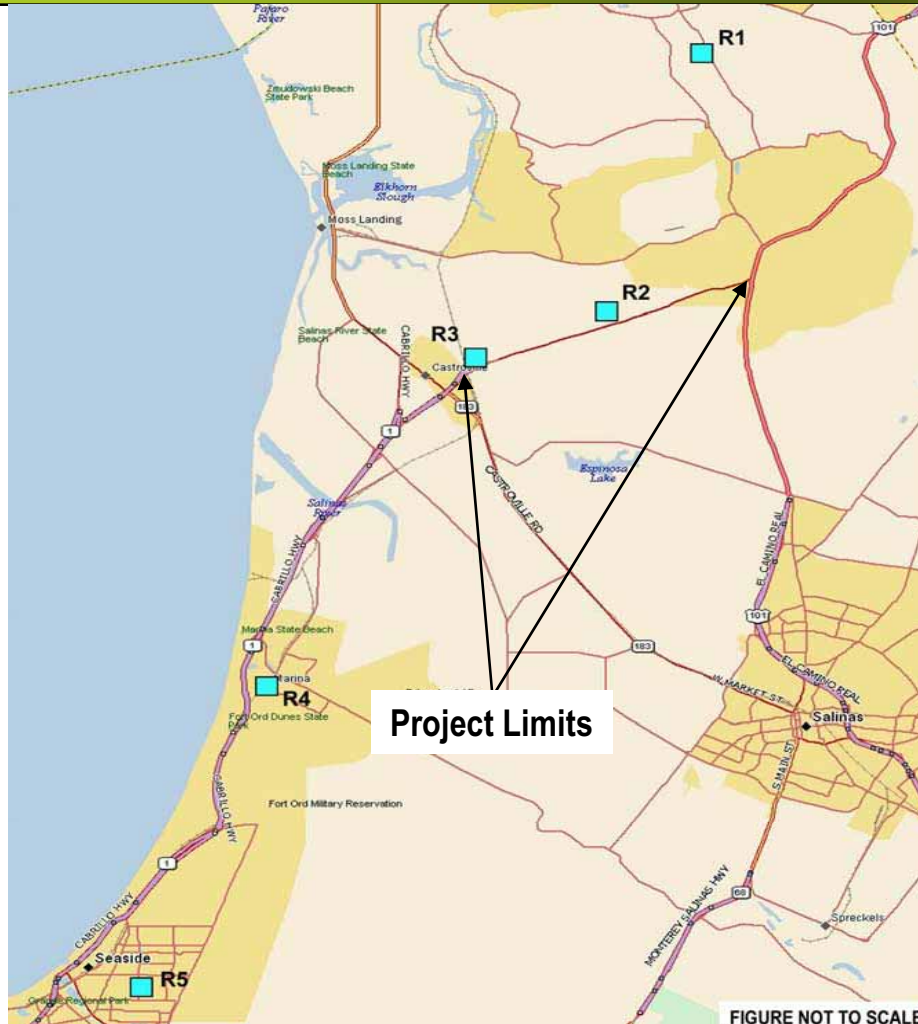
## Criteria for Selection of Residential Growth Areas

- **“Sample” of residential areas that may be affected by any growth that would result from Route 156 improvement**
- **Close to Route 156 Corridor**
- **Potential for growth per AMBAG projections**
- **Include range of commute distance to local job centers**



## State Route 156 West Growth Inducement Study

# Selection of Residential Growth Areas



## Residential Growth Areas -

- R1 North Prunedale
- R2 Oak Hills Drive
- R3 Castroville
- R4 Marina/Fort Ord
- R5 Seaside/Fort Ord



## State Route 156 West Growth Inducement Study

# Planned Growth Index

Residential Analysis Zones		Total Zone Population			Planned Growth Index
		2000	2030	Growth	
North Prunedale	R1	8,155	9,051	896	4%
Oak Hills Drive	R2	3,471	4,315	844	4%
Castroville	R3	7,133	11,598	4,465	19%
Marina/Fort Ord	R4	21,307	34,541	13,234	57%
Seaside/Fort Ord	R5	30,034	33,655	3,621	15.70%
<b>Total for Analysis Zones</b>		<b>61,945</b>	<b>84,109</b>	<b>23,060</b>	<b>100%</b>

Population Source: AMBAG, 2007



## Selection of Employment Areas

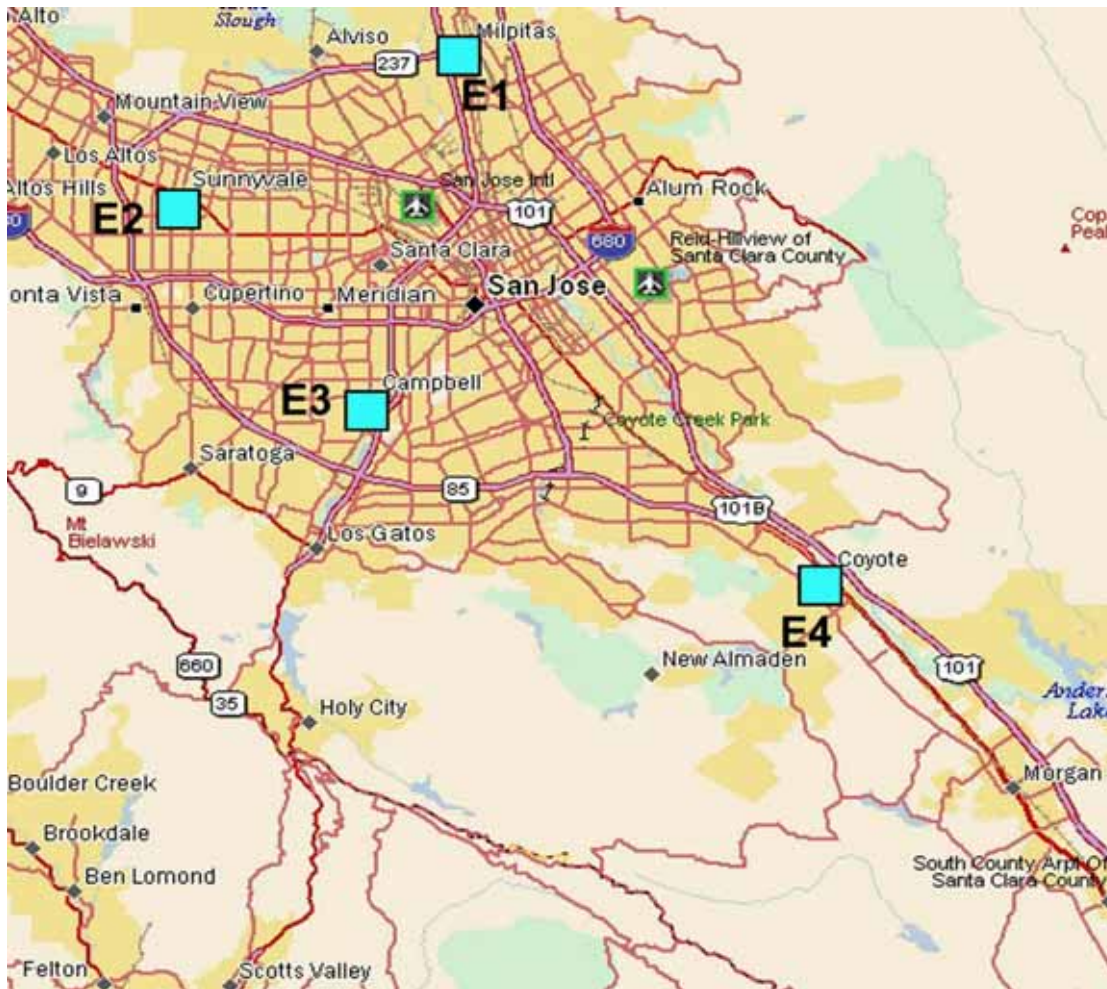
### Criteria for Selection of Employment Areas

- **Universe of jobs accessible from Route 156 corridor**
- **Roughly grouped by commute time and distance**
- **2030 jobs defined by AMBAG and ABAG projections**



## State Route 156 West Growth Inducement Study

# Selection of Employment Areas



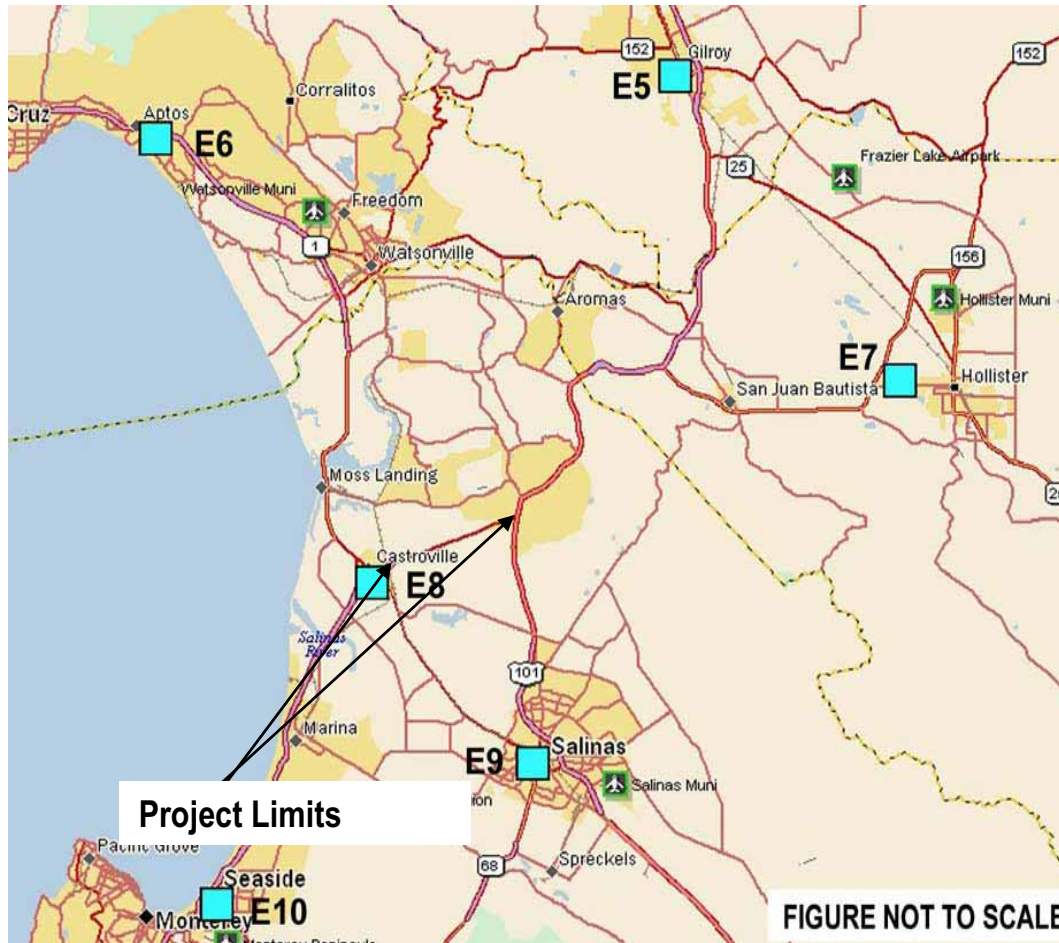
### Santa Clara County

- E1 East Bay
- E2 South Peninsula
- E3 San Jose
- E4 Coyote Valley



## State Route 156 West Growth Inducement Study

# Selection of Employment Areas



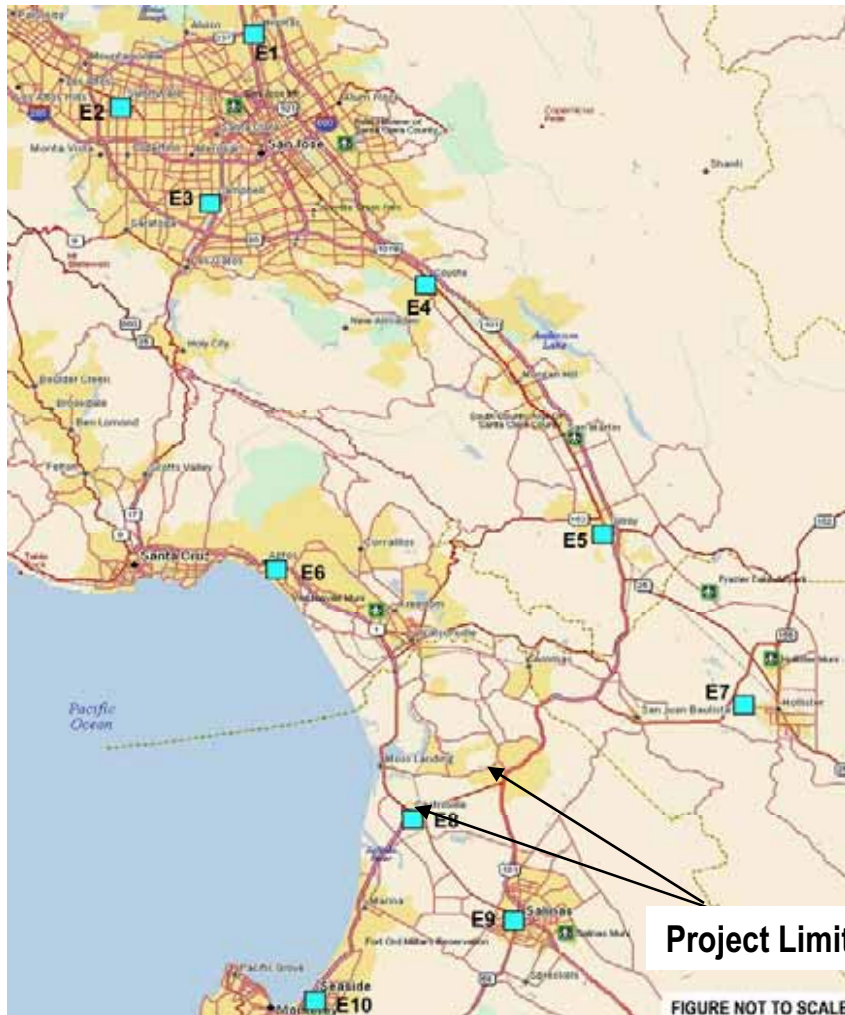
### Santa Clara/ Santa Cruz / San Benito / Monterey Counties

- **E5 Gilroy**
- **E6 Santa Cruz /  
Watsonville**
- **E7 San Juan Bautista /  
Hollister**
- **E8 Castroville**
- **E9 Salinas**
- **E10 Seaside / Monterey**



## State Route 156 West Growth Inducement Study

# Selection of Employment Areas



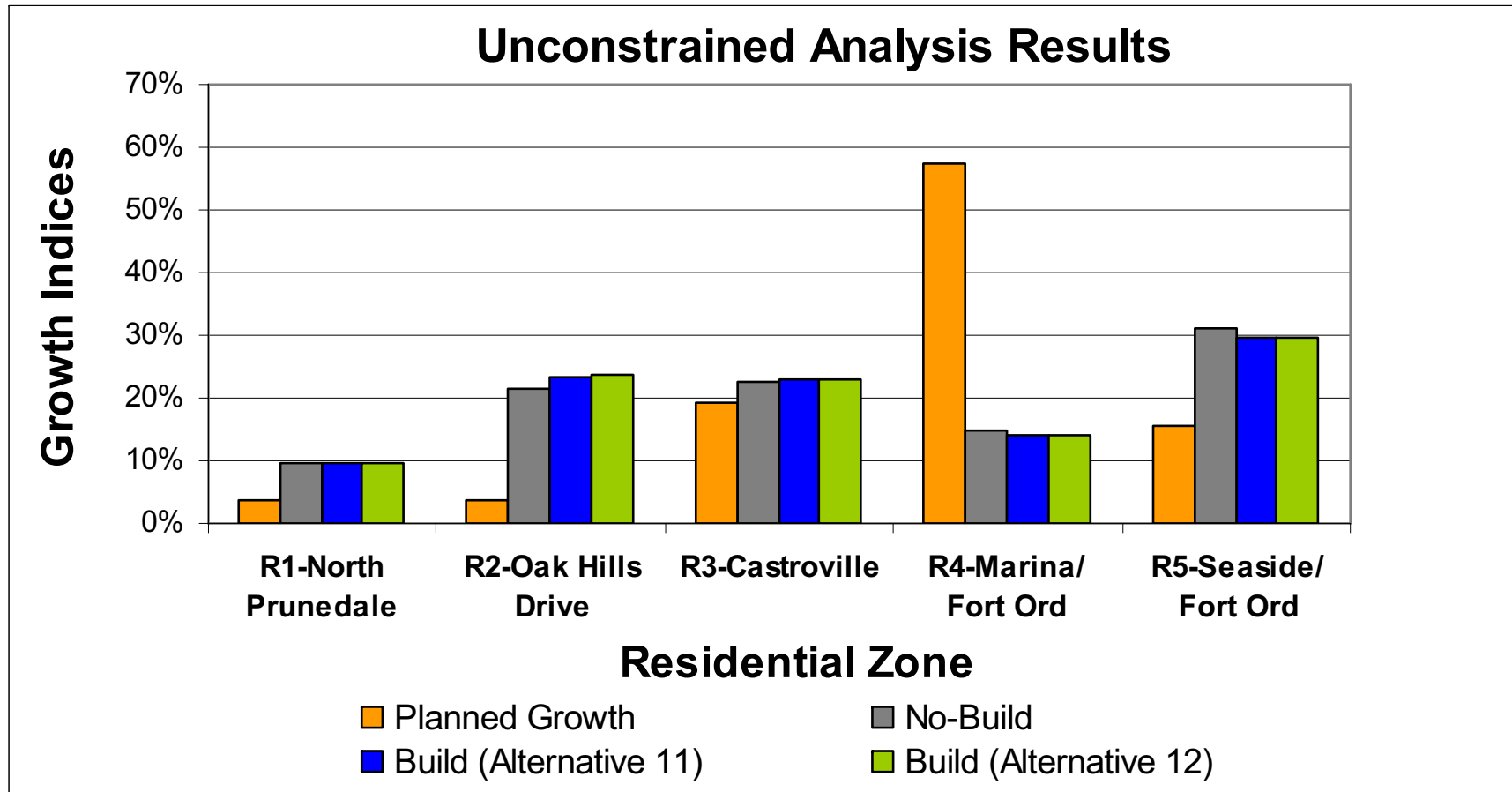
## Overall

- E1 – E5 Santa Clara County
- E6 – Santa Cruz County
- E7 – San Benito County
- E8 – E10 Monterey County



## State Route 156 West Growth Inducement Study

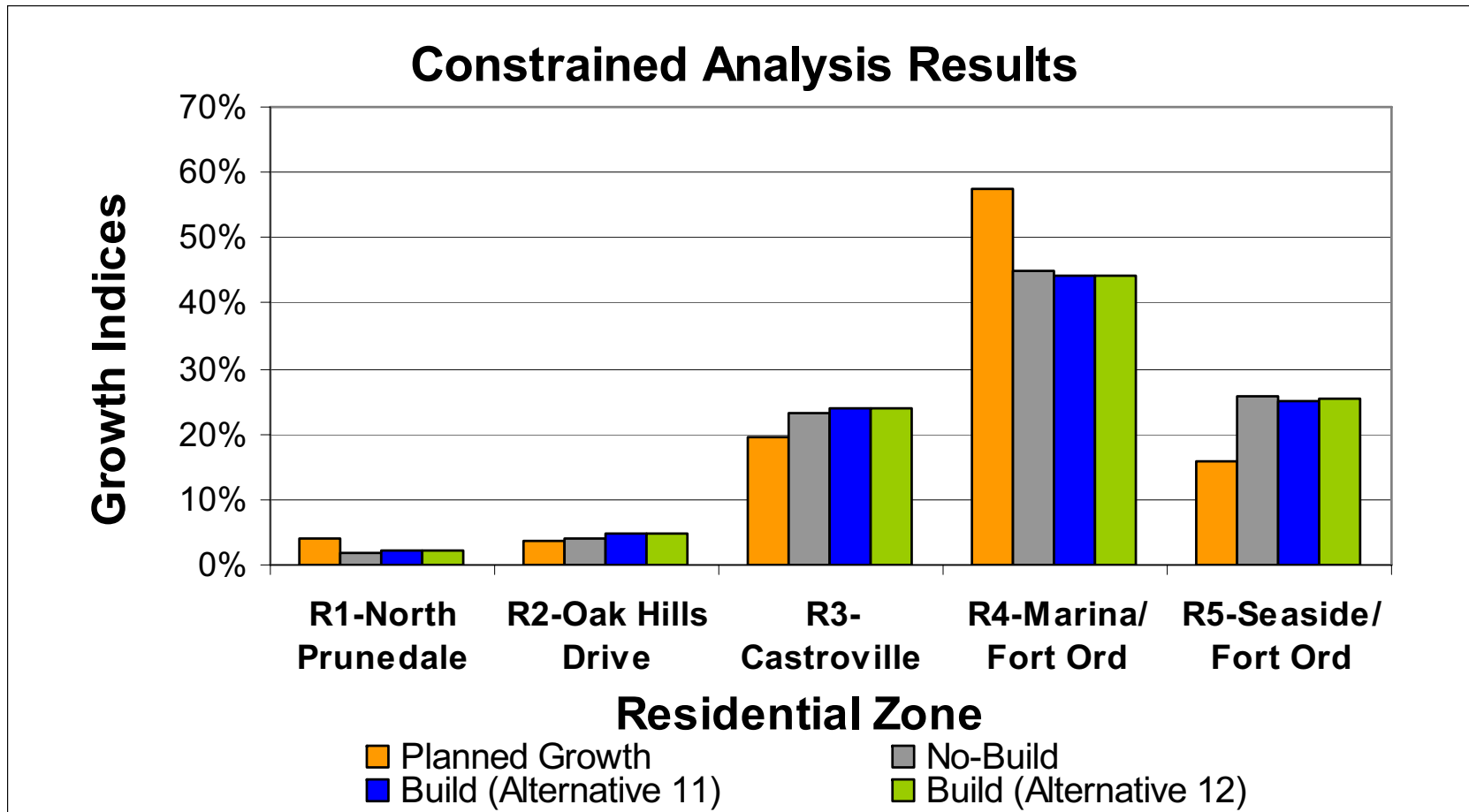
# 2036 Unconstrained Results





## State Route 156 West Growth Inducement Study

# 2036 Constrained Results





## 2036 Unconstrained Results

- **Marina/Fort Ord will provide most of planned residential growth capacity in the five sample areas; it is the only growth area that has more planned capacity than growth pressure.**
- **North Prunedale, Oak Hills Drive, Castroville, and Seaside/Fort Ord will have more residential growth pressures than capacity even without any highway improvement.**



## 2036 Unconstrained Results

- **In Marina/Fort Ord and Seaside/Fort Ord, the residential growth pressures would be higher in the no-build as compared to both the Build Alternatives.**
- **Alternatives 11 and 12 would both have almost identical effects. The two Build Alternatives would have relatively little effect on residential growth pressures.**



## 2036 Constrained Results

- **Alternatives 11 & 12 would both increase relative growth pressures very slightly in North Prunedale, Oak Hills Drive and Castroville.**
- **In all other areas (Marina / Fort Ord / Seaside), Alternatives 11 & 12 would both very slightly decrease relative growth pressures.**
- **Hence impact on all the growth areas under consideration, due to the two build alternatives, would be very insignificant.**



# Other Planning Considerations

**Public opposition to growth plus development restrictions.**

- **Majority of the residents in Monterey County are opposed to growth.**
- **There are growth limitations due to the presence of visual resources, restrictions on farmland development and infrastructure deficiencies such as non-availability of water.**
- **Monterey County Growth Management Policy (GMP) attempts to establish growth areas in areas where the provision of services and facilities such as water, sewer, police and fire protection, are likely.**
- **The GMP also seeks to discourage urban development outside the boundaries of urban service areas in order to discourage premature and unnecessary conversion of open space outside of urban service areas.**



## Other Planning Considerations

- **Growth policies of Monterey County will determine the effects in the areas with the greatest commute time savings.**
  - **Growth zones - North Prunedale, Oak Hills Drive and Castroville are all within the Monterey County's jurisdiction.**
  - **County politics could be described as "Smart Growth."**



## Research Conclusions

- **The commute time savings derived from both the alternatives are not going to substantially increase or decrease residential growth pressures in any of the five growth zones.**



## Research Conclusions

- **Alternatives 11 and 12 would both have negligible effect on growth.**
- **As per unconstrained analysis, under both build alternatives, Oak Hills Drive (R-2) would be the most impacted by growth pressure.**
- **As per constrained analysis, under both build alternatives, North Prunedale (R-1), Oak Hills Drive (R-2) and Castroville (R-3) show increased growth pressures, the increase being less than 1 percent for each of the three centroids.**



## Research Conclusions

- **The proposed project is more likely to save time for trips in the westbound direction.**
- **These trips are a combination of commuting to service jobs and recreational trips.**
- **The housing market in the 101 corridor is dominated by commuters to Silicon valley. Improved access to service jobs on the Monterey Peninsula is unlikely to substantially affect this market by inducing housing growth.**



## Research Conclusions

- **Major factors preventing unplanned growth along the corridor-**
  - The lack of developable land in cities and
  - Strong land use controls such as infill development and mixed-use development.
- **The proposed project would not stimulate unplanned residential or related commercial growth.**



- **Results of growth study and panel will be:**
  - Documented in draft technical growth report
  - Summarized in administrative draft environmental document
- **Following admin review, draft environmental document and all technical reports will be released for public comment**



## Expert Panel Objectives

- **Review and assess research results**
- **Discuss growth trends and issues for the Route 156 corridor.**
- **Define factors influencing residential and commercial growth in the corridor.**
- **Consider how much the proposed highway improvements might influence growth in the corridor.**