

SCOPE OF WORK

In general, the consultant's scope of work includes the following:

- Update the StreetSaver® road inventory for Nevada County.
- Perform pavement condition surveys.
- Upload survey data to StreetSaver® and calculate the pavement condition index (PCI).

The County's pavement network is composed of approximately 407.1 centerline miles of publicly maintained roads, and in-house surveys have already been conducted on 131.7 centerline miles. This project will consist of surveying the remaining portion of the network (275.4 centerline miles.)

Work Plan

Task 1. Kick-off Meeting

NCE will first meet with County staff to kick-off the project by reviewing the technical approach and any administrative matters that may be necessary. At a minimum, items to be discussed will include the following:

- Scope of work, schedule and invoicing requirements
- Communication channels and protocols
- Field work
 - NCE safety procedures for field data collection
 - Scheduling and access requirements for field work
 - Public safety concerns, requirements, and procedures
 - Quality Control Plan (QCP)
 - Access to County's StreetSaver® database
 - New roads, if any
- Other items as needed

Prior to the kick-off meeting, NCE will prepare an agenda which will be sent to County staff for review prior to the meeting. An additional progress meeting may be held with County to review the work performed and to address any questions or issues that arise as the work progresses. Monthly progress reports will be submitted as well. It is assumed that meetings will be held remotely until the pandemic allows for in-person meetings.

DELIVERABLES:

- Agenda and technical memorandum summarizing the results of meetings
- Monthly progress reports

Task 2. Condition Surveys & Quality Control

Condition Surveys

NCE will perform pavement condition surveys on approximately 275.4 centerline miles of pavement in this task. Condition surveys will be performed in accordance with MTC or ASTM D6433-20 "Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys" protocols as determined by the County. Any variation from the established protocol will be to accommodate unique local conditions, e.g., chip seals over Portland cement concrete pavements, bleeding, edge cracking, etc. and will be

discussed with the County. Localized areas that are not typical of the entire road section will be inspected and recorded as “special sample units.”

The condition data collection will be performed via walking surveys following standard StreetSaver® protocols with a 10 County of Nevada percent sampling rate. Walking surveys have historically been used in the County and are performed by in-house by County staff.

NCE will be responsible for providing all equipment necessary to perform this task. Should County personnel wish to observe NCE’s crews during the surveys, we can accommodate their staff. Individual County staff may accompany NCE’s field crews for up to 2 hours to gain hands-on, in-field training at no additional cost.

Please note that NCE’s condition surveys do not include issues relating to safety and road hazards, geometric issues, road shoulders, drainage, or needed short-term maintenance.

Quality Control

Quality control (QC) checks are critical when a large amount of data needs to be collected and processed. As part of NCE’s goal to provide a superior quality product for our clients, we incorporate a QC component into all our projects. For this project, we propose the inclusion of a QC Manager, Dr. Sharlan Montgomery Dunn. She will be responsible for:

- Calibrating all data collection activities
- Reviewing field activities, including spot checks on the field crews
- Reviewing field procedures and making changes, as needed
- Comparing the field data collected with on-site conditions
- Reviewing all data entry functions, including random spot checks
- Reviewing reports and analyses to ensure quality products
- Prior to performing the condition surveys, NCE will prepare a QC Plan (QCP) and submit to the County for approval. The QCP will include the following:
 - Description of condition survey procedures and all modifications will be documented so that future updates will be consistent
 - Accuracy required for data collection or acceptability criteria
 - Description of how data will be checked for accuracy, e.g., 5% re-inspection
 - Safety procedures

Data Entry and PCI Calculations

All information collected from the condition surveys will then be uploaded into the StreetSaver database. This task will be performed at NCE’s office in order to provide QC of all data entered into the system. NCE will then perform the pavement condition index (PCI) calculations and correct any errors found. PCI listing report will be prepared and submitted to the County.

DELIVERABLES:

- Quality control plan
- Updated StreetSaver® database with pavement distress data and calculated PCI
- Section PCI List