

California Department of Transportation

District 12 - Orange County

Landscape Maintenance & Litter Removal Programs

James Pinheiro

*Deputy District Director
Operations & Maintenance*



District 12

Landscape Maintenance

Background

Landscape Inventory

Projects

Resources

Recommendations



Litter Removal

Background

Resources

Recommendations



Goals

- *Develop partnerships*
- *Improve roadside appearance*
- *Meet customer expectations*
- *Leverage limited resources*





Roadside area (not landscaped)

Landscape Elements

- *Trees*
- *Palms*
- *Shrubs*
- *Ground cover*
- *Vines*
- *Mulch*



Landscape Elements(continued)

- *Irrigation piping & sprinklers*
- *Electric control valves*
- *Buried conductor wiring*
- *Automatic irrigation controllers*
- *Centralized computer control systems*



Landscape Activities

- *Manual & Automatic Irrigation*
- *Irrigation System Repair*
- *Fertilizing*
- *Pruning*
- *Mulching*
- *Replanting*
- *Weed control (mowing/spraying)*
- *Tree trimming*



Activities (continued)

- *Inventory inspection*
- *Complaint investigation*
- *Rodent control*
- *Removing trees & shrubs*
- *Stump grinding*



District 12 Landscape Inventory

- *2,990 acres of landscaping
(11% of statewide inventory)*
- *54,562 trees*
- *1,341 palms*
- *1,746 acres of ground cover*



Inventory (continued)

- *410 linear miles of ground cover edging*
- *4 landscaped park & ride lots*
- *5,700 acres of roadsides not landscaped
(require mowing and spraying)*



Landscape Allocation/Expenditures

Fiscal Year 04/05

Total Allocation

- *\$6.47M allocated for Landscape activities, including labor and operating expense*

Total Labor & Spent

- *\$6.6M (labor \$5.3M and operating expense \$1.3M)*



Allocation/Expenditures(continued)

Expenditure per acre for District 12

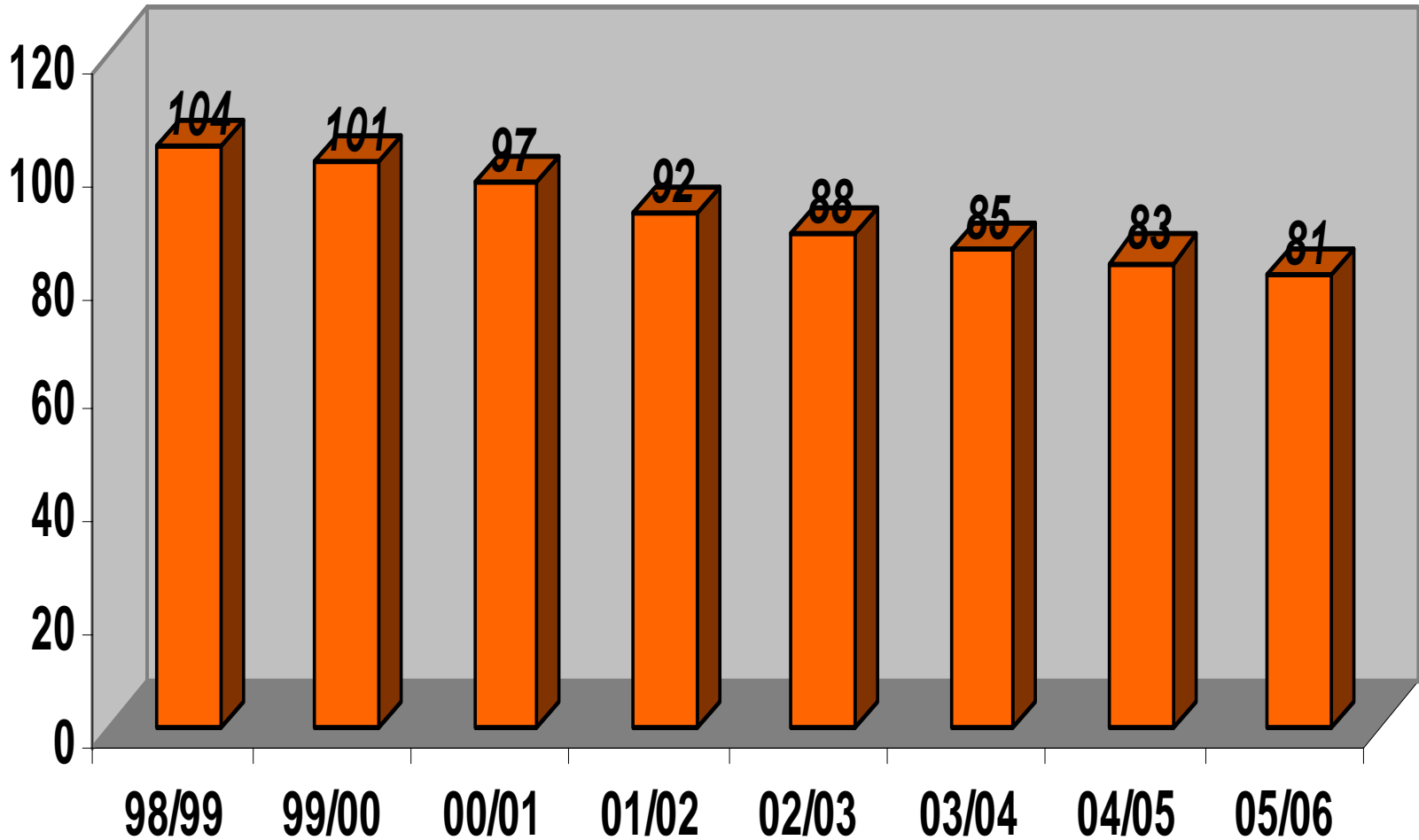
- $\$6.6M/2,990 \text{ acres} = \$2,207/ \text{ per acre}$

Statewide expenditure average per acre

- $\$56,537,200/27,280 \text{ acres} = \$2,072/\text{per acre}$



District 12 Landscape Maintenance Workforce



District 12 Landscape Maintenance Workforce

Level of Service Scores

- *A measurement tool used by highway maintenance organizations throughout the nation*
- *Gives an indication of the condition of the element being reviewed*
- *Scores are used to help determine future allocations*
- *Scoring is done once a year*
- *50 lineal mile segments are measured*

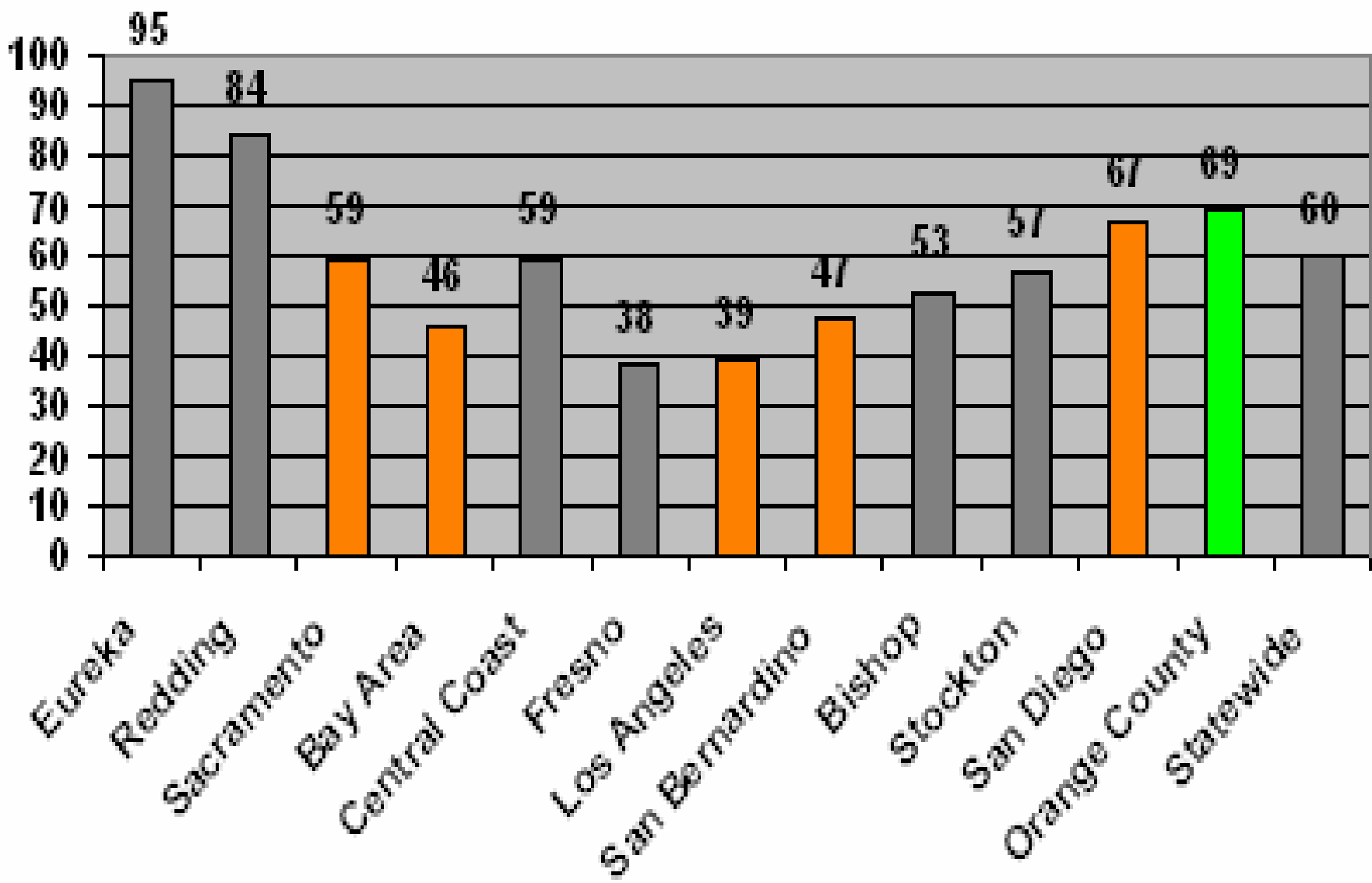


Level of Service Scoring System

- *Statewide targets the last 3 years were 54, 59 & 60*
- *District 12 targets were 69, 65 & 70*
- *District 12 achieved 74, 69 & 69*

- *100-90 = A: not unsightly, not perfect*
- *89-80 = B: good appearance, not great*
- *79-70 = C: minimum acceptable*
- *69-60 = D: below minimum acceptable*
- *less than 60 = fail: unacceptable*

*Level
Of
Service
Scores*



FY 2005/06

District 12 ranked third in the State



Projects

- *Since 1998, over 1,200 acres of highway landscaping have been developed in Orange County*
- *261 acres of landscape work are currently under construction or plant establishment.*
- *110 acres of landscape work have been programmed for construction in the next 3 years.*



Landscape Maintenance Resources

- *Maintenance Program*
- *Adopt-A-Highway program*
- *Encroachment permit program*
- *Local agreements*
- *Special Programs (Court Referrals)*





Conventional Highway (landscaped by others)

District 12

21

Litter & Graffiti Removal

- *Adopt-A-Highway (AAH)*
- *Special Program People (SPP)*
- *Graffiti*
- *Road Patrol*



Litter removal programs

- *Sweeping*
- *Contract Trash Collection*
- *Trash Debris Task Force*
- *Don't Trash California Campaign*



Adopt-A-Highway

- *Two-mile section (5 Yr. Term)*
- *Graffiti removal*
- *Weed control*



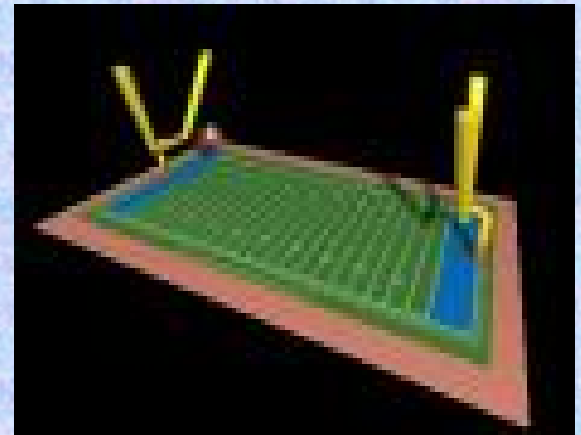
Caltrans provides

- *Encroachment Permit*
- *Signs and panels*
- *Safety orientation*
- *Safety gear (hats, vests, gloves, etc)*
- *Litter bags*
- *Collection/disposal*



AAH Campaign

- *24 times/Year in adopted areas*
- *18,200 Bags (260 10-yard dump trucks)*
- *A football field 14 inches high*



Special Program People

(SPP)

- *County low risk offenders*
- *Groups of 10-15 people*
- *CT provides;*
 - *transportation*
 - *supervision*
 - *safety instruction*



Special Program People

- *2800 potential trash pickup areas (40'x1/2 mile)*
- *5-30 minutes average*
- *3 times/year District wide*
- *13,300 bags (190 10-yard dump trucks)*
- *A football field 11 inches high*



SPP work

- *10 SPP workers/day*
- *8 times/month (SPP)*
- *2 times/month (AAH)*
- *150 bags/day*



SPP Litter removal

Two days later



District Coverage Area



- *6730 acres of unpaved areas (includes 3000ac landscape)*
- *Or 5177 football fields*
- *2800 (40'x1/2 mile) potential sites*



Graffiti Campaign

- *One 2-person crew*
- *Cleared 1.2 M Sq. ft (28 miles of 8-foot high wall)*



Road Patrol

- *Removed Traffic hazards*
- *17,156 Vehicle-mile*
- *60 times/year*



Sweeping Campaign

- *10 times /year*
- *Covered 10,377
shoulder Lane-mile*



Contract Trash Collection

- *Contractors hauled 6000
Tons (450 - 6x20x8 Bins)*



Trash Debris Task Force

- *Caltrans coordinates with County team*
- *Provide public information*
- *Shares all anti-litter efforts with the team*



Don't Trash California Campaign

- *Public information outreach*
 - *OC Register articles*
 - *Internet links in TCA, CT web sites*
 - *Bumper stickers on TCA, CT fleet vehicles*
 - *OCTA buses tailback design*
 - *City of Anaheim High School program & Adopted High School*



Public Opinion

Mercury NEWS “Trashed roads plague region” Sept. 12, 2005

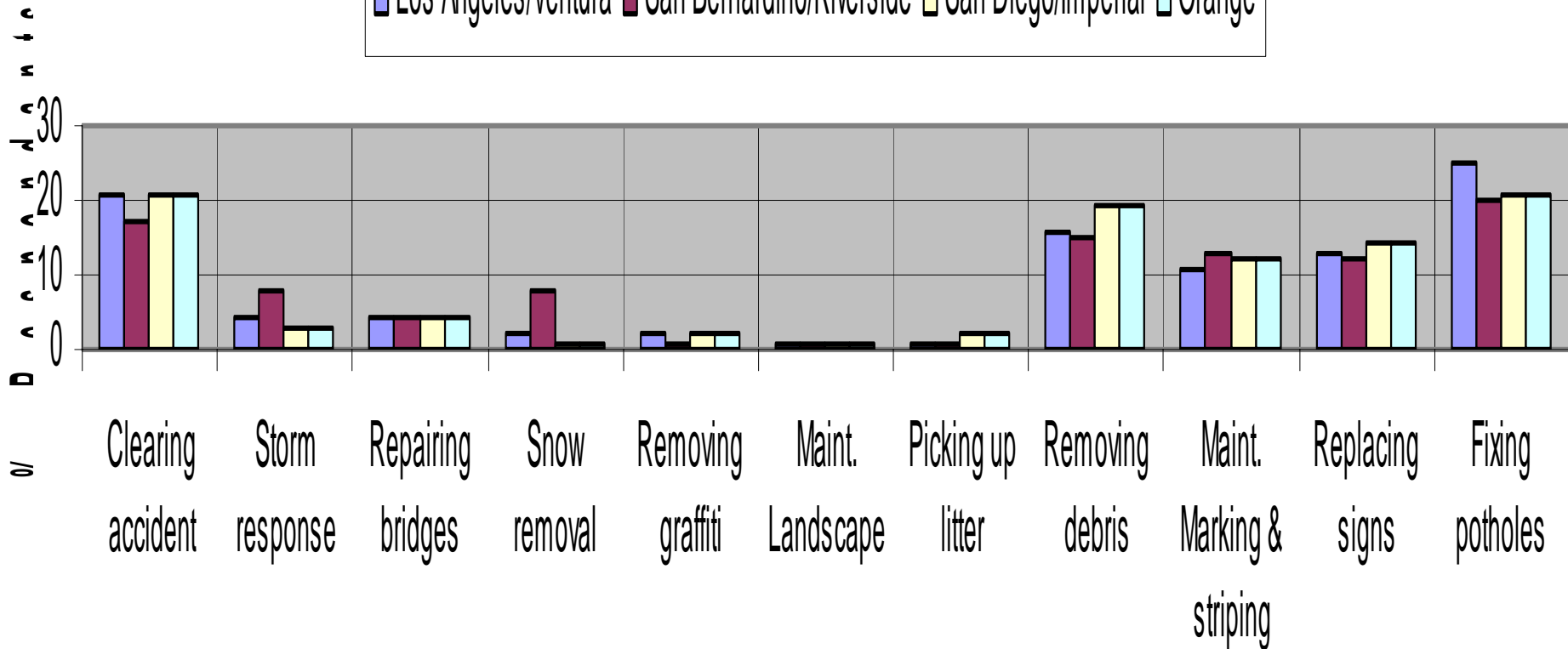
“Caltrans divides the state into 12 Districts., and the Bay Area ranked last..or most trashed..in its survey.

Los Angeles was 10th, while San Diego and Orange Counties boast highways that are among the cleanest in the state.”



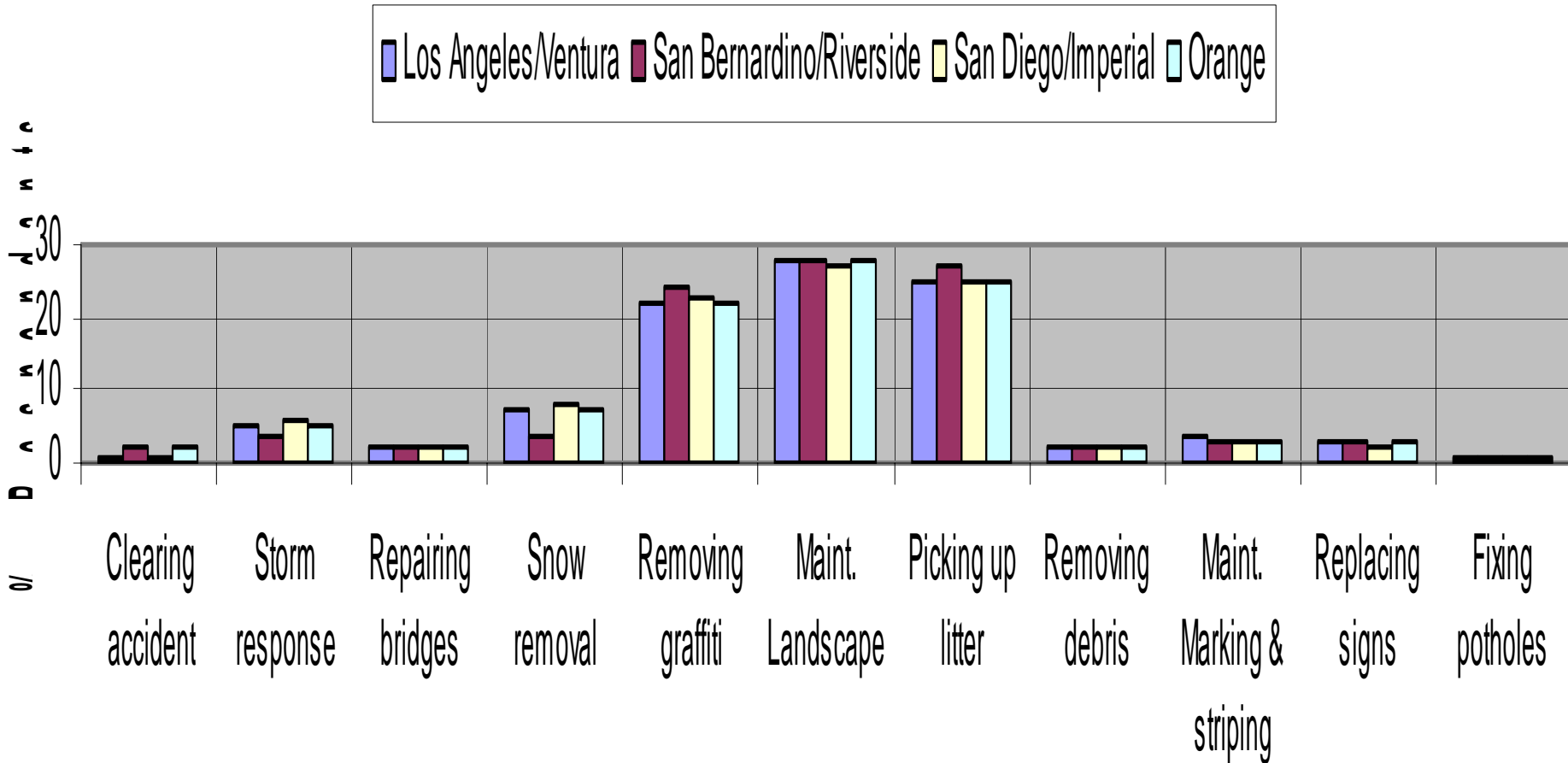
What do you feel should be the three HIGHEST priority items for Caltrans Maintenance crews?

■ Los Angeles/Ventura
 ■ San Bernardino/Riverside
 ■ San Diego/Imperial
 ■ Orange



2005 Maintenance Customer Survey

What do you feel should be the three LOWEST priority items for Caltrans Maintenance crews?



2005 Maintenance Customer Survey

Conclusions

- *Reducing roadside litter problems can free-up resources for other roadside maintenance needs*
- *Involve all stakeholders in efforts to enhance & maintain roadsides*
- *Involve all stakeholders in efforts to enhance & maintain landscaping*



Recommendations

- *Increase work by others from Adopt-A-Highway, court referral , permit, and agreement programs.*
- *Local enhancement of current resources.*



Recommendations(continued)

- *Increase use of court referral program*
- *Enhance Adopt-A-Highway program*
- *Promote anti-litter campaigns & education*



Recommendations(continued)

- *Increase enforcement of anti-litter laws*
- *Partner with local agencies & businesses to maintain landscape areas under permit*
- *Local agencies perform work under delegated maintenance agreements*



For more information:

Caltrans District 12

3347 Michelson Drive, Suite 100

Irvine, California 92612

(949) 724-2000

www.dot.ca.gov/hq/maint

[Http://adopt-a-highway.dot.ca.gov](http://adopt-a-highway.dot.ca.gov)

