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MTC Pre-qualification Distress Surveys Oakland, California

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Introduction

An evaluation was conducted for MTC to prequalify vendors for completing pavement distress surveys for PTAP contracts

Objectives of the evaluation:



- To provide MTC with recommendations for contract distress data collection services
- To check accuracy and precision in distress data collected by vendors



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Current MTC Pavement Distress Data Collection Method

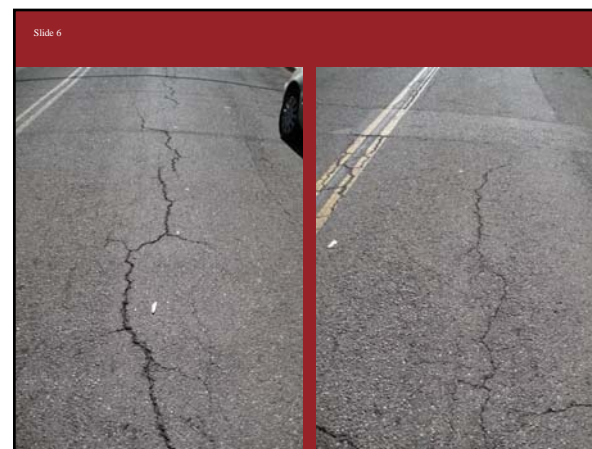


- n Standard StreetSaver distress survey is walking distress survey collecting 7 AC & 7 PCC distress types
- n Distress definitions in MTC's
 - "Pavement Condition Index Distress Identification Manual for Asphalt and Surface Treatment Pavements"
 - Pavement Condition Index Distress Identification Manual for Jointed Portland Cement Concrete Pavements

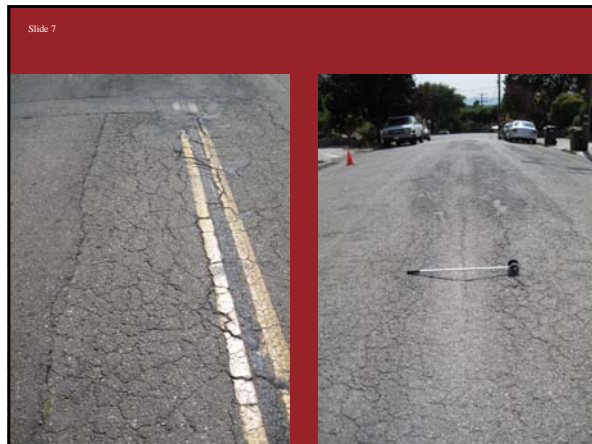


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Section Selection

- n Sites located in small area of Oakland
- n Sites checked in July to identify range of PCI values and range of distress types
 - 2 in good condition - PCI >75
 - 2 in poor condition - PCI <20
 - 14 in moderate condition
 - All distress types included
 - Range of severities included
- n 4 sites selected for reinspection for repeatability



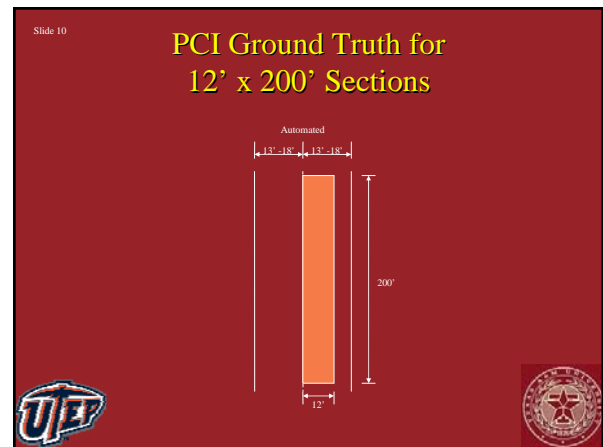
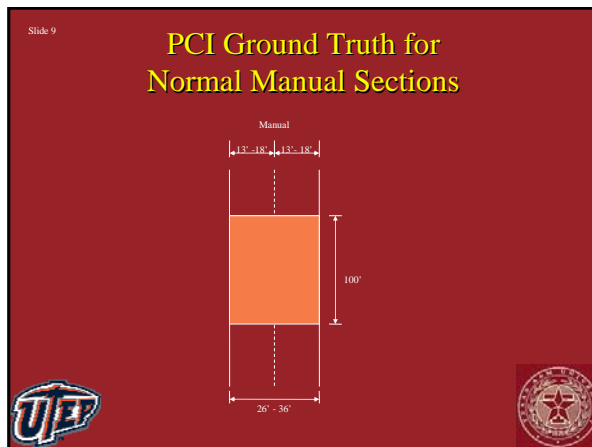




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“Ground Truth”



- n Roger Smith inspected each site; Sui Tan helped with most inspections
- n One “manual inspection unit” identified and inspected in each section
- n One “automated inspection unit” identified and inspected in each section
- n Distresses mapped
- n Sections photographed

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Approval Criteria



- n Established based on past inspections conducted in Bay Area where more than one qualified inspector inspected same sites near same time

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Approval Criteria

- n The approval based on three criteria:
 1. At least 40% (7) of sections within +/- 5 PCI points of “Ground Truth”
 2. No more than 15% (3) of sections > 15 PCI points of “Ground Truth”
 3. At least 90% of PCI values from repeat inspections within +/- 7 PCI points of the consultant’s mean value for that site

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Issues or Lessons Learned

- n Even experienced firms can have inspectors get off track with inspections
- n Firms that regularly have experienced inspectors participate PCI training appear to be closer to “Ground Truth”
- n There are still issues with some distress types and severity levels



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Questions?

