

# CCPIC

## Summary of Voluntary Local Roads Survey Questions

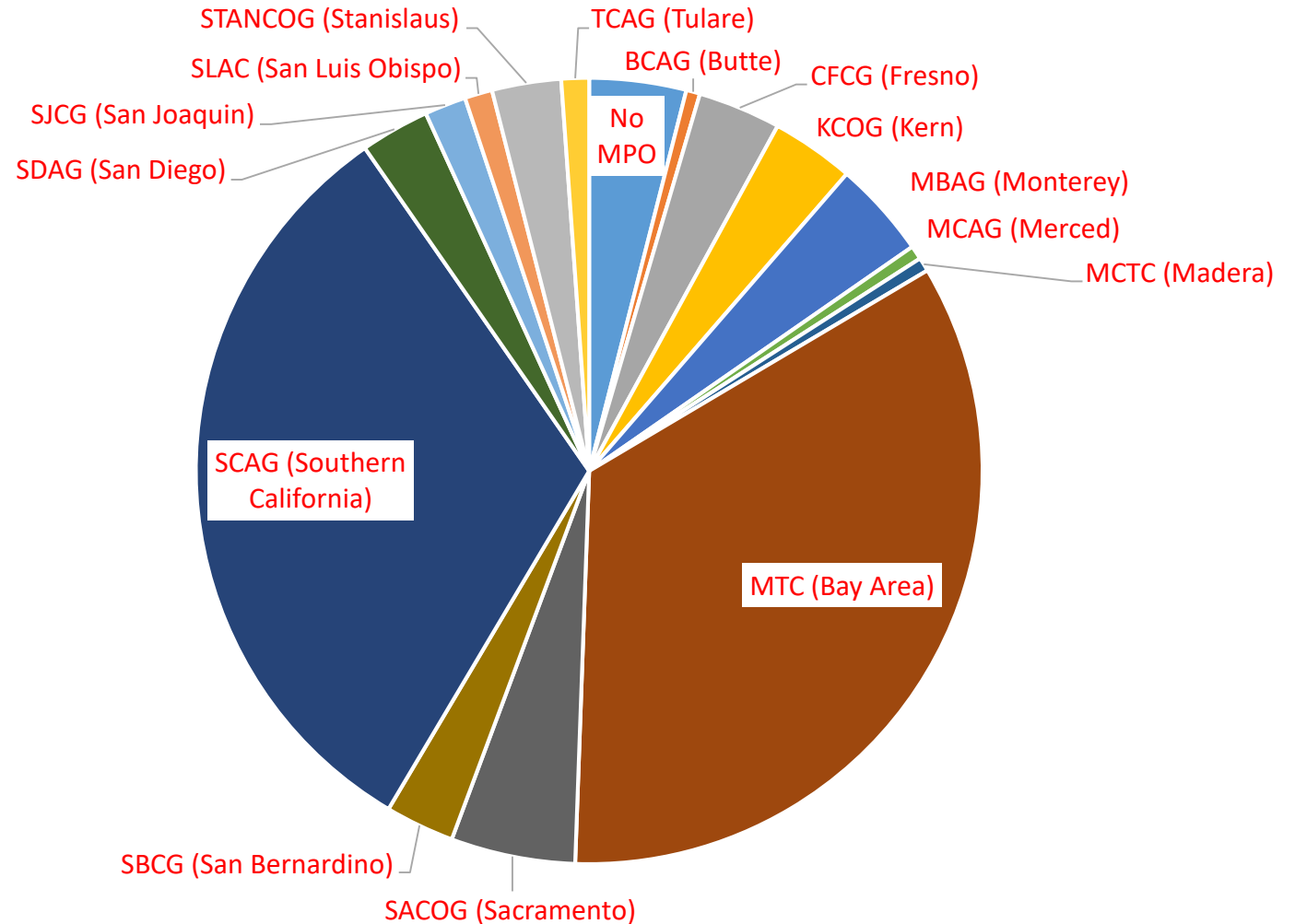
CCPIC Governance Meeting  
28 September 2018

# Summary:

## Local Roads Survey CCPIC Questions

- Responses

- 25 counties
  - 5/11 largest by area
- 155 cities
  - 1/11 largest by population



# City Needs

Needs Category	1 <sup>st</sup> Priority	2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> Priority	Overall Ranking <sup>1</sup>
PMS operation, prioritization, treatment selection <sup>2</sup>	21	16	58
Preservation, maintenance, and rehabilitation practice, including design, specifications, and construction quality	13	23	49
General pavement training and design	7	17	31
Support for implementation of improved practices	5	20	30
Other <sup>4</sup>	5	10	20
Specification help	4	11	19
Construction management	3	9	15
PMS data collection, pavement assessment	5	3	13
Sustainable pavement practices	1	7	9
Support regarding implementation of complete streets	2	4	8
Help with grant writing	2	3	7

# County Needs

Needs Category	1 <sup>st</sup> Priority	2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> Priority	Overall Ranking <sup>1</sup>
Specification help	4	3	11
Preservation, maintenance, and rehabilitation practice, including design, specifications, and construction quality	4	2	10
Construction management	1	5	7
Help with grant writing	2	2	6
Support for implementation of improved practices	2	1	5
Other <sup>4</sup>	0	5	5
PMS operation, prioritization, treatment selection <sup>2</sup>	1	2	4
PMS data collection, pavement assessment	1	1	3
Sustainable pavement practices	0	2	2
General pavement training and design	0	1	1
Support regarding implementation of complete streets <sup>3</sup>	0	0	0

# Pavement Management Questions

- Slightly more than half the agencies stated that they do maintenance prior to the appearance of extensive distress on the pavement surface as a standard practice.
  - Many starting now that have some funding
  - Many do not because of funding
- Sixty percent of agencies are primarily using PCI to select their treatment.
  - Some additional training and guidance would be useful on pavement materials, structures and damage mechanisms and treatment selection
  - Training focused on treatment selection in conceptual design phase
    - PCI does not identify structural (load related) vs surface (aging related) distress, which helps select treatment
    - This type of training has been initially discussed with MTC Street Saver staff, and piloting of life cycle cost analysis tool for this purpose

# Pavement Management Questions

- Responders are considering heavy loading when selecting treatments to some degree
  - For heavy traffic
  - Overlays followed by reconstruction if heavily cracked
  - Overlays followed by crack sealing and slurry seals if moderately cracked
  - Slurry seals if aged but uncracked; counties use chips seals, slurry seals, microsurfacing and different kinds of asphalt overlays
- Two thirds of all agencies do not routinely consider use of recycling treatments for asphalt pavements
  - FDR, CIR, CCPR, etc
- Less than a quarter of the agencies that responded have used life cycle cost analysis (LCCA) to evaluate the timing and selection of their preservation, maintenance and rehabilitation treatments

# Materials and Construction Questions

- More than half of agencies do not allow supplementary cementitious materials to replace cement in their concrete for pavement
- Approximately ten percent did not know what their specifications were regarding use of SCM
- Two thirds of the responders have typical specification language that includes a required minimum cement content in their concrete for pavement, gutters
- Guidance and training regarding modernizing concrete specifications has a high likelihood of improving both the performance and sustainability for all concrete pavement, sidewalks and other minor concrete

# Materials and Construction Questions

- Two thirds of the responders have specification language for measurement of density on compacted asphalt in the field using cores or calibrated nuclear gauges
- More than 40% of the agencies use a contracted private firm to monitor asphalt compaction in the field, with 22% using a combination of city and contracted staff, and 9% using only city staff
- According to the responses a little more than half of the responders assess penalties for poor asphalt compaction based on measured densities, and 28% do not. Only four percent provide incentives for good compaction



# Materials and Construction Questions

- A question for the future would be to estimate their average relative density, and what standard they use to calculate relative density (maximum density or laboratory maximum density)
- They may be satisfied, but unclear the level of compaction that is resulting in that satisfaction and whether or not it can be improved
- Not sure how many agencies:
  - are looking at the consultant's compaction data
  - what kinds of penalties are being assessed and how rigorously

# Materials and Construction Questions

- Nearly half of the agencies allow the use of RAP in their asphalt mixes, with most allowing a maximum of 15% RAP. Another 8% of agencies allow up to 25% RAP. Only one third of the survey responders answered this question.