

AGREEMENT FOR PROFESSIONAL SERVICES

ARTICLE 1 PARTIES AND PURPOSE

Section 1.1 Parties

THIS AGREEMENT is entered into on _____, 2026, by and between the CITY OF LODI, a municipal corporation (hereinafter "CITY"), and NICHOLS CONSULTING ENGINEERS, CHTD., a Nevada corporation qualified to do business in California (hereinafter "CONTRACTOR").

Section 1.2 Purpose

CITY selected the CONTRACTOR to provide the services required in accordance with the Scope of Services attached, as Exhibit A and incorporated by this reference.

CITY wishes to enter into an agreement with CONTRACTOR for StreetSaver Database Inspection Services (hereinafter "Project") as set forth in the Scope of Services attached as Exhibit A. CONTRACTOR acknowledges that it is qualified to provide such services to CITY.

ARTICLE 2 SCOPE OF SERVICES

Section 2.1 Scope of Services

CONTRACTOR, for the benefit and at the direction of CITY, shall perform the Scope of Services as set forth in Exhibit A.

Section 2.2 Time for Commencement and Completion of Work

CONTRACTOR shall commence work pursuant to this Agreement, upon receipt of a written notice to proceed from CITY or on the date set forth in Section 2.6, whichever occurs first, and shall perform all services diligently and complete work under this Agreement based on a mutually agreed upon timeline or as otherwise designated in the Scope of Services.

CONTRACTOR shall submit to CITY such reports, diagrams, drawings and other work products as may be designated in the Scope of Services.

CONTRACTOR shall not be responsible for delays caused by the failure of CITY staff to provide required data or review documents within the appropriate time frames. The review time by CITY and any other agencies involved in the project shall not be counted against CONTRACTOR's contract performance period. Also, any delays due to

weather, vandalism, acts of God, etc., shall not be counted. CONTRACTOR shall remain in contact with reviewing agencies and make all efforts to review and return all comments.

Section 2.3 Meetings

CONTRACTOR shall attend meetings as may be set forth in the Scope of Services.

Section 2.4 Staffing

CONTRACTOR acknowledges that CITY has relied on CONTRACTOR's capabilities and on the qualifications of CONTRACTOR's principals and staff as identified in its proposal to CITY. The Scope of Services shall be performed by CONTRACTOR, unless agreed to otherwise by CITY in writing. CITY shall be notified by CONTRACTOR of any change of Project Manager and CITY is granted the right of approval of all original, additional and replacement personnel at CITY's sole discretion and shall be notified by CONTRACTOR of any changes of CONTRACTOR's project staff prior to any change.

CONTRACTOR represents it is prepared to and can perform all services within the Scope of Services (Exhibit A) and is prepared to and can perform all services specified therein. CONTRACTOR represents that it has, or will have at the time this Agreement is executed, all licenses, permits, qualifications, insurance and approvals of whatsoever nature are legally required for CONTRACTOR to practice its profession, and that CONTRACTOR shall, at its own cost and expense, keep in effect during the life of this Agreement all such licenses, permits, qualifications, insurance and approvals, and shall indemnify, defend and hold harmless CITY against any costs associated with such licenses, permits, qualifications, insurance and approvals which may be imposed against CITY under this Agreement.

Section 2.5 Subcontracts

Unless prior written approval of CITY is obtained, CONTRACTOR shall not enter into any subcontract with any other party for purposes of providing any work or services covered by this Agreement.

Section 2.6 Term

The term of this Agreement commences on April 15, 2026 and terminates upon the completion of the Scope of Services or on October 31, 2026, whichever occurs first.

ARTICLE 3
COMPENSATION

Section 3.1 Compensation

CONTRACTOR's compensation for all work under this Agreement shall conform to the provisions of the Fee Proposal, attached hereto as Exhibit B and incorporated by this reference.

CONTRACTOR shall not undertake any work beyond the scope of this Agreement unless such additional work is approved in advance and in writing by CITY.

Section 3.2 Method of Payment

CONTRACTOR shall submit invoices for completed work on a monthly basis, or as otherwise agreed, providing, without limitation, details as to amount of hours, individual performing said work, hourly rate, and indicating to what aspect of the Scope of Services said work is attributable. CONTRACTOR's compensation for all work under this Agreement shall not exceed the amount of the Fee Proposal.

Section 3.3 Costs

The Fee Proposal shall include all reimbursable costs required for the performance of the Scope of Services. Payment of additional reimbursable costs considered to be over and above those inherent in the original Scope of Services shall be approved in advance and in writing, by CITY.

Section 3.4 Auditing

CITY reserves the right to periodically audit all charges made by CONTRACTOR to CITY for services under this Agreement. Upon request, CONTRACTOR agrees to furnish CITY, or a designated representative, with necessary information and assistance needed to conduct such an audit.

CONTRACTOR agrees that CITY or its delegate will have the right to review, obtain and copy all records pertaining to performance of this Agreement. CONTRACTOR agrees to provide CITY or its delegate with any relevant information requested and shall permit CITY or its delegate access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees and inspecting and copying such books, records, accounts, and other material that may be relevant to a matter under investigation for the purpose of determining compliance with this requirement. CONTRACTOR further agrees to maintain such records for a period of three (3) years after final payment under this Agreement.

ARTICLE 4
MISCELLANEOUS PROVISIONS

Section 4.1 Nondiscrimination

In performing services under this Agreement, CONTRACTOR shall not discriminate in the employment of its employees or in the engagement of any subcontractor on the basis of race, color, religion, sex, sexual orientation, marital status, national origin, ancestry, age, or any other criteria prohibited by law.

Section 4.2 ADA Compliance

In performing services under this Agreement, CONTRACTOR shall comply with the Americans with Disabilities Act (ADA) of 1990, and all amendments thereto, as well as all applicable regulations and guidelines issued pursuant to the ADA.

Section 4.3 Indemnification and Responsibility for Damage

CONTRACTOR to the fullest extent permitted by law, shall indemnify and hold harmless CITY, its elected and appointed officials, directors, officers, employees and volunteers from and against any claims, damages, losses, and expenses (including reasonable attorney's fees and costs), arising out of performance of the services to be performed under this Agreement, provided that any such claim, damage, loss, or expense is caused by the negligent acts, errors or omissions of CONTRACTOR, any subcontractor employed directly by CONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts they may be liable, except those injuries or damages arising out of the active negligence, sole negligence, or sole willful misconduct of the City of Lodi, its elected and appointed officials, directors, officers, employees and volunteers. CITY may, at its election, conduct the defense or participate in the defense of any claim related in any way to this indemnification. If CITY chooses at its own election to conduct its own defense, participate in its own defense, or obtain independent legal counsel in defense of any claim related to this indemnification, CONTRACTOR shall pay all of the costs related thereto, including without limitation reasonable attorney fees and costs. The defense and indemnification obligations required by this Agreement are undertaken in addition to, and shall not in any way be limited by the insurance obligations set forth herein.

Section 4.4 No Personal Liability

Neither the City Council, nor any other officer or authorized assistant or agent or City employee shall be personally responsible for any liability arising under this Agreement.

Section 4.5 Responsibility of CITY

CITY shall not be held responsible for the care or protection of any material or parts of the work described in the Scope of Services prior to final acceptance by CITY, except as expressly provided herein.

Section 4.6 Insurance Requirements for CONTRACTOR

CONTRACTOR shall take out and maintain during the life of this Agreement, insurance coverage as set forth in Exhibit C attached hereto and incorporated by this reference.

Section 4.7 Successors and Assigns

CITY and CONTRACTOR each bind themselves, their partners, successors, assigns, and legal representatives to this Agreement without the written consent of the others. CONTRACTOR shall not assign or transfer any interest in this Agreement without the prior written consent of CITY. Consent to any such transfer shall be at the sole discretion of CITY.

Section 4.8 Notices

Any notice required to be given by the terms of this Agreement shall be in writing signed by an authorized representative of the sender and shall be deemed to have been given when the same is personally served or upon receipt by express or overnight delivery, postage prepaid, or three (3) days from the time of mailing if sent by first class or certified mail, postage prepaid, addressed to the respective parties as follows:

To CITY: City of Lodi
 221 West Pine Street
 P.O. Box 3006
 Lodi, CA 95241-1910
 Attn: James Selke

To CONTRACTOR: Nichols Consulting Engineers, CHTD.
 8801 Folsom Blvd., Ste 265
 Sacramento, CA 95826
 Attn: Vijay Pulijal, PE, PMP

Section 4.9 Cooperation of CITY

CITY shall cooperate fully and in a timely manner in providing relevant information it has at its disposal relevant to the Scope of Services.

Section 4.10 CONTRACTOR is Not an Employee of CITY

CONTRACTOR agrees that in undertaking the duties to be performed under this Agreement, it shall act as an independent contractor for and on behalf of CITY and not an employee of CITY. CITY shall not direct the work and means for accomplishment of

the services and work to be performed hereunder. CITY, however, retains the right to require that work performed by CONTRACTOR meet specific standards without regard to the manner and means of accomplishment thereof.

Section 4.11 Termination

CITY may terminate this Agreement, with or without cause, by giving CONTRACTOR at least ten (10) days written notice. Where phases are anticipated within the Scope of Services, at which an intermediate decision is required concerning whether to proceed further, CITY may terminate at the conclusion of any such phase. Upon termination, CONTRACTOR shall be entitled to payment as set forth in the attached Exhibit B to the extent that the work has been performed. Upon termination, CONTRACTOR shall immediately suspend all work on the Project and deliver any documents or work in progress to CITY. However, CITY shall assume no liability for costs, expenses or lost profits resulting from services not completed or for contracts entered into by CONTRACTOR with third parties in reliance upon this Agreement.

Section 4.12 Confidentiality

CONTRACTOR agrees to maintain confidentiality of all work and work products produced under this Agreement, except to the extent otherwise required by law or permitted in writing by CITY. CITY agrees to maintain confidentiality of any documents owned by CONTRACTOR and clearly marked by CONTRACTOR as "Confidential" or "Proprietary", except to the extent otherwise required by law or permitted in writing by CONTRACTOR. CONTRACTOR acknowledges that CITY is subject to the California Public Records Act.

Section 4.13 Applicable Law, Jurisdiction, Severability, and Attorney's Fees

This Agreement shall be governed by the laws of the State of California. Jurisdiction of litigation arising from this Agreement shall be venued with the San Joaquin County Superior Court. If any part of this Agreement is found to conflict with applicable laws, such part shall be inoperative, null, and void insofar as it is in conflict with said laws, but the remainder of this Agreement shall be in force and effect. In the event any dispute between the parties arises under or regarding this Agreement, the prevailing party in any litigation of the dispute shall be entitled to reasonable attorney's fees from the party who does not prevail as determined by the San Joaquin County Superior Court.

Section 4.14 City Business License Requirement

CONTRACTOR acknowledges that Lodi Municipal Code Section 3.01.020 requires CONTRACTOR to have a city business license and CONTRACTOR agrees to

secure such license and pay the appropriate fees prior to performing any work hereunder.

Section 4.15 Captions

The captions of the sections and subsections of this Agreement are for convenience only and shall not be deemed to be relevant in resolving any question or interpretation or intent hereunder.

Section 4.16 Integration and Modification

This Agreement represents the entire understanding of CITY and CONTRACTOR as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This Agreement may not be modified or altered except in writing, signed by both parties.

Section 4.17 Contract Terms Prevail

All exhibits and this Agreement are intended to be construed as a single document. Should any inconsistency occur between the specific terms of this Agreement and the attached exhibits, the terms of this Agreement shall prevail.

Section 4.18 Severability

The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

Section 4.19 Ownership of Documents

All documents, photographs, reports, analyses, audits, computer media, or other material documents or data, and working papers, whether or not in final form, which have been obtained or prepared under this Agreement, shall be deemed the property of CITY. Upon CITY's request, CONTRACTOR shall allow CITY to inspect all such documents during CONTRACTOR's regular business hours. Upon termination or completion of services under this Agreement, all information collected, work product and documents shall be delivered by CONTRACTOR to CITY within ten (10) calendar days.

CITY agrees to indemnify, defend and hold CONTRACTOR harmless from any liability resulting from CITY's use of such documents for any purpose other than the purpose for which they were intended.

Section 4.20 Authority

The undersigned hereby represent and warrant that they are authorized by the parties to execute this Agreement.

Section 4.21 Federal Transit Funding Conditions

If the box at left is checked, the Federal Transit Funding conditions attached as Exhibit D apply to this Agreement. In the event of a conflict between the terms of this Agreement or any of its other exhibits, and the Federal Transit Funding Conditions, the Federal Transit Funding Conditions will control.

Section 4.22 Counterparts and Electronic Signatures

This Agreement and other documents to be delivered pursuant to this Agreement may be executed in one or more counterparts, each of which will be deemed to be an original copy and all of which, when taken together, will be deemed to constitute one and the same agreement or document, and will be effective when counterparts have been signed by each of the parties and delivered to the other parties. Each party agrees that the electronic signatures, whether digital or encrypted, of the parties included in this Agreement are intended to authenticate this writing and to have the same force and effect as manual signatures. Delivery of a copy of this Agreement or any other document contemplated hereby, bearing an original manual or electronic signature by facsimile transmission (including a facsimile delivered via the Internet), by electronic mail in "portable document format" (".pdf") or similar format intended to preserve the original graphic and pictorial appearance of a document, or through the use of electronic signature software will have the same effect as physical delivery of the paper document bearing an original signature.

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IN WITNESS WHEREOF, CITY and CONTRACTOR have executed this Agreement as of the date first above written.

ATTEST:

CITY OF LODI, a municipal corporation

OLIVIA NASHED
City Clerk

AARON M. BUSCH
Interim City Manager

APPROVED AS TO FORM:

NICHOLS CONSULTING ENGINEERS, CHTD.,
a Nevada corporation qualified to do
business in California

By: _____
KATIE O. LUCCHESI
City Attorney 

By: _____
Name: VIJAY PULIJAL, PE, PMP
Title: Principal Engineer

Attachments:

Exhibit A/B – Scope of Services & Fee Proposal

Exhibit C – Insurance Requirements

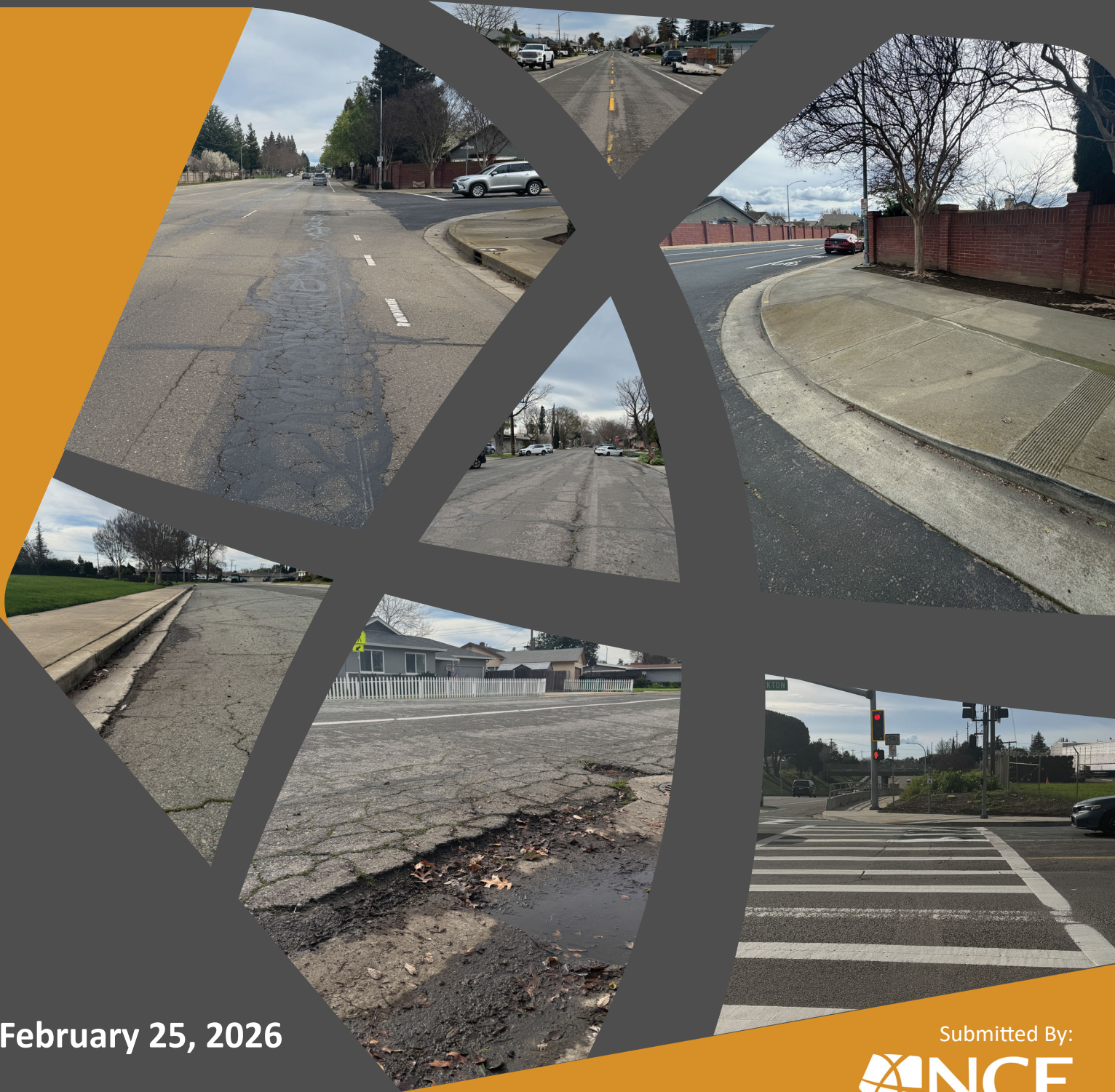
Exhibit – Federal Transit Funding Conditions (if applicable)

Funding Source: _____
(Business Unit & Account No.)

Doc ID:

CA: Rev.01.2026-LT (CA Formatted)

PROPOSAL
StreetSaver® Inspection and
Pavement Management Program Services



February 25, 2026

Submitted By:



8801 Folsom Boulevard, Suite 265
Sacramento, CA 95826
(916) 388-5655



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Cover Letter

February 25, 2026

James Selke, PE
 Assistant Engineer
 City of Lodi, Public Works Department
 221 West Pine Street
 Lodi, CA 95240

Proposal – StreetSaver[®] Inspection and Pavement Management Program Services

Dear Mr. Selke and Members of the Selection Committee:

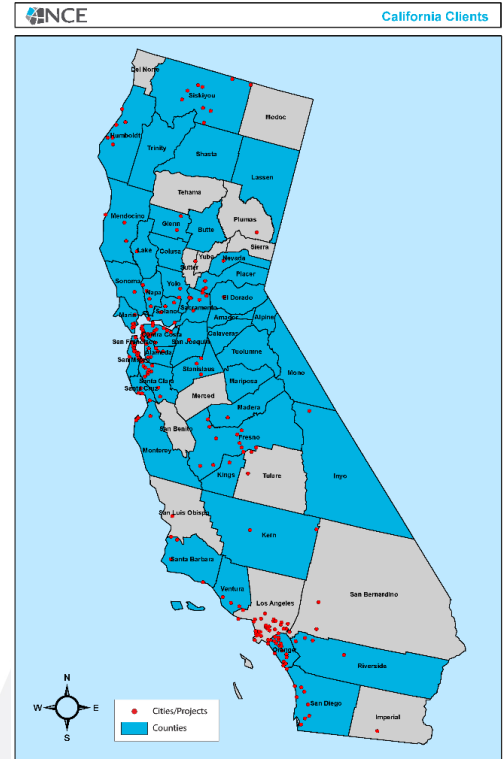
The City of Lodi maintains approximately 217.5 centerline miles of roadway, including recently added sections, and is seeking to update its StreetSaver[®] Pavement Management Program in accordance with MTC distress protocols (8 distress for flexible and 7 distress for rigid pavement, 8AC/7PCC). NCE is pleased to submit this proposal to perform the required pavement condition surveys, database updates, and budget analyses as outlined in the RFP.

The City of Lodi benefits from multiple **dedicated transportation funding sources**, including RMRA (SB 1), Gas Tax, Street Fund, and local measures, which support its ongoing street maintenance and rehabilitation programs. With these resources and a Council-identified budget for this update, the City is well positioned to use this Pavement Management Program (PMP) effort to evaluate 5-year PCI targets of 60 and 70, develop defensible funding scenarios, and support long-term pavement investment decisions. An updated PMP will also assist the City in meeting reporting requirements and strengthening future funding and grant applications.

NCE is a nationally recognized pavement specialty firm, with broad capabilities and expertise in the areas of pavement management, asset management, civil and pavement design, and training. With more than 100 person-years of combined experience with PMP updates. Our highly trained and certified technical staff are experienced in data collection and have worked together on many similar PMP projects for public agencies throughout California (see map to the right), including various agencies in Sacramento County and San Joaquin County. They have developed an excellent reputation for dedication, integrity, productivity, quality of work, and service to our clients.

NCE is a Metropolitan Transportation Commission (MTC) certified consultant, and our team has widespread experience providing distress inspections and updating the StreetSaver[®], PMP. Specifically, the NCE team offers the following to the City:

- Familiarity with Street Network and Local Experience:** NCE successfully implemented and updated the StreetSaver[®] PMP for the various agencies in Sacramento and San Joaquin Counties. (e.g., City and County of Sacramento, City of Galt, Citrus Heights, Elk Grove, Folsom, Rancho Cordova, and Stockton). We are in the process of executing the agreement for the PMP update with the City of Tracy and will start field data collection in Spring 2026. Our familiarity with local conditions, databases, and GIS will provide the City with an efficient and cost-effective update with minimal start-up time. Our key staff assigned to this project have been working on neighborhood agencies’ PMP updates in



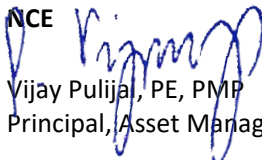
1003 W. Cutting Blvd, Suite 110
 Point Richmond, CA 94804
 (510) 215-3620

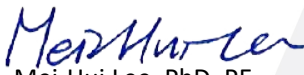
recent years. With our knowledge and direct experience with local agencies, the NCE team has the demonstrated ability to successfully deliver the PMP project on schedule and within budget.

- **MTC Trained and Certified Inspectors:** NCE’s field inspectors are certified through MTC, the only agency to administer StreetSaver® certification. All pavement condition surveys will be conducted via human (walking) inspection in compliance with MTC 8AC/7PCC distress protocols. The City can be assured of accurate, reliable, and consistent field data. We have performed pavement distress surveys on over 120,000 centerline miles of roads and hundreds of parking lots in California alone.
- **StreetSaver® Experience and Proficiency:** NCE staff have been working with the StreetSaver® program since 1987. In addition to performing PMP implementations and updates (including field surveys) for over 220 cities and counties, NCE supports MTC with StreetSaver® software development, including beta testing, system enhancements, and ongoing technical improvements.
- **Knowledge of Statewide Needs and Funding:** NCE performed a Statewide Local Streets and Roads Needs Assessment study of 540 cities and counties throughout California in 2008 and has provided biennial updates since then. We are able to access extensive information from comparable cities or neighborhood agencies on their funding sources, construction practices, as well as maintenance and rehabilitation policy and funding needs of essential components (NCE recently completed the 2025 Statewide Needs Assessment study). The information can be utilized for performance measurement, pavement strategies, long-term planning, policy advocacy, budget allocation, and potential grant applications.
- **Sustainable, Innovative Pavement and Mix Design Capabilities:** NCE is at the forefront of new pavement design methods as well as mix designs and specifications that include warm mixes, recycling, use of rubber tires, and long-life pavements. We can assist City staff in using sustainable materials and recycling where possible to meet AB32 goals.
- **Real-life Knowledge:** With over 85% of our clients being in the public sector, NCE understands local agencies' needs and the types of problems frequently encountered, such as lack of available trained personnel or funds, budgetary concerns, and other institutional issues inherent in the use of pavement management systems. NCE understands the constraints and has assisted agencies in arriving at realistic solutions.
- **Rigorous Quality Control:** NCE’s projects include a QC Manager, who reports directly to the Project Manager and provides a thorough review of documents prepared for deliverables. NCE’s technicians also undergo mandatory internal training/calibration once a year for field condition surveys, as well as for other PMP related activities.

As a Principal with NCE, I am authorized to bind the firm and attest that the information submitted with this proposal is true and correct. We acknowledge receipt of Addendum No. 1, issued on February 21, 2026. The signed receipt is included in Appendix C. NCE’s team is prepared to assist the City to meet the needs of the StreetSaver® Inspection and Pavement Management Program Services and will provide the City with prompt responsive service, high-quality deliverables, and innovative solutions to improve the infrastructure throughout the City. If you have any questions, please contact our designated project manager, Mei-Hui Lee, at (510) 520-5927 or via email at mlee@ncenet.com. We look forward to your favorable review of our proposal.

Sincerely,

NCE

Vijay Pulija, PE, PMP
Principal, Asset Management


Mei-Hui Lee, PhD, PE
Project Manager



1. Approach and Work Program

Project Approach and Understanding

The last few years have seen remarkable changes in the funding picture with the passage of the Road Maintenance and Rehabilitation Act (RMRA or SB1). The City is expected to receive approximately \$1.9 million in FY2026-27; In addition, Measure K—originally approved by San Joaquin voters in 1990 and renewed in November 2006 for an additional 30 years—is expected to generate approximately \$1.5 million in FY2026 on street maintenance. The City also passed Measure L in November 2018, which includes dedicated funding for street repairs and transportation improvements and is anticipated to generate \$5.4 million annually. When combined with the City’s existing Gas Tax, Street Fund, and General Fund revenues, these funding sources result in a substantial increase in available resources for street maintenance and rehabilitation. This enhanced funding capacity supports City’s annual crack sealing program of approximately \$750,000 and pavement resurfacing projects totaling approximately \$1.0 to \$2.0 million per year.



Public accountability will be critical so that voters can see and understand that these new revenues are being spent most cost-effectively, and that performance measures are instituted. One such measure is the network pavement condition index (PCI) which is reported periodically to elected officials and/or the public.

Today, there is a renewed focus on streets and transportation in California as a whole and the demand for more accurate data is expected to grow. But new revenues come with new accountability measures; streets that will be maintained with RMRA funds require submittals to the California Transportation Commission for approval. Due to the increasing adoption of zero-emission vehicles (ZEVs), SB1 revenue is projected to decline by approximately 3% annually over the next decade. Given this evolving funding landscape, maintaining an accurate and up-to-date pavement management database is critical. A well-defined funding mix, supported by reliable pavement condition data, enables policymakers to better prioritize projects and plan for both short-term needs and long-term transportation sustainability.

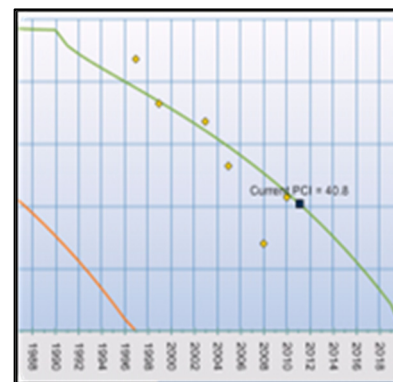
A robust PMP will provide the accountability that Lodi City residents expect; the PMP will assist in developing cost-effective, multi-year maintenance work plans with available paving funding.

Ultimately, the PMP update should provide the City with two key pieces of information:

1. A multi-year work plan, which will show the City Council and the public the most cost-effective manner of spending new revenues and which may be used to select streets for SB1, Measure M, and Measure L.
2. A long-term funding analysis to determine future needs that will help guide elected officials in making informed policy decisions.

It is vital that the pavement condition data be accurate and that it be closely calibrated with the performance prediction models in StreetSaver®. For example, the graph shown on the right is an example where variations in the field data collected may result in different predictions of the future PCI. Obviously, this is not a desirable outcome.

Therefore, we understand that City of Lodi seeks a qualified consultant to perform the 2026 PMP update for entire network, utilizing the StreetSaver® software. We are very familiar with StreetSaver® database and local pavement network, and we have successfully completed similar PMP updates with neighborhood agencies in recent years. The City can be confident that NCE will deliver results that are



accurate, reliable, and consistent, supported by proven methodologies and a strong understanding of regional pavement management practices.

The City maintained street network consists of 217.5 centerline miles, including new added approximately 19.5 miles of streets. NCE will build on our successful delivery of City’s PMP updates in this project. Our approach emphasizes:

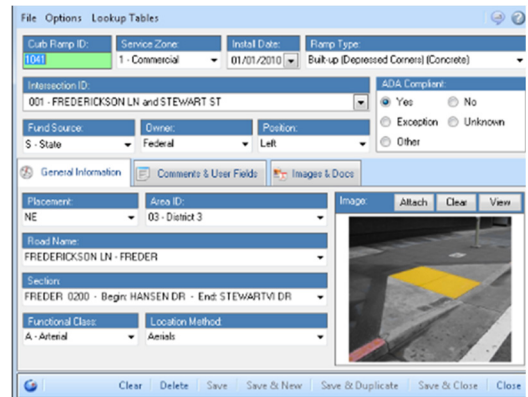
- **Collaboration** – A kick-off meeting with City staff to confirm goals, roles, and schedule, followed by regular check-ins.
- **Accurate Data Collection** – Pavement surveys performed with MTC-certified raters, supported by rigorous quality control.
- **Customized Pavement Strategies** – Updated M&R decision trees and unit costs reflecting current practices, bid tabs, and sustainability options.
- **Scenario Development** – Budget needs analyses and multiple funding scenarios tailored to each agency’s priorities and funding realities.
- **Clear Deliverables** – Reports and optional presentations that communicate technical results in ways that staff, elected officials, and the public can understand.
- **Capacity Building** – Optional training and technical support to ensure the PMP remains a useful tool beyond this update.

Finally, it is our understanding that the City desires the selected consultant to update 2026 Pavement Management Program:

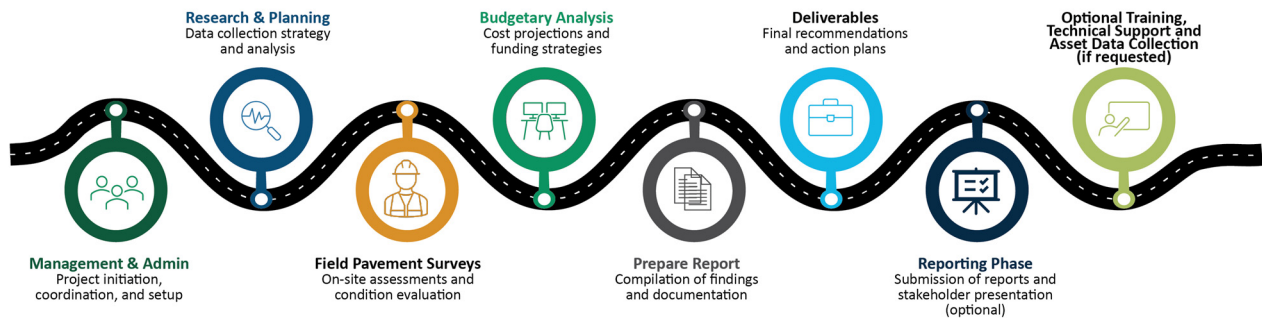
- Pavement condition survey and database update
- Budget analysis for PCI scenarios
- Final report and recommendations

Optional services, including Council presentation support, staff training, technical support, and asset data collection, are presented separately for the City’s consideration and are not included in the base scope of work.

If desired, certain right-of-way asset inventories (e.g., ADA curb ramps, signs, markings) may also be incorporated into StreetSaver® Plus and managed alongside the City’s street network.



The following diagram provides a high-level overview of NCE’s pavement management program update process and illustrates how quality control is integrated throughout each phase of the project in alignment with the RFP scope.



Quality control is integrated into every stage of the pavement management process, ensuring accuracy, consistency, and reliability in data collection, analysis, and reporting.

Scope of Work

The following tasks outline NCE’s approach to completing the City’s 2026 Pavement Management Program Update. The three tasks identified in the RFP have been expanded below to provide additional clarity and detail; however, all tasks directly correspond to and are fully aligned with the RFP-defined scope. For ease of review, the equivalent RFP task number is noted under each task heading.

All required services described in the RFP are included in the base scope and lump sum fee unless specifically identified as optional.

Task 1: Kickoff Meeting and Project Coordination *(Equivalent to RFP Task 1)*

NCE will first meet with City 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:

- Project goals
- Scope of work, project schedule, budget and invoicing requirements
- Database review and updates
 - Updated GIS map of publicly maintained streets
 - New streets to be added to the database
- Field work
 - Scheduling and access requirements for field work
 - Public safety concerns, requirements and procedures
 - Quality Control Plan (QCP)
 - Other modifications of pavement inventory
- Maintenance and rehabilitation (M&R) practices, records, costs
- Paving or maintenance budgets
- Budgeting scenarios
- Other optional tasks

Prior to the kick-off meeting, NCE will prepare a detailed agenda, which will be sent to City staff for review. Additional progress meetings will be held at appropriate milestones to review the work performed and to address any questions or issues that arise as the work progresses. Assume up to four (4) progress update meetings will be included in this task.

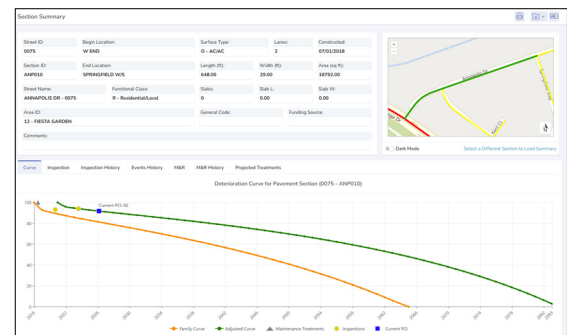
Deliverables

- Kickoff meeting agenda and summary.
- Project progress meetings.

Task 2: Database Review and Update *(Equivalent to RFP Task 1)*

As part of this task, NCE will review the existing StreetSaver® database inventory to identify any missing information, duplicated sections, miscoded characteristics or incorrect GIS linkages, and will verify that all roadway segments are accurately represented and properly classified.

NCE will next update new streets provided by the City (approximately 250 sections or 19.5 centerline miles) into the StreetSaver® database, including street name, limits, Street ID, Section ID, street geometry, functional classification, surface type, number of lanes, construction records and GIS linkages. Updated inventory will be shared in excel format with the City for review before starting pavement condition survey.



Deliverables

- Updated pavement inventory.
- Updated StreetSaver® databases.

Task 3: Pavement Condition Surveys and PCI Calculations *(Equivalent to RFP Task 1)*

Consistent with the City's written responses to proposer questions, NCE will perform pavement condition inspections using a walking survey methodology conducted by MTC-certified raters as the base scope of work. This approach ensures full compliance with MTC 8AC/7PCC distress protocols and maintains consistency with the City's prior update in 2022.

In addition, NCE is providing information regarding automated data collection as an optional alternative, should the City wish to consider it. Automated surveys are not included in the base scope or lump sum fee and would only be performed at the City's request and authorization.

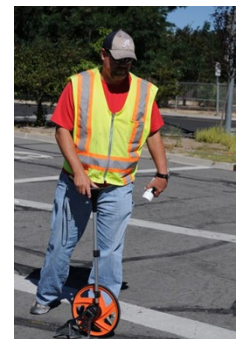
NCE will perform pavement condition surveys on approximately 217.5 centerline miles of City-maintained streets, including approximately 19.5 miles of newly added sections incorporated under Task 2. The network includes approximately 47.0 miles of arterials, 21.1 miles of collectors, and 129.9 miles of local streets. All distress data will be collected using a walking survey methodology in accordance with MTC 8AC/7PCC distress protocols.

The “fuel” for any pavement management engine is the surface condition data. Pavement distress provides that important set of data in determining the costs to maintain the pavement network.

There are three types of distress surveys that are utilized for pavement management systems, and each has its advantages and disadvantages. Briefly, these are:



Walking Surveys – These are performed with one-person crews (for high volume streets like expressways or major arterials, two-person crews are needed for safety). The major advantage of this survey method is that it is highly accurate, since cracks and all other pavement distresses are measured and recorded. Walking surveys can take more time, but it is easily taught to City staff, which allows future updates to be performed in-house with no special equipment. **The same survey methodology was used in the City’s previous 2022 pavement condition update, which was performed by City staff.** For this project, we have proposed conducting a walking survey at the City’s request to maintain consistency, which is also the recommendation of Metropolitan Transportation Commission (MTC) for pavement condition updates. Approximately one sample unit will be inspected for each 1,000 lineal feet of roadway.



Windshield Surveys – These are performed with two-person crews in a vehicle traveling at low speeds (under 15 mph). The major advantage is that 100% of the streetway is surveyed, and it can be accomplished very quickly, safely and inexpensively. However, the disadvantage is that the data collected tends to be of variable quality. In particular, low-severity distresses are typically not visible from a moving vehicle. This results in a higher-than-expected condition rating of the streets, and consequently, a lower estimate of the backlog and pavement M&R needs.

Automated Surveys – These are typically performed with a customized vehicle that is equipped with a digital camera and laser bars. The major advantage is that they are equipped to perform inspections very quickly and safely. It should be noted that an accurate street centerline shapefile will be required. In this project, NCE has teamed with märker geospatial, LLC to perform automated surveys on City’s maintained street network as an option. Our team has worked together on many projects including various agencies in Sacramento area, Placer County and Fresno County. Our team is well positioned to collect, measure, and map all pavement condition data using a sophisticated automated approach. A significant advantage is that streetway imagery and additional assets can be collected as part of the pavement surveys, such as signs, markings, guardrails, signals, etc. The cost savings are considerable, as these are all collected at the same time as the pavement distress data, reducing both mobilization costs and data collection time. In addition, the digital images can be stored and used for later review with additional fee if desired.



Automated surveys will be conducted to collect continuous distress data along the traveled lanes of each roadway segment in accordance with MTC 8AC/7PCC distress protocols. Data collection will focus on primary wheel paths and travel lanes, typically covering a width of approximately 14 to 16 feet. For multi-lane roadways, multiple passes may be performed as needed to ensure appropriate lane coverage consistent with industry standards. The upgraded LiDAR Scanners can capture high-resolution 3D pavement profiles and automatically determine surface damage areas and the

type, severity, and quantity of distress to evaluate pavement conditions. The data collection system will be operated by the MTC-certified technicians ensuring consistency and reliability in the collected data.

Any variation from the established procedures will be to accommodate unique local conditions, e.g., gap-graded texture of rubberized asphalt concrete overlays, bleeding, edge cracking, etc. These conditions typically exhibit unique distresses that may not be reflected in any distress manual, so special exceptions will need to be made.

Our team will be responsible for providing all equipment necessary for the performance of this task. Should City personnel wish to observe our field crews and testing vehicle during the inspection surveys, we will be more than happy to accommodate this. Individual City staff may also accompany NCE's field crew for up to ½ day to gain hands-on training at no additional cost to the City. We have found that this is the most effective training method for agency staff, as they become part of the data collection crew, rather than just observers.

Please note that this scope of work and condition surveys do not address issues including, but not limited to traffic, safety and street hazards, geometric issues, street shoulders, sidewalks, curb and gutters, drainage issues or short-term maintenance that should be performed.

Quality Control

Quality Control/Quality Assurance (QC/QA) checks are critical on a project such as this when such 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/QA component into all of our projects. For this project, we have proposed the inclusion of a QC Manager, Mr. Shahram Misaghi, who will have the following project responsibilities:

- Calibration of all data collection activities
- Review of 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
- Review of all data entry functions, including random spot checks
- Review of reports generated, and analyses performed to ensure a quality product

For walking or automated surveys, quality management practices for pavement management suggest that a one-time inspection of the final data is typically inadequate and involves a high risk of failure. We recognize the importance of effectively implementing and maintaining quality control and assurance practices for pavement distress data. Our approach will integrate quality management and control procedures throughout the entire data collection and delivery process.

NCE will implement a robust, multi-step QA/QC process for condition survey, including:

Multiple Data Verification Methods

Comparison with historical Maintenance and Rehabilitation (M&R) Data: Distress data will be cross-checked against recent maintenance and rehabilitation records.

- Historical PCI Comparison: Since PCI typically drops by 3–5 points per year, sections outside this range will be flagged for review.
- Re-inspection (walking survey only): A minimum of 5% of the sections will be re-inspected by an inspector that was not involved in field condition survey for QC purposes.
- Desktop Review by Certified Inspectors (automated survey only): Randomly selected sections will be reviewed by certified pavement inspectors to verify accuracy.
- Approximately 24 sections representative of various geographical locations, functional classes and different PCI ranges will be inspected 100% using walking survey by our certified inspector, which will be used to calibrate the automated data if necessary (automated survey only).

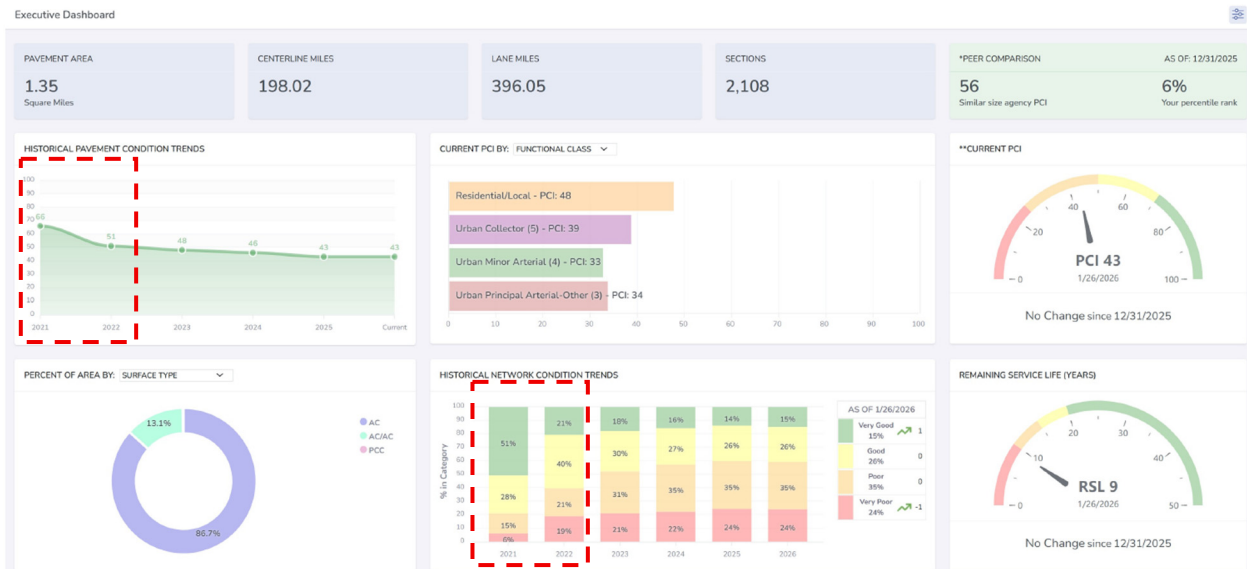
Systematic Quality Checks

NCE will review field procedures, compare field data with on-site conditions, and conduct random spot checks of data entry.

Technical Validation

All processed data will undergo final technical validation before being integrated into the StreetSaver® database. This will include checking data completeness, format consistency, and logical validation of condition values. Walking survey will be conducted by certified technicians, as well as operations of automated survey vehicle, ensuring reliability and consistency.

A comparison of the 2021 and 2022 network condition results in City’s StreetSaver® database indicates significant changes in overall pavement performance. The percentage of streets in “Good” condition decreased from 51% to 21% in 2022, while the “Failed or Very Poor” category increased from 6% to 19%. Correspondingly, the overall network PCI dropped from 66 in 2021 to 51 in 2022. Given these substantial changes within a one-year period, additional QC reviews will be incorporated into this project to ensure the accuracy, consistency, and reliability of the updated condition data. It is assumed that approximately 10% of street sections will be re-inspected by our certified inspector using walking survey approach.



In addition, NCE will prepare and implement a draft Quality Control (QC) Plan that will include the following components:

- Description of condition survey procedures and control section setup for automated survey (sampling, distress types, severities). All procedures, changes or modifications will be well documented in the QC Plan so that future updates will be consistent.
- Accuracy required for data collection or acceptability criteria. Typical examples include accurate identification of distress types 95% of the time or 90% of re-inspected sections must be within ±10 PCI points.
- Description of how data will be checked for accuracy, e.g., 5-10% re-inspections.
- Comparison of past and current PCI ratings, e.g., if the difference in PCI is more than 2 to 3 points per year, then NCE will research the cause, which may be unrecorded maintenance, premature pavement failures, incorrect survey data, etc.
- Safety procedures.

A draft QC Plan will be submitted to the City for review before field inspection.

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 Quality Control 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 City.

Deliverables

- QC Plan.
- PCI listing report.
- Updated StreetSaver® database with pavement distress data.
- Pavement Condition Index (PCI) Report.

Task 4: Update Maintenance and Rehabilitation History and Decision Tree *(Equivalent to RFP Task 2)*

In this task, NCE will first review maintenance and rehabilitation (M&R) strategies with City staff. This will include the recommendation and selection of appropriate treatments and the determination of treatment unit costs. This will also be an appropriate time to review the use of new/sustainable treatments or materials, such as PCC bonded overlays, rubberized asphalt, rubberized cape seals, microsurfacing, rejuvenators, cold-in-place recycling (CIR), full depth reclamation (FDR), warm mix asphalt, etc.

Development of the M&R decision tree is a critical step in any pavement management update as it has a direct and significant impact on the final work plan that is developed, as well as the budgeting consequences. NCE's experience in pavement engineering and design, as well as local conditions, allows our staff to be able to provide the City with solutions that are innovative, sustainable, practical, and workable.

Paving construction costs were significantly elevated between 2020 and 2022 and have only slightly declined since then. Given this trend, NCE strongly recommends that decision tree update be completed prior to conducting any budget analysis.

In this task, NCE will review any recent bid tabs, together with those from neighboring agencies, as appropriate, to update unit costs in the decision tree. **We have recently completed similar PMP updates for the agencies in Fresno City and Sacramento City areas (Galt, Elk Grove, Rancho Cordova, Sacramento City, etc.) and will be able to use these bid tabs of construction costs for comparison if needed.** Construction cost data collected from other agencies through the 2025 Statewide survey will also be provided for reference.

In addition, all historical M&R records from 2022 to 2026 will be entered into the StreetSaver® database. Populating the database with recent M&R historical data is extremely useful for determining future treatments and predicting performance of the various pavement sections. M&R activities include overlay, reconstruction, and any surface seals or localized repairs. All M&R historical records must include the street names, Street ID and Section IDs, limits of work, date and type of treatments, and cost of treatments (optional).

Deliverables

- Updated StreetSaver® database with historical M&R records.
- M&R history report.
- M&R strategies and costs in the decision tree.

Task 5: Budget Analysis and Final Report *(Equivalent to RFP Task 2 and Task 3)*

NCE will next perform a **Budget Needs** analysis using an analysis period to be determined by the City (can be as long as 30 years). The Needs Analysis identifies street sections that need treatment and applies the M&R decision trees to each section. The costs are then summed for the entire period. This forms the basis for performing Budget Scenario evaluations, which optimize the street sections for repair under constrained budgets.



In simple terms, the Budget Needs analysis answers the questions:

“If I have unlimited funding for street maintenance and repair, which streets should I fix? When should I fix them? What treatments should I apply? How much will it cost?”

The **Budget Scenarios** evaluation uses a weighted effectiveness rating to prioritize sections for repair under constrained, realistic, budgetary assumptions. The effectiveness rating is defined as the area under a pavement performance curve. The effectiveness rating is weighted to place a higher priority on certain streets, such as arterials and collectors.

Simply put, this module answers the question:
“If I only have limited funds for street maintenance and repair, which streets have the highest priority for repairs, when should I perform the repairs, and how much will it cost?”

Multiple funding scenarios may be performed to answer “what-if” questions (the real “meat” of any PMP). NCE will perform up to four (4) budget scenario runs based on the discussion with City staff. Typical scenarios include:

- Impacts of existing funding levels including SB1 and local Measure L/Mfunding
- Funding required to maintain existing PCI
- Funding to improve the PCI to a state of good repair or City’s target condition
- Impacts to model changes in funding, e.g. , if increases in funding, e.g., sales tax or bond measures

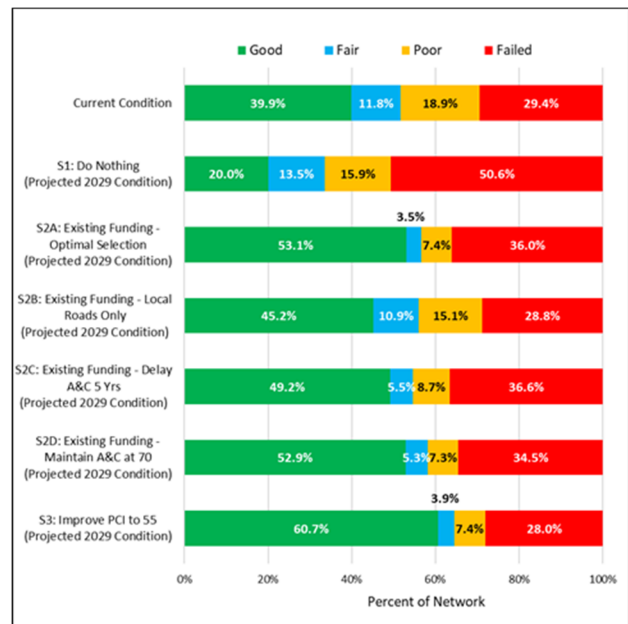
StreetSaver® has powerful prioritization tools that analyses the benefits and costs for each street segment and treatment so that a prioritized list of candidate projects are generated for inclusion in a multi-year work plan. It also has the ability to accommodate projects that are “fixed” e.g. utility projects or projects with committed funding.

A sample graph from similar budgetary analyses is shown directly on the right.

After the analysis is completed, NCE will prepare a draft report that summarizes the overall condition of the pavement network, the maintenance & rehabilitation strategies used, the results of budgetary analyses, different budget scenarios and selected street sections for maintenance and rehabilitation for City to review.

The report will contain, at a minimum, the following information:

- Executive Summary.
- Study Objectives.
- Description of methodology.
- Inventory of all roadways.
- Current pavement conditions for all street classes (arterials, collectors and local streets).
- Projected PCI under existing funding levels over the next five to ten years for all street classes.
- Projected annual repair/rehabilitation programs for street maintenance for a multi-year period.
- Multi-year plan for street maintenance, resurfacing, rehabilitation and reconstruction.
- Impact of deferred maintenance (unfunded backlog) on the overall network condition.
- Recommended funding scenario.
- Recommended pavement strategies.
- GIS maps to show impacts of scenarios.



NCE will deliver the draft report to the City for review in electronic format. Upon receipt of the City’s comments on the draft report, a final report will be completed and submitted to the City.

Deliverables

- Preliminary budgetary analysis results.
- Draft and final report.
- Updated StreetSaver® databases.

Task 6: Council Presentation *(Optional – Not included in base RFP scope)*

In this task, NCE will prepare a presentation to City staff for internal discussion for City Council meeting, summarizing pavement network condition, pavement strategies, budgetary analysis, and planning recommendations.

We believe that part of NCE’s value to the City is the information that we can bring and share from other cities or counties, and the results of tight budgetary constraints. We can also share the perspective of our work in the California Statewide Needs Assessment study, which included an assessment of all 540 cities and counties (NCE was recently completed the update of 2025 Statewide Needs Assessment study).

A slide titled "What Does the City Own/Maintain?". It contains a table with three columns: "Pavement Class", "Centerline Miles", and "% of the Entire Network (by Pavement Class)".

Pavement Class	Centerline Miles	% of the Entire Network (by Pavement Class)
Asphalt	88.2	82.7
Concrete	18.8	17.4
Gravel	0.0	0.0
Total	107.0	100

Below the table, it states "Asset value = \$444.5 million".

This task includes one virtual meeting with City staff prior to the presentation to discuss key elements such as the goals and objectives of the presentation, the level of knowledge and backgrounds of the audience, the number of stakeholders involved and other potential issues. NCE will prepare the draft presentation for City to review. Upon receipt of the City’s comments on the presentation, a final presentation will be completed and submitted to the City for Council meeting to ensure alignment with expectations and provide sufficient time for review. We anticipate attending an in-person Council meeting to present the study findings, review the key results and recommendations, and respond to any questions or comments from the Council, as needed.

Deliverables

- Draft and final PowerPoint presentation.
- In-person Council presentation.

Task 7: Training and Technical Support *(Optional – Not included in base RFP scope)*

As an optional task, NCE will prepare and present a one-day virtual training class (6-hour) with City staff for StreetSaver® software. The class will cover the following items:



- Creating or editing street sections
- Entering pavement distress data
- Performing PCI Calculations
- Entering maintenance and rehabilitation history
- Revising the M&R decision tree
 - Determining appropriate unit costs
- Determining budget needs
 - Creating budget scenarios
 - Identifying treatment strategies
 - Project selection tools
 - Target-driven analysis
- Generating reports and GIS maps

All training materials will be provided by NCE. It is assumed that the training will be conducted virtually and will include up to 2 participants from the City. It is also assumed that computers and internet access will be provided by the City.

NCE has prepared and trained over 100 agencies in California on StreetSaver®. This includes developing all the training materials, ensuring interaction in the training as well as conducting the training. At the end of the training, City staff will be able to perform additional funding scenarios as desired and generate new or revised multi-year work plans.

Additionally, NCE will also allocate up to 40 hours of technical support in this task. Typically, most technical support is related to providing one-on-one assistance, performing budget scenarios, updating M&R records, providing customized reports, providing pavement treatment recommendations, GIS maps, etc.

Deliverables

- Training manuals and PowerPoint presentations.
- Up to 40 hours technical supports.

Task 8: Asset Data Collection *(Optional – Not included in base RFP scope)*

As previously mentioned, LiDAR sensor and street level 3D 360 imagery system can collect other pavement asset inventory/condition when performing pavement distress inspections. City staff can easily review and manage any roadway/roadside information collected in the field using mobile mapping tools. The users have the ability to visualize, measure, edit, and validate infrastructure and roadway/roadside assets. Items include collection and condition assessments for pavements, utilities, properties, markings,



traffic signs and signals, ADA curb ramps, drainage and bridge structures, etc. all with a high level of accuracy. Note that this optional task will be only available with automated survey performed in Task 3.

City engineers, planners, and GIS technical staff can easily locate and assess important infrastructure in the office to avoid field data collection along busy streets. All collected information can be exported to shapefile format and merged with the City's existing GIS system. Available street right of way asset data collections include:

- Sign inventory/condition (good/fair/poor; FHWA MUTCD retroreflectivity)
- Sidewalk inventory/condition (good/fair/poor; trip hazards)
- Curb inventory/condition (good/fair/poor)
- ADA ramp inventory/condition (compliance)
- Pavement marking or curb marking inventory/condition (good/fair/poor)
- Cross gutter inventory/condition (good/fair/poor)
- Tree inventory (size, types, pictures located along public street right of way)
- Traffic signals/control cabinets inventory
- Streetlights inventory
- Speed bump inventory
- Storm drain inventory
- Guardrail and barricade inventory

Deliverables

- GIS shapefile with asset inventory/condition/photos.
- Summary report for each asset item.



2. Schedule

Per the City’s schedule outlined in the RFP, consultant selection and contract award are anticipated to be completed by March 18, 2026, with the kickoff meeting to be held during the week of March 23, 2026. Field data collection and quality control (QC) activities will be completed within approximately two months. A draft report will be prepared for the City’s review in June 2026. The preliminary project schedule is provided below, and the entire update is expected to be completed within four months, assuming no weather delays affecting field work.

All services will be completed within four (4) months of contract execution, consistent with the RFP requirements.

Tasks	March			April				May				June				July				
	3/16	3/23	3/30	4/6	4/13	4/20	4/27	5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29	7/6	7/13	7/20	7/27
1. Kickoff Meeting and Project Coordination		X		X				X				X				X				
2. Database Review and Update		X	X																	
3. Pavement Condition Surveys and PCI Calculations				X	X	X	X	X	X	X	X	X								
4. Update M&R History & Decision Tree											X	X	X							
5. Budgetary Analysis & Final Report																				
<i>Draft Report</i>														X	X					
<i>City to Review</i>																	X	X		
<i>Final Report</i>																			X	
6. Council Presentation																				
7. Technical Supports and Training																				
8. Asset Data Collection																				

Assumptions

- "X" indicates meetings
- Assume contract award on March 18, 2026 and kickoff meeting on week March 23, 2026
- Assume no weather delays on walking survey

3. Cost

NCE will provide the defined base scope of work (RFP Tasks 1–3) on a lump sum basis for a fee of **\$150,500** for the walking survey option. This fee includes all required services described in the RFP and outlined in this proposal. Optional services, including Council presentation, training, technical support, and asset data collection, are not included in this amount and are provided separately.

In accordance with the RFP, pricing is provided for both walking survey and automated data collection options so the City may evaluate and select the preferred approach based on cost, schedule, and data objectives. If the automated survey option is selected, the total lump sum fee would be as shown in the detailed cost breakdown enclosed.

A detailed cost breakdown by task and labor category is provided below. Total compensation will not exceed the selected lump sum amount without prior written authorization from the City.

Task Description	Hourly Breakdown by Personnel					Marker/ MTC	Total Costs
	Project Manager	Principal/QC	Staff Engineer	Technician	Clerical		
1. Kickoff Meeting and Project Coordination	8		8		6		\$ 5,500
2. Database Review and Update	2	2	12	24			\$ 7,700
3. Pavement Condition Surveys and PCI Calculations							
<i>Walking Survey</i>	4	8	12	656			\$ 120,000
<i>Automated Survey (optional)</i>	4	8	96	112		\$ 32,591	\$ 78,000
4. Update M&R History & Decision Tree	2	4	16				\$ 5,300
5. Budgetary Analysis & Final Report	4	2	48		4		\$ 12,000
Total (without Optional Task) - Walking Survey	20	16	96	680	10		\$ 150,500
Total (without Optional Task) - Automated Survey	20	16	180	136	10	\$ 32,591	\$ 108,500
6. Council Presentation	2	12	6				\$ 6,500
7. Technical Supports and Training	8		40			\$ 690	\$ 11,000
8. Asset Data Collection							TBD


Assumptions & Notes

- The tasks in this proposal expand the three RFP tasks for clarity. Tasks 1–3 herein correspond to RFP Task 1; Task 4 corresponds to RFP Task 2; and Task 5 corresponds to RFP Task 3. Tasks 6–8 are optional and not included in the base RFP scope.
- Assume City has active StreetSaver® database and updated GIS shapefile.
- Task 2 includes adding new sections and update GIS linkages in the database (approx. 19.5 centerline miles or 250 sections of new streets).
- Task 3 assumes to survey all City maintained streets and new added streets (approx. 217.5 centerline miles of streets)
- Tasks 1, 4, and 6 include virtual meetings.
- Task 6 includes one in-person Council Presentation.
- Task 7 includes one 6-hour StreetSaver® Training and up to 40 hours technical supports.



4. Qualifications

Firm Profile

 NCE is a client-focused professional consulting firm integrating the disciplines of engineering, science, and planning to address the infrastructure and resource challenges facing our communities today and in the future. Unique from other civil engineering firms, we have specialized in pavement technology, including pavement management, design, and research for more than three decades.

Our firm has been in business for more than 35 years and during this time, we have performed pavement condition surveys ranging from state highways in 12 states to local street networks in over 220 cities and counties in California (including various agencies in San Joaquin County and Sacramento County areas). We have surveyed over 120,000 miles of pavements, including alleys, trails, and parking lots. Our field data collection ranges from walking surveys as per the American Society for Testing and Material (ASTM) or StreetSaver® protocols to using specialized automated equipment to collect data such as pavement distresses, roughness, structural strength (deflection testing) to asset data (signs, signals, curb ramps, marking, sidewalks, etc.). We have perfected the automated approach to ensure the results are consistent and reproducible. Our relevant services include pavement management, asset management, pavement evaluation, testing and design, civil engineering, and the research and design of sustainable and innovative pavement technologies.

NCE was established in 1990, and we have since grown to over 140 employees working across seven offices in Sacramento, Richmond, Oakland, and Anaheim, California, Lake Tahoe and Reno, Nevada, in addition to Scottsdale, Arizona.

Firm Capabilities

NCE's pavement/civil engineers and technicians have extensive experience in collecting pavement distress and transportation asset data, analysis, and design as well as developing plans, specifications, construction cost estimates for infrastructure projects. NCE staff have worked with the StreetSaver® program since 1987. In addition to performing PMP implementations and updates (including field surveys) for cities and counties, NCE has conducted training workshops and beta testing for over 20 years.

The City can count on our team to provide superior, responsive service on this project. Agencies repeatedly choose to work with NCE staff because of our collaborative style, our commitment to making sure each project is a success, and the confidence they have in our ability to complete the project to their satisfaction. It is the fundamental goal of NCE to produce high quality work products while maintaining a reputation for timely service. NCE's team offers extensive experience and expertise in a wide range of services, including but not limited to those listed below.

NCE's staff hold a variety of professional licenses, specialties, and training's including:

- MTC StreetSaver® Rater Certification
- Certified Geographic Information Systems Professional (GISP)
- Professional Civil Engineer (CA)
- Geotechnical Engineer (CA)
- Professional Landscape Architect (CA)
- Certified Professional Erosion & Sediment Control
- Certified Professional in Stormwater Quality
- Certified QSD/QSP
- Professional Geologist
- Certified Engineering Geologist
- Registered Professional Archaeologist

- **Asset/Pavement Management**
- Pavement Testing, Analysis, and Design
- Civil Engineering Design
- **GIS and Database Management**
- Pavement Rehabilitation and Sustainability
- Deflection Testing and Coring
- Geotechnical Engineering
- Bike and Pedestrian Path Design
- Complete Streets and ADA Retrofit Design
- Landscape Architecture and Green Infrastructure
- Environmental Studies and Documents
- Regulatory Compliance and Permitting
- Stormwater and Water Resource Management
- Watershed Planning and Wetland Delineation
- Sustainable Design/Low Impact Development
- Construction Documents (PS&E)
- Construction Management/Inspection
- Utility Relocation Design
- Hydrology and Hydraulic Analysis
- Stakeholder Facilitation/Public Outreach.

Pavement and Asset Management Expertise

NCE has extensive experience evaluating and implementing pavement management systems for numerous public agencies throughout California and the west coast. We are a nationally recognized pavement specialty firm, with broad capabilities and expertise in the areas of pavement management, civil engineering, and pavement design, evaluation, and analysis. We provide pavement management services and are proficient with most software currently in use, including StreetSaver®, PAVER™, and Cartegraph, which account for 76% of all California agencies. We have successfully implemented PMP for numerous cities and can assist the city to plan a multi-year capital improvement program more effectively. We are active in over 10 pavement-related (including pavement and asset management) committees at the Transportation Research Board. NCE’s prior project experience with hundreds of other cities on PMP and pavement design allows us to deliver accurate, reliable, consistent pavement data that may then be used by the City to develop pavement strategies and make future funding decisions.

NCE understands that the City has been utilizing MTC’s StreetSaver® program to develop pavement inventory, update pavement condition and select street sections for maintenance and rehabilitation for years; we are an **MTC certified firm and have a solid familiarity and working knowledge of StreetSaver®**; our staff has worked with StreetSaver® extensively for over 30 years. We have also established a positive and collaborative relationship with StreetSaver® management and technical staff which serves as a benefit to our clients. NCE offers the city a wealth of knowledge and skills with PMPs and utilizing the data to apply and recommend new technologies for design and rehabilitation. As an indicator of our experience and the quality of our work, NCE received MTC’s award for **“Best Pavement Management Consultant.”**

NCE thoroughly understands the capabilities of pavement management programs such as StreetSaver®; our staff has worked with StreetSaver® for over 30 years and are certified in field data collection protocols.

With our vast experience delivering similar PMP projects throughout California, we are very familiar with all aspects of StreetSaver®, including: pavement data collection; verifying pavement inventories; rigorous QC/QA procedures; developing innovative maintenance strategies; funding (or “what-if”) analyses; development of multi-year workplans; GIS links to PMP and development of user interfaces; training (both field and computer operations); providing technical support; and presentations to elected officials, advisory councils and agency staff.

The NCE team proposed to do the work is comprised of licensed engineers and MTC certified inspectors who have fulfilled the following roles for pavement management projects that are identical or similar to the scope or work described in the RFP.

NCE Staff	Project Role	MTC Certification / Role
Vijay Pulijal, PE, PMP	Principal-in-Charge	MTC Project Manager, Lead Instructor
Mei-Hui Lee, PhD, PE	Project Manager	MTC QA/QC Manager, Lead Instructor, MTC Certified
Shahram Misaghi, MS, PE	QA/QC Manager	MTC Project Manager, MTC Certified
Saint Yoojaroen	Staff Engineer	MTC Certified, Pavement Engineer
Randy Plett	Senior Field Technician	MTC Certified, Field Technician
Jake Rajnowski	Senior Field Technician	MTC Certified, Field Technician
Ken Huisman*	Field Supervisor/ Automated Surveys	MTC Certified/ märker geospatial*
John Zimmer*	Field Data Collection Coordinator	MTC Certified/ märker geospatial*

Pavement Design & Analysis

Pavement designs, plans, specifications, and estimates (PS&E) for preventive maintenance, rehabilitation, and reconstruction are NCE’s specialty and we offer extensive experience and expertise with pavement treatment alternatives. Our civil and geotechnical engineers not only understand the types of pavements and treatment options, but also understand the significance and cost implications of proper roadway support on competent subgrade soils to limit future settlement and cracking. Pavement design begins with an accurate assessment of the existing structural adequacy. Unlike traditional civil firms who rely on core samples, we employ our pavement survey expertise in conjunction with

NCE’s expertise in pavement treatment alternatives includes cost saving, cutting-edge, and green/sustainable paving technologies, such as warm mix asphalt and in-place recycling technologies.

deflection data, continuous thickness data using ground penetrating radar (GPR), and materials testing to assess the engineering properties of the existing roadway more accurately.

Sustainable and Innovative Pavement Technologies

FHWA Sustainable Pavements Program
Towards Sustainable Pavement Systems: Webinar Series

The FHWA launched the Sustainable Pavements Program in 2010 to advance the knowledge and practice of sustainability related to pavements. The overall objective of the program is to increase the awareness, visibility, and the body of knowledge of sustainability considerations in all phases of the pavement life cycle. Under that program, the FHWA has completed the technical resource publication [Towards Sustainable Pavement Systems, A Reference Document](#) (FHWA-HIF-15-005), and is now delivering a series of five webinars to help implement and promote key elements of pavement sustainability.

Timeframe	Length	POH	Fee
April to September 2015	2 hours	Yes	Free!

Target Audience: State Department of Transportation (DOT) practitioners and other key stakeholders in the pavement community.

- Design Engineers
- Materials Engineers
- Maintenance and Construction Engineers
- Academics
- Local Roadway Agencies
- Suppliers and Producers
- Contractors and Consultants
- Public Interest Groups

Webinar Registration Link (Click to Register)

Webinar #1 | Webinar #2 | Webinar #3 | Webinar #4 | Webinar #5

There are numerous pavement rehabilitation techniques available today with new binders, new additives, and polymers all of which may be applied in various layers to preserve pavement life. NCE constantly seeks to identify the most cost-efficient alternatives for cities and counties, such as CIR, cement stabilized pulverized base (CSPB), asphalt rubber hot mix asphalt (ARHM), warm mix asphalt, and terminal blend asphalt rubber binders. Many of the technologies NCE can implement will meet potential City sustainability or environmental goals and policies. Some examples are described in the following paragraphs.

Sustainable Pavements – NCE is involved with projects at both the national and local levels on issues, such as sustainable pavements, and premature failures. For example, Dr. Tom Van Dam has served as NCE’s Principal Investigator for the FHWA on Sustainable Pavement Systems. He has developed technical guidelines and a webinar series and has been an internal resource for NCE when addressing sustainability for our projects.

Cool Pavements – NCE prepared a report to discuss cool pavement alternatives for the City of Chula Vista as a means of mitigating the urban heat island impact. This included the use of pavement alternatives, such as porous or permeable pavements, pavers, concrete pavements, and use of light-colored aggregates, etc.



Composite Pavements – NCE worked for the Strategic Highway Research Program (SHRP2 R21) to develop best practice standards for asphalt concrete (AC)/portland cement concrete (PCC) composite pavements nationwide. This project resulted in the development of best practices in construction, specifications, and quality management procedures for these pavements. NCE is currently teaching a series of workshops for State Highway Agencies nationwide to assist them in implementing key best practices for composite pavements. While this work was funded and aimed at State Highway Agencies, the fundamental concepts of composite pavements and the best ways to implement them can be translated to cities, too.



Cold-In-Place Recycling – A cost-effective alternative to traditional mill and fill pavement treatments, cold-in-place recycling can yield cost savings of as much as 30% using existing AC materials, which produces less truck hauling and better time efficiency during construction. Longer pavement sections (generally at least 500,000 sf of pavement area) that require deeper mill and fills (typically at least three inches) are good candidates for cold-in-place recycling with potentially large cost savings.



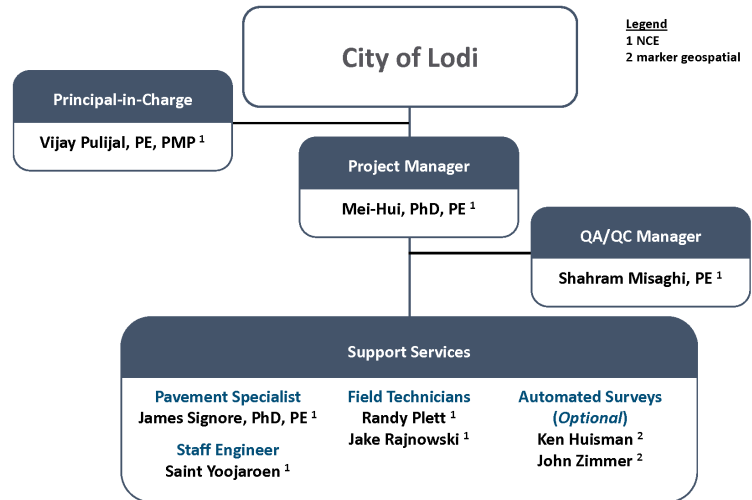
Full Depth Reclamation (FDR) – Full-depth reclamation is a process that reconstructs failed AC pavements by recycling the existing roadway materials. The old AC and aggregate base materials are pulverized and mined utilizing specialized equipment. The full-depth reclamation method recycles the materials in-situ and can offer significant cost savings over conventional roadway reconstruction techniques. It is generally cost-effective for areas as little as 25,000 square feet.

GIS Analysis, Modeling, and Mapping using the latest ESRTM Software


NCE staff have an in-depth knowledge and understanding of the GIS needs of public entities and the importance of geospatial data in making critical resource(s), impact analysis, and management decisions. These decisions require well thought out tools that allow for efficient management, deployment, and dissemination of spatial data (both internal and external for the public). Our experience with GIS development and analysis, cartography, and asset management is extensive and includes projects for municipalities across California and Nevada. Our services include mobile data collection, integration with asset and PMS software, and detailed mapping capabilities using the latest ESRI™ software which includes ArcGIS®, and ArcPro.

Organization Chart

NCE has assembled a team that includes key personnel who have supported City’s prior PMP updates, along with certified field inspection capability and advanced pavement engineering expertise to ensure a consistent and defensible 2026 update. Principal-in-Charge **Vijay Pulijal, PE, PMP**, will oversee contractual obligations, project quality, staffing, and serve as a main contact for the City, bringing extensive leadership and project management experience statewide. Project Manager **Mei-Hui Lee, PhD, PE**, will lead day-to-day efforts and serve as the primary contact between NCE, the City, and our subconsultant (as optional automated survey), with strong technical expertise in pavement management, design, and rehabilitation. QA/QC Manager **Shahram Misaghi, PE**, and Pavement Specialist **James Signore, PhD, PE**, will provide advanced technical guidance and will implement NCE’s quality assurance program, drawing on his extensive experience in pavement management and maintenance. Mei-Hui has supported various local agencies’ PMP updates in Sacramento County and San Joaquin County areas, providing valuable continuity and understanding of jurisdiction needs.



Subconsultants

 NCE has included märker geospatial, LLC (märker) on our team to assist as-needed in providing automated pavement data collection services (optional). märker has provided hundreds of successful pavement and asset management projects specifically for municipal governments for over 30 years. The märker team has implemented numerous industry-leading technologies in order to successfully collect, process, and deliver accurate, up-to-date pavement conditions, along with other various public works roadway and roadside infrastructure assets for a multitude of government agencies across the country. märker owns and operates a fleet of right-of-way data collection equipped vehicles and they use proven technologies to successfully complete pavement data collection and asset management projects. märker’s testing vehicle has been certified by MTC through the Vendor Certification Program (VCP).



Together with NCE, our team has successfully collected, processed, and delivered accurate up-to-date pavement conditions and roadway infrastructure assets for the Cities of West Sacramento, Sacramento, Citrus Heights, Davis, Elk Grove, and the Counties of Yolo, Sacramento, Shasta, Siskiyou, San Diego, and Orange. Our team are currently working in Sacramento County to perform PMP update and was also selected by the City of Tracy to conduct the similar PMP update in 2026.

Unlike other consultants using similar technologies, NCE and märker places certified technicians in their survey vehicle in order to identify and confirm the pavement distress data, (in real time) using an on-board surface distress recording subsystem. These specially designed touch screen data entry devices are integrated with the vehicle's GPS and allows the inspector to quantify the severity and extent along more accurately with the GPS beginning and end point locations of every pavement distress that is present on the City's roadways.

NCE Roles and Responsibilities

Vijay Pulijal, PE, PMP | Principal-in-Charge

Vijay Pulijal, PE, PMP, is NCE's proposed Principal-in-Charge for this project. Vijay will be responsible for ensuring the resources required are met, and will oversee the project through the phases and participate in key meetings.

Mei-Hui Lee, PhD, PE | Project Manager

Mei-Hui Lee, PhD, PE, serving as Project Manager, will be the City's point on the project, and maintain overall communication with the City and all NCE Team members. It will be her responsibility to share project status with the team and collect information to document monthly and year-to-date progress on individual activities. In consultation with the Principal, Vijay Pulijal, it will also be her responsibility to update the schedule, to develop action items to keep the project on schedule, and to examine cost-cutting measures that can be taken to streamline the project.

Shahram Misaghi, PE | QA/QC Manager

Shahram Misaghi, PE, is NCE's proposed QA/QC Manager for this project. He will be responsible for implementing NCE's quality assurance and quality control management (QA/QC) program. He will address QA/QC procedures and expectations for each team member and will provide the quality assurance review and its documentation of the documents that will be submitted to the City.

James Signore, PhD, PE | Pavement Specialist

James Signore, PhD, PE, will be responsible for leading all pavement design and materials related aspects on this contract, including the use of the latest economical treatment methods and materials, and review of technical specifications related to Hot Mix Asphalt (HMA) concrete, surface seals, and pavement recycling. This includes developing and implementing pavement investigations and design scopes of work using both empirical and mechanistic design approaches.

Saint Yoojaroen | Pavement Engineer

Saint Yoojaroen will support the PMP and GIS Linkage update by assisting with StreetSaver® database modifications, including adding new sections and updating pavement history. He will help run budget needs and scenario analyses, generate reports and maps, and update the maintenance and rehabilitation (M&R) decision trees with unit costs once James discusses treatment strategies with the City. Saint will also coordinate closely with Project Manager Mei-Hui, supporting her in meetings with City staff and ensuring that all database updates and analyses reflect agency priorities.

Randy Plett and Jake Rajnowski | Senior Field Technicians

Randy Plett and Jake Rajnowski will be responsible for performing manual pavement condition assessments, creating Pavement Condition Index data in accordance with MTC protocol, and performing quality control and assurance of collected pavement performance data. They will also perform data collection pre-processing, geospatial analysis and network maintenance to help prepare datasets for the collection process.

Subconsultant Roles and Responsibilities (Optional Automated Survey)

Ken Huisman (märker) | Field Supervisor

Ken Huisman (marker) is NCE's Field Supervisor for optional automated survey in this project. He will coordinate and manage facets of the automated survey field work, including crew coordination, survey scheduling, quality components, and timely completion of all fieldwork collection deliverables.

John Zimmer (märker) | Field Data Collection Coordinator

John Zimmer (marker) will provide his extensive pavement profiling and infrastructure management experience to this project. John has more than 30 years' experience in transportation engineering. His hands-on experience in completing

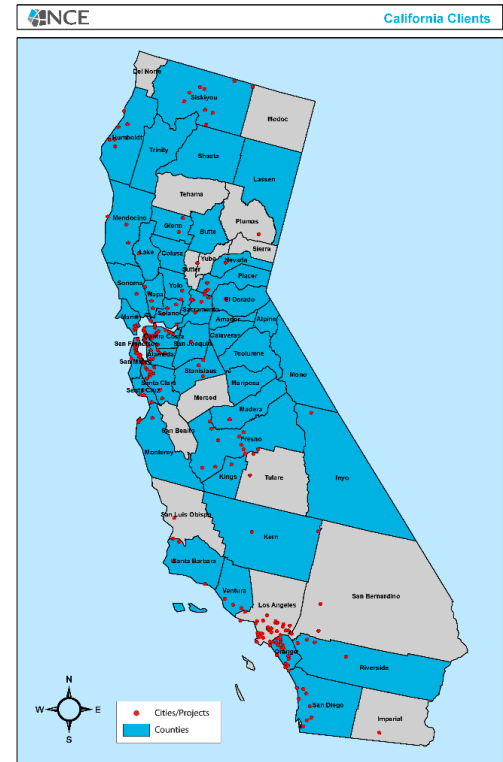
pavement data collection, transfer, delivery, and analysis has become an instrumental part of our field team in delivering timely, accurate, and reliable data. John is certified by MTC to perform condition surveys.

Experience and References

NCE has been a leader in the field of pavement management and design and has successfully diversified its services over the last 33 years since 1990, while still maintaining its reputation as experts in the field of pavement research, management, design, and reconstruction. NCE is well versed in California's pavement management standards, regulations, and the latest software. We remain at the forefront of existing and emerging PMS methods and technology trends.

NCE's expertise in pavement management systems is exemplified by our close relationship with MTC. We have worked with MTC since 1997 in many capacities. NCE conducts all the StreetSaver® training on MTC's behalf and assists in any beta testing for new software development. NCE has also trained hundreds of cities, county, and local agency staff including engineers and maintenance personnel on the program.

With PMP implementations and updates completed for over 220 cities and counties, NCE is among the most experienced pavement management firms in California. The map to the right shows our California municipal and local government agency clients where we have performed pavement-related engineering work such as pavement condition surveys and other pavement management services – further demonstrating the depth of our knowledge, expertise, and experience in the pavement management arena.



Relevant Experience

2023 Pavement Management Program Update, City of Galt, CA: NCE provided pavement consulting services to assist in updating the StreetSaver® Pavement Management Program (PMP). The City's pavement network is composed of approximately 90.8 centerline miles of publicly maintained streets. The last condition surveys were performed in 2018. For the 2023 update, the City desires to perform pavement condition surveys on the entire network, as well as maintenance and rehabilitation records update, budget analysis, summary report and Council presentation. With City's existing paving budget \$0.8 million per year, the network PCI will drop from 69 to 61 in 5 years. **NCE Key Personnel:** Margot Yapp, Shahram Misaghi, Mei-Hui Lee, Sampat Kedarisetty, Saint Yoojaroen, Jake Rajnowski.



Pavement Management Program Implementation and Updates, City of Elk Grove, CA: In 2004, the City of Elk Grove selected NCE to convert the City's inventory data from Sacramento County to StreetSaver®. Existing data were reviewed, verified with County and City staff as appropriate, and then sectionalized into the appropriate format. The City has approximately 542 centerline miles in the street network. As part of this project, NCE assisted the City with the selection of appropriate PMP software (StreetSaver® was selected by the City), field verified street lengths from County records, performed condition surveys, performed all budget analyses and prepared reports, and finally, made a final presentation to the City Council. In addition, City staff was trained in the use of the software. NCE has assisted the City by updating the pavement surveys on half of arterials and collectors and one-quarter of residential streets annually over the past 10 years. The budgetary analysis and PMP reports will be conducted bi-annually. **NCE Key Personnel:** Margot Yapp, Mei Hui Lee, James Signore, Jake Rahnowski, märker Geospatial



Pavement Management System Update and Survey, City of Stockton, CA: NCE updated the StreetSaver® pavement management system in 2017 on arterials and collector networks. The City's street network consists of 756 centerline miles (approximately 4,525 pavement sections). Pavement condition was previously updated in 2012/2013. Field inspections on residential streets are not included in 2017 update. NCE collected pavement distress data on arterials and collectors only, calculated the PCI, and provided recommendations for maintenance and rehabilitation treatments for City staff. Unit cost and pavement strategies were updated in the decision tree for accurate budgetary analysis. Next, NCE performed a budget needs analysis with various scenarios to address maintenance and rehabilitation options along with their associated costs. City's scheduled overlay and surface seal projects in 2018 were also included in the analysis. Finally, the budgetary report with projected network condition and deferred maintenance was prepared and submitted to the City. **NCE Key Personnel:** Margot Yapp, James Signore, Mei Hui Lee, Joseph DeLeon

Regional Pavement Management Update, Stanislaus Council of Governments, Stanislaus County, CA: The Stanislaus Council of Governments selected NCE to provide professional services to update their regional pavement management program in 2012-2014 and again in 2021-2022. StanCOG consists of nine cities (Ceres, Hughson, Modesto, Newman, Oakdale, Patterson, Riverbank, Turlock, and Waterford and Stanislaus County). Stanislaus National Forest is adjacent to this county. The project scope included:



- Performed distress/condition surveys on road network (1,873 paved miles of roads)
- Updated existing pavement network to include new streets
- Implemented a rigorous QC program as part of the distress surveys
- Calculated pavement condition indices
- Updated all maintenance history data
- Updated and modified the maintenance strategies and decision tree
- Performed budget scenario analyses
- Prepared final reports
- Provided training to StanCOG and agency staff
- Linked the GIS to the pavement management database
- Made presentations to City Councils
- Provided recommendations for preventive maintenance strategies and work plans

NCE successfully implemented the pavement management update for all nine cities in 2012 and the results were used to assist StanCOG to develop a sales tax measure that was passed in November 2016. NCE recently completed a similar update for all agencies (including Stanislaus County) in 2022. **NCE Key Personnel:** Margot Yapp, Mei-Hui Lee, Shahram Misaghi, James Signore, Jake Rahnowski.

Pavement Management Updates, Pavement Condition Data Collection, and Analysis, City of Sacramento, CA: With over 3,000 lane-miles of streets, Sacramento owns and maintains the fifth largest street network in California. In 2016, the City of Sacramento (City) converted to StreetSaver® and needed results in less than six weeks. NCE/marker geospatial implemented an aggressive field data collection schedule to meet this goal. The NCE team performed annual semi-automated pavement condition surveys of the street network in accordance with the distress definitions and descriptions as per ASTM D6433 in 2017 to 2021. All of the data collected were entered into the StreetSaver® database and analyzed to generate PCI and reports. NCE performed budget needs analysis scenarios to identify road sections that need treatment and apply the maintenance and rehabilitation decision trees to each section. The scenarios evaluation prioritized sections for repair under constrained, realistic, budgetary assumptions. NCE performed the City's last PMP update in 2020/22 with the pavement condition report submitted in early 2022. NCE has recently been selected again to update the City's PMP for 2024 to 2026. **NCE Key Personnel:** Margot Yapp, Mei-Hui Lee, James Signore, Jake Rajnowski, Ken Huisman (märker geospatial), John Zimmer (märker geospatial).



Pavement Management System (PMS) Updates, County of Sacramento, CA:

NCE was first contracted by the County of Sacramento (County) to assist in updating the PMS in 2013. The County converted to the StreetSaver® PMS in the late 1990s but had not updated it since that time. The decision to update to the current version of StreetSaver® was intended to assist the County in managing the road network of approximately 2,200 centerline miles. Due to the then economic climate, the road network did not receive sufficient funding to maintain it in a state of good repair. NCE began pavement condition surveys in 2017 and completed the entire network update in 2018. All surveys were performed in accordance with



ASTM D6433. The data collected were entered into the County's StreetSaver® database and the PCI determined. In addition, NCE performed the funding analysis to determine the funding shortfalls and prepare a five-year work plan for each Supervisorial District. Furthermore, NCE assisted the County to present the results to the Board of Supervisors and the public so that they understood how the additional funding from SB1 will be allocated. NCE recently performed budgetary analysis and supported public meetings for the County in 2022. NCE was selected by the County again in 2025 to update its PMS. We have teamed with Marker to conduct automated surveys on all County's maintained roads, and the field data collection will be completed in Spring 2026. **NCE Key Personnel:** Margot Yapp, James Signore, Mei-Hui Lee, Jake Rajnowski, Ken Huisman (märker geospatial), John Zimmer (märker geospatial).

Various Projects, Metropolitan Transportation Commission, Various Locations, CA:

Since 1987, NCE staff has been involved with the StreetSaver® program through various assignments. Details of our experience are described below:



PMP Implementations: NCE has implemented the StreetSaver® PMP in over 200 cities and counties in California since 1994. They include many major cities such as San Francisco, San Jose, Oakland, Seattle, Boise, Fremont, and Fairfield as well as counties such as Alameda, Marin, San Mateo, Santa Cruz, Stanislaus, Mendocino, Mariposa, Humboldt, Lake, Lassen, and Mono. The PMP implementations included network sectionalizations, performing condition surveys and budgetary analyses, presentations to elected officials, and preparing capital improvement programs.

StreetSaver® Knowledge: NCE staff proposed on this project have worked with the StreetSaver® software since 1987. We have more than 100 person-years of experience with StreetSaver®, more than any other pavement consulting firm in the United States.

P-TAP Rounds 1-26 Projects: NCE has been a selected P-TAP consultant since Round 1 in 1998/99. This includes NCE's technicians and engineers being certified in MTC's rater certification program. Our PTAP clients include more than 80 cities and counties (more than half the agencies in the San Francisco Bay Area).

Beta Testing: NCE has been involved with beta testing different versions of the StreetSaver® software since 1994. We have worked with MTC as well as the software developers in finding, reporting and resolving bugs from versions 5.4 to the current online version. Our staff has included users with an intimate knowledge of the PMP program and programming abilities, as well as newer engineers with limited knowledge (that better represent the typical user). Our exposures to multiple "real-life" databases have enabled us to push the program to its limits.

Software Development: NCE has been a member of the Software Development Team (SDT) since the development of Version 7.0. Since 2001, NCE has been a facilitator at the SDT meetings and worked with both MTC and the software developers (DevMecca) in the development of subsequent versions. Both of these experiences have allowed us to better understand the programming efforts, and challenges inherent in the process. It has also allowed a fuller understanding of the capabilities of the program, and the bugs and enhancements that accompany each new version. This, in turn, allows us to better assist agencies.

Training: NCE has trained users on the StreetSaver® software since 1997. This includes developing all the training materials, ensuring interaction in the training as well as conducting the training. Our staff has performed training on the software as early as 1988 with individual agencies. Training courses we have developed for MTC include Basic Computer Skills, Budgetary Analyses, How to be a Champion, GIS Linkage, Custom Report Wizard, and Project Selection.

Non-Pavements Needs Assessment: NCE developed a methodology for predicting non-pavement needs to incorporate in the Regional Transportation Plan. Using survey data from over 80 cities and counties NCE developed prediction models to determine the non-pavement asset value in agencies where little, if any, data were available. Over 22 different non-pavement assets were included, e.g., curb and gutters, sidewalks, traffic signals, streetlights, guardrails, sewers, sound/retaining walls, traffic signs, and storm drains.

Challenges and Solutions: NCE has been the go-to consultant for MTC for “unusual” scope of work. The most recent was performing a funding analysis for the City of Oakland which passed a \$350 million bond in 2016 for transportation improvements. The results from StreetSaver® had to be coupled with external factors such as safety, alternate modes of transportation and social equity.

NCE Key Personnel: Margot Yapp, Vijay Pulijal, James Signore, Mei Hui Lee, Shahram Misaghi, Saint Yoojaroen, Jake Rajnowski.

Pavement Management Program Update, Amador County and Cities, CA:

Amador County and its participating cities (City of Amador, Jackson, Plymouth and Sutter Creek) maintained roadway information in spreadsheet format but do not have an established Pavement Management Program (PMP). NCE was selected by the County and cities in 2015 to develop and implement a comprehensive, GIS-based PMP from the ground up and update into StreetSaver® database. NCE has conducted pavement condition survey on approximately 455 centerline miles of roads and the airport in the County and cities. GIS map, historical maintenance and rehabilitation records, and pavement strategies were also updated in this project. Following data collection and database update, multi-year budget analysis was performed to evaluate funding scenarios, identify prioritized projects, and estimate the investment required to maintain or improve overall network condition. We have also assisted the County and City staff to prepare the Board/Council presentations and conduct technical training to ensure successful long-term use and maintenance of its PMP system. NCE was selected by Amador County again in 2020 to conduct PMP update for the County and all participating cities; however, the project was ultimately cancelled due to the lack of available County budget to fund the effort.



NCE Key Personnel: Margot Yapp, James Signore, Mei-Hui Lee.

References

Provided below are three references, within the past 10 years of clients for whom services have been performed that are comparable in quality and scope to that specified in this RFP.

NCE	
2023 Pavement Management Program Update	
Client:	City of Galt, 495 Industrial Drive, Galt, CA 95632
Contact Name:	Trung Trinh
Phone Number:	(209) 366-7260
Email Address:	ttrinh@cityofgalt.org
Services Provided:	Pavement Management Program Updates
Start/End Dates:	2023 to 2025
Pavement Management Program Implementation and Updates	
Agency:	City of Elk Grove, 8400 Laguna Palms Way, Elk Grove, CA 95758
Contact Name:	Robert French
Phone Number:	(916) 478-3648
Email Address:	rfrench@elkgrovecity.org

Services Provided:	Pavement Condition Surveys
Start/End Dates:	2011 to Present
Pavement Management System Update and Survey	
Agency:	City of Stockton, 22 East Weber Avenue, Room 301, Stockton, CA 95202
Contact Name:	Adriana Garibay
Phone Number:	(209) 937-7298
Email Address:	adriana.garibay@stocktonca.gov
Services Provided:	Pavement Management System Update and Survey
Start/End Dates:	2020 to 2021
Regional Pavement Management Update	
Agency:	Stanislaus Council of Governments, 111 I Street, Ste 308, Modesto, CA 95354
Contact Name:	Rosa De Leon Park
Phone Number:	(209) 525-4642
Email Address:	rpark@stancog.org
Services Provided:	Regional Pavement Management Program Services
Start/End Dates:	2012 to 2024, 2021 to 2022
Pavement Management Updates, Pavement Condition Data Collection, and Analysis	
Agency:	City of Sacramento, 5730 24 th Street, Bldg 1, Sacramento, CA 95822
Contact Name:	Gregory Smith, PE
Phone Number:	(916) 808-8364
Email Address:	gsmith@cityofsacramento.org
Services Provided:	Annual Pavement Condition Surveys and Analysis
Start/End Dates:	2017 to Present
Pavement Management System Updates	
Agency:	County of Sacramento, 9660 Ecology Lane, Sacramento, CA 95827
Contact Name:	Ken Wick
Phone Number:	(916) 826-6460
Email Address:	wickk@saccounty.net
Services Provided:	Pavement Management System Updates
Start/End Dates:	2013 to Present
Various Projects Throughout San Francisco Bay Area	
Agency:	Metropolitan Transportation Commission, 375 Beale Street, Ste 300, San Francisco, CA 94105
Contact Name:	Elliott Wing
Phone Number:	(415) 260-7774
Email Address:	etwong@bayareametro.gov
Services Provided:	StreetSaver® Program Various Assignments
Start/End Dates:	1987 to Present



5. Work Sample

NCE has provided a link below to a completed report that our firm has previously developed for cities, counties or local government agencies that are comparable to the project outlined in this RFP.

<https://cityoflodijameselke.portal.massive.io>

Appendix A

Pages 24-26

Removed per mutual agreement



Appendix B
Key Staff Resumes and Certifications

Mei-Hui Lee, PhD, PE

Project Manager

Dr. Lee has a PhD in civil engineering and is experienced in pavement design, evaluation, and maintenance projects. Dr. Lee has abundant field experience at various international airfields, including runway design, pavement structure evaluation, and field surveys. She also has research experience at the Federal Aviation Administration National Airport Pavement Test Facility in runway design life extension and aircraft baking performance simulation projects. Currently, she serves as the project manager for pavement management and design projects at NCE. Her clients include the Counties of Sacramento, Trinity, Lake, and Mariposa, as well as multiple cities, including Sacramento, South San Francisco, Martinez, and Folsom. She is responsible for the analysis and quality control of pavement distress data collection, updating maintenance and rehabilitation decision trees and the treatment unit costs, and the development of budget scenarios and summary reports. She has developed cost-effective maintenance treatments and strategies, prepared custom multiple-year detailed street maintenance plans and budget option reports, and linked Geographic Information System maps with management sections in the client's Pavement Management Program database.

Representative Projects

2013-2022 Pavement Management Update

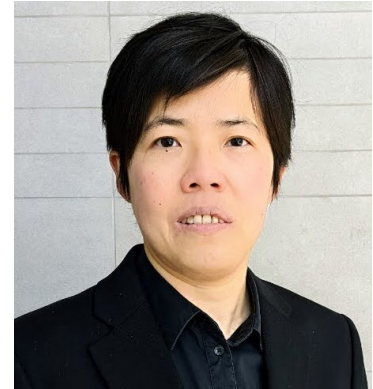
Sacramento County, CA

Senior Engineer. NCE was first contracted by the County to assist in updating the Pavement Management System in 2013. The County converted to the StreetSaver[®] Pavement Management System in the late 1990s but has not updated it since that time. The decision to update to the current version of StreetSaver[®] was intended to assist the County in managing the road network of approximately 2,200 centerline miles. Due to the economic climate, the road network had not received sufficient funding to maintain it in a state of good repair. NCE began pavement condition surveys in 2017 and completed the entire network update in 2018. All surveys are performed per American Society for Testing and Materials D6433. The data collected were entered into the County's StreetSaver[®] database and the Pavement Condition Index was determined. In addition, NCE performed the funding analysis to determine the funding shortfalls and prepare a five-year work plan for each Supervisorial District.

2019 & 2023 Pavement Management Program

City of Yuba City, CA

Senior Engineer/Project Manager. Yuba City selected NCE to assist staff in updating their Pavement Management System in 2018. The City's pavement network is comprised of approximately 259 centerline miles of publicly maintained streets (arterial: 45.3 centerline miles/133 sections; collector: 41.7 centerline miles/143 sections; residential/local: 171.8 miles/1,129 sections). The last condition surveys were performed in 2015. For the 2018 update, the City requested pavement condition surveys on arterials and collectors only. NCE next conducted Pavement Condition Index calculations and updated all inspection data in the City's StreetSaver[®] database. In the 2023 Pavement Management System



Education

PhD, Civil Engineering, National Taiwan University, Taiwan, 2009
 MS, Civil Engineering, Columbia University, New York, 2012
 BS, Civil Engineering, National Taiwan University, Taiwan, 2002

Registrations and Certifications

Professional Engineer – Civil, CA
 #87635

Affiliations

American Society of Civil Engineers
 Nevada Water Resources Association
 American Public Works Association

Joined NCE

2014

Total Years of Experience

13 years

update, NCE worked with City staff to update pavement maintenance strategies, perform budgetary analysis, and summarize the impacts of various funding levels or target Pavement Condition Indexes.

2017-2022 Street Surface Seal and Pavement Rehabilitation

City of South San Francisco, CA

Project Manager. NCE has completed pavement resurfacing, rehabilitation, and reconstruction projects for the City since 2017, which comprised 47.7 centerline miles of streets for resurfacing and 16.0 centerline miles of streets for rehabilitation. Every two years, the City surveys the streets and enters the data into the StreetSaver® database. This database assists staff in determining the Pavement Condition Index for each street segment and the street network overall. NCE assists the City in updating historical maintenance and rehabilitation records and conducting field reviews to identify candidate streets for the City's annual surface seal and rehabilitation programs. Based on the City's paving budgets and maintenance strategy, NCE has utilized the StreetSaver® database and field reviews to develop a multi-year work plan for the City in 2018, 2020, and 2022.

Pavement Management System Updates

Various Cities and Counties

Project Engineer. Mei-Hui has been involved with updating Pavement Management Programs for many Cities and Counties in the Bay Area, Central Valley, and outside of California. She is responsible for the analysis and quality control of pavement distress data collection, updating maintenance and rehabilitation decision trees and the treatment unit costs, and the development of budget scenarios and summary reports. She has developed cost-effective maintenance treatments and strategies, prepared custom multiple-year detailed street maintenance plans and budget option reports, and linked Geographic Information System maps with management sections in the client's Pavement Management Program database. Some of her current/past Pavement Management Program clients include:

- Ada County, ID
- Amador City, CA
- Amador County, CA
- Benicia, CA
- Calistoga, CA
- Chula Vista, CA
- Clearlake City, CA
- Davis, CA
- East Bay Regional Park District, CA
- Elk Grove, CA
- Folsom, CA
- Hayward Airport, CA
- Jackson City, CA
- Lake County, CA
- Lakeport City, CA
- Mariposa County, CA
- Placerville, CA
- Plymouth City, CA
- Rio Vista, CA
- San Francisco Airport, CA
- San Francisco, CA
- San Pablo, CA
- Santa Cruz, CA
- Siskiyou County, CA
- St. Helena, CA
- Sutter Creek City, CA
- Trinity County, CA
- University of California-Davis, CA
- Vallejo, CA
- Yountville, CA
- Yuba City, CA

StreetSaver® Peer Review

City of Lincoln, NE

Project Manager. Mei-Hui reviewed the current StreetSaver® database pavement inventory, maintenance and rehabilitation treatments/unit costs, Pavement Condition Index breakpoints by condition categories, inspection updates, historical maintenance and rehabilitation updates, and budgetary scenario parameters. Geographic Information System linkage and pavement segment re-sectionalizing were also included in this project. All pavement sections were sectionalized by blocks that were not cost-effective from a maintenance perspective. All arterials and collections were re-sectionalized as half a mile long to better reflect pavement conditions and maintenance practices. In addition, the new sections were re-ordered sequentially and avoided double counting of centerline mileages.

CERTIFICATE OF ACHIEVEMENT

This is to certify that

Mei-Hui Lee

has completed the requirements of the

MTC StreetSaver Rater Certification Program

with the skills and knowledge on pavement condition
assessment based on the MTC's modified ASTM D6433

Certificate valid until Apr 29 2026

Serial no: 1167



Sui Tan, StreetSaver Program Manager
Metropolitan Transportation Commission



Vijay Pulijal, PE, PMP

Principal, Asset Management

Vijay Pulijal is a forward-thinking Principal Engineer and Asset Management Lead with over 22 years of expertise in both pavement and non-pavement infrastructure. With a strong foundation in traditional asset management, Vijay has expanded his role to lead cutting-edge pilot studies focused on integrating AI technologies into asset management processes. These initiatives, which began in March 2023, aim to enhance data collection, improve decision-making, and drive innovation in public infrastructure management.

As a licensed Professional Engineer (PE) and certified Project Management Professional (PMP), Vijay has successfully managed over 170 Pavement Management Program (PMP) projects, consistently delivering cost-effective, high-quality solutions to public agencies. Recently, Vijay has spearheaded efforts to pilot AI-assisted data collection methods for evaluating pavement distress and managing non-pavement assets, including traffic signs, streetlights, and signals. These forward-looking initiatives are laying the groundwork for a more scalable and precise approach to asset management, underscoring Vijay's dedication to innovation and future-ready solutions.

In addition to his technical work, Vijay is an experienced presenter, having shared his insights on asset management software and tools at the MTC User Week. Most recently, he presented at the PWX conference in Atlanta, showcasing an AI-driven approach to pavement distress evaluation in his session titled *Advancing Pavement Asset Management in Public Works with AI: Watsonville Case Study*.

Representative Projects

2019-2026 StreetSaver® Technical Assistance

Metropolitan Transportation Commission, CA

Principal Engineer. Vijay provides QA/QC on distress data and budget analyses, supports agencies with technical guidance on StreetSaver® use, and reviews final deliverables to ensure quality and consistency with MTC standards. NCE has been involved in numerous projects related to the development, implementation, and training of the StreetSaver® program. NCE implemented the StreetSaver® Pavement Management Program in more than 200 agencies since 1994. NCE has been a Pavement Technical Assistance Program consultant since Round 1 in 1998/1999. This includes NCE's technicians and engineers being certified in the Metropolitan Transportation Commission's certification program. NCE has been involved with the beta testing of different versions of the StreetSaver® software since 1994 and has been a member of the software development team. NCE has trained users on the StreetSaver® software since 1997, including the development of the training materials, ensuring interaction in the training, and conducting the training. NCE provides services related to the development of the StreetSaver® software and provides training workshops and seminars. The overall training and support program is provided by MTC twice per year in Oakland and once per year in Southern California. Depending on the workshop, the audience has ranged from managers to clerical/administrative staff members that perform data entry. The bulk of the attendees, however, have been engineers and maintenance staff who work with local streets.



Education

MS, Engineering Technology,
University of Memphis TN, 2000
BS, Civil Engineering, Osmania
University, India, 1999

Registrations and Certifications

Professional Engineer – Civil, CA
#76480
Project Management Professional
(PMP), PMI
MTC StreetSaver® Rater Certification
OSHA 10-Hour Construction,
ClickSafety

Affiliations

American Public Works Association
(APWA)
Construction Management
Association of America (CMAA)
American Society of Civil Engineers
(ASCE)

Joined NCE

2024

Total Years of Experience

22 years

Statewide Local Streets and Roads Needs Assessment

League of California Cities, County Engineers Association of California, California State Association of Counties

Principal Engineer. Vijay helped manage the statewide survey process by supporting the team in following up with agencies, tracking responses, and resolving technical issues. I worked closely with the project lead to ensure the data received was accurate and complete, helping move the effort forward from both a technical and coordination standpoint. NCE is responsible for the development of the needs and scenario methodologies for both pavement and non-pavement assets for 539 cities and counties. This includes the development of a website, online database data collection, and funding analysis. The results are used to document the funding needs for the next ten years and to advocate for additional transportation revenues. Margot has managed the project since 2008 and is responsible for communicating the results to a wide variety of audiences, including state legislators, elected city and county officials, Directors of Public Works, engineers, and planners.

Pavement Management Technical Assistance Program (P-TAP) (Rounds 5 thru 25)

Metropolitan Transportation Commission (MTC), San Francisco Bay Area, CA

Project Manager. Vijay led the Pavement Management Technical Assistance Program (P-TAP) for MTC over the past 21 years, managing more than 168 assignments for Bay Area cities and counties. The P-TAP program, funded by approximately \$1.5 million in federal dollars annually, helps local agencies stretch their road budgets by implementing, updating, and maintaining pavement management databases. The program also supports the management of non-pavement street and road assets, such as signs, storm drains, curbs, gutters, traffic signals, and streetlights, through pilot projects.

Vijay's role as Project Manager involves conducting pavement condition surveys, updating agencies' pavement management programs (using StreetSaver®) with field data, and incorporating recent maintenance and rehabilitation work. He works closely with agencies to develop pavement treatment strategies, taking into account treatment costs, inflation, interest rates, and long-term budget projections. Vijay generates various budget scenarios to display the potential impact on pavement conditions and optimize the annual budget for cost-effective results. His team also provides color-coded PCI and work plan maps using GIS tools like ESRI ArcMap and delivers comprehensive reports containing all findings for both MTC and the respective agencies.

In addition to his technical responsibilities, Vijay provides training and guidance to agency staff, including inspection ride-alongs and StreetSaver® software training. He also assists agency project managers with presentations to boards or councils, ensuring they have the tools to justify spending and secure federal and state funding for pavement preservation and rehabilitation projects.

Vijay and his team maintain a close working relationship with MTC, offering feedback on StreetSaver® enhancements and regularly presenting at MTC User meetings and seminars. His ongoing contributions have positioned him and his team as trusted advisors, helping local agencies manage their infrastructure more efficiently and secure necessary funding.

Vijay and his team work closely with MTC staff in providing feedback on the StreetSaver® module and participate and present at various MTC User's meeting and seminars.

Pavement Management Program Update

City of Chico, CA

Project Manager. This project involved adding over 100 miles of pavement sections to the database. Vijay took existing pavement management data in Cartegraph and imported it into StreetSaver®. Extensive new field surveys of the entire City were then conducted, collecting current conditions data on 282 centerline miles to update the StreetSaver® database and show where maintenance would be most effective. There by assisting the City help determine the most appropriate time to treat a pavement; what the most cost-effective method may be; and how many dollars it may take to maintain a roadway system at a desirable condition.

CERTIFICATE OF ACHIEVEMENT

This is to certify that

Vijay Pulijal

has completed the requirements of the

MTC StreetSaver Rater Certification Program

with the skills and knowledge on pavement condition
assessment based on the MTC's modified ASTM D6433

Certificate valid until Jun 27 2026

Serial no: 1177



Sui Tan, StreetSaver Program Manager
Metropolitan Transportation Commission



Shahram Misaghi, PE

Quality Assurance/Quality Control Manager

Shahram is an experienced Project Manager and Lead Project Engineer at NCE with over 20 years of experience in pavement management, asset management, maintenance, rehabilitation, design, and planning projects. His experience includes pavement and asset data collection and analysis. Currently, he is leading/involved in multiple projects focused on pavement right-of-way asset inventory for agencies across California, and he has led over 70 PMS projects in the last 12 years.

He has been involved with the update of pavement management systems for numerous cities and counties throughout California with responsibilities that include the analysis and quality control of pavement distress data, updating maintenance and rehabilitation decision trees and the treatment unit costs, and the development of budget scenarios and summary reports. He has developed the most cost-effective maintenance treatments and strategies, prepared custom multiple-year detailed street maintenance plans and budget option reports, and linked GIS maps with management sections in the client's PMS database. He is extremely well-versed with StreetSaver[®] and is certified by MTC to perform condition surveys.

Representative Projects

StreetSaver[®] Training and Technical Support and PTAP Rounds 1-24

Metropolitan Transportation Commission (MTC), CA

Project Manager and Senior Engineer. NCE has been involved in many projects related to the development, implementation, and training of the StreetSaver[®] program. NCE implemented the StreetSaver[®] PMS in over 150 agencies since 1994. Shahram has trained users of the StreetSaver[®] software including the development of the training materials, ensuring interaction in the training, as well as conducting the training.

Statewide Local Streets and Roads Needs Assessment

League of California Cities and County Engineers Association of California

Senior Engineer. NCE has prepared the biennial needs analysis for both pavement and non-pavement assets for 540 cities and counties since 2008. This includes the development of a website, an online database and data collection, and funding analysis. The results are used to document the funding needs for the next 10 years and assisted in the passage of Senate Bill 1. The results are communicated to a variety of audiences, including state legislators, elected city/county officials, Directors of Public Works, engineers, and planners.

Pavement Management System Updates

Various Cities and Counties, Bay Area and Southern California

Project Manager, Senior Engineer, and Quality Assurance/Quality Control Manager. Shahram has been involved with updating Pavement Management Systems for over 70 cities and counties in California. He is responsible for the analysis and quality control of pavement distress data, updating maintenance and rehabilitation decision trees and the treatment unit costs, and the development of budget scenarios and summary reports. He has developed the most cost-



Education

MS, Civil Engineering, University of Texas, El Paso, 2011

BS, Civil Engineering, University of Science & Technology, Tehran, 1999

Registrations and Certifications

Professional Engineer – Civil, CA
#82874

Metropolitan Transportation
Commission StreetSaver[®] Rater
Certification

Joined NCE

2011

Total Years of Experience

20 years

effective maintenance treatments and strategies, prepared custom multiple-year detailed street maintenance plans and budget option reports, and linked Geographic Information System maps with management sections in the client's Pavement Management System database. He is an experienced user of the PAVER™ pavement management software. He has also been responsible for quality control review of client deliverables, including final reports and agency submittals. Some of his current/past Pavement Management System clients in California include:

- Alameda
- Amador County LTC
- Bakersfield
- Berkeley
- Calaveras COG
- Clearlake
- Colma
- Citrus Heights
- Davis
- Diamond Bar
- Dixon
- Fairfield
- Fresno
- Fresno COG
- Glenn County
- Humboldt CAOG
- Kern County
- Lake County APC
- Lakeport
- Madera City/County
- Marin County
- Mendocino COG
- Mission Viejo
- Monterey County and Cities
- Metropolitan Transportation Commission
- Oakland
- Placer County
- Richmond
- Rocklin
- San Francisco City/County
- San Francisco International Airport
- Santa Maria
- Stanislaus COB
- Trinity County
- Tuolumne County
- Walnut Creek
- West Sacramento
- Yolo County

Measure KK Technical Analysis and Support

City of Oakland, CA

In November 2016, Oakland voters overwhelmingly passed Measure KK, a \$600 million bond measure that included \$350 million for transportation. Well before Measure KK went to the voters, NCE provided the City with a StreetSaver® analysis to determine the impacts of the bond measure over the next ten years. This included determining the most cost-effective maintenance and rehabilitation strategies, such as pavement preservation and cold-in-place recycling.

Engineering Services for Pavement Management System Update

City of Fresno, CA

Co-Project Manager. Shahram was responsible for field data collection, quality control activities, budgetary analysis, reports, and Council presentations. NCE performed semi-automated condition surveys using the Metropolitan Transportation Commission's modified ASTM D6433 survey procedures, and a customized vehicle equipped with a computer, cameras, and a laser bar. This allowed condition data, including distress type, extent, and severity, to be collected quickly and safely. After inspection, all distress data were entered into the City's StreetSaver® database, and Pavement Condition Index calculations were performed. NCE then met with City staff and reviewed and updated the maintenance and rehabilitation strategies and treatments.

OCTA PAVER™ and StreetSaver® Pavement Management Training Workshops

Orange County Transportation Agency (OCTA), CA

Instructor and Peer Review. Shahram has instructed the OCTA's Pavement Management workshops instructing 200 city and county personnel, as well as consultant personnel, from various agencies within the County on the use and functions of PAVER™.

Countywide Pavement Management Program Implementation

Fresno Council of Governments, CA

Senior Engineer. Shahram was responsible for database modification, field data collection, budgetary analysis, and final report. The Fresno Council of Governments represents 16 member jurisdictions. Due to funding constraints, pavement maintenance and repair have been limited, especially in rural cities. However, Senate Bill 1 will provide a reliable source of funds for local governments to catch up with the maintenance needs that were not met due to historical funding issues. To manage the SB1 funding more efficiently, a Pavement Management System is highly desirable to better manage the network and to communicate with elected officials and the residents about the needs of the community. NCE was selected to implement a countywide regional Pavement Management System using the StreetSaver® Pavement Management System for nine rural Cities, including Coalinga, Firebaugh, Fowler, Huron, Kingsburg, Mendota, Orange Cove, San Joaquin, and Selma, for a total of 328 centerline miles.

CERTIFICATE OF ACHIEVEMENT

This is to certify that

Shahram Misaghi

has completed the requirements of the

MTC StreetSaver Rater Certification Program

with the skills and knowledge on pavement condition
assessment based on the MTC's modified ASTM D6433

Certificate valid until Feb 20 2026

Serial no: 1165



Sui Tan, StreetSaver Program Manager
Metropolitan Transportation Commission



J. Saint Yoojaroen

Staff Engineer

With a solid foundation in civil and pavement engineering, Saint Yoojaroen has developed a comprehensive skill set through various impactful projects at NCE. At NCE, he has played a pivotal role as a Staff Engineer I in multiple pavement resurfacing and rehabilitation programs, including significant projects like the FY 24/25 Pavement Resurfacing Program in Pacifica, and the 2024 Pavement Rehabilitation in Lake County. His contributions span from conducting thorough field reviews and pavement condition assessments to designing effective solutions for road maintenance, including curb/gutter replacement and drainage improvements. Saint's expertise extends to managing pavement management databases, utility coordination, and providing support in bidding and construction processes. His academic background at the University of California-Davis, where he served as a Research Assistant at the Pavement Research Center, further complements his professional experience. Saint is proficient in AutoCAD, Civil3D, ArcGIS, and Microsoft Office Suite.

Representative Projects

2019-2026 StreetSaver® Technical Assistance

Metropolitan Transportation Commission, City of San Francisco, CA

Staff Engineer I. NCE is facilitating meetings held by the StreetSaver® Software Development Team, composed of Metropolitan Transportation Commission staff, StreetSaver® software developers, third-party developers, and various consultants. NCE also facilitates special task group meetings made up of local agencies and consultants that work on various pavement management topics including concepts, enhancements, general design, and feedback to the Software Development Team. The scope of work includes various training workshops, as well as updating and/or revising training materials and workbooks. NCE provides copies of presentations, workbooks, and other training materials to the Metropolitan Transportation Commission.

2024 Pavement Technical Assistance Program

Metropolitan Transportation Commission, City of Alameda, CA

Staff Engineer I. NCE is assisting the Metropolitan Transportation Commission with its Pavement Technical Assistance Program Round 24 and later rounds to maintain existing pavement management system databases while providing each of the 109 jurisdiction's decision-makers with information that allows them to better manage and maintain their local pavement assets and to advocate for increased funds for pavement maintenance if funding gaps exist. The scope includes 1) performing condition surveys on sample sections of approximately 1,144 centerline miles of roads, updating the City's database with the collected data and calculating the Pavement Condition Index; conducting quality assurance/quality control; 2) updating the maintenance and rehabilitation decision trees, and analyze the data collected. NCE will make recommendations to each City based on the analysis; 3) prepare budget needs, scenarios, and other reports; NCE will generate a summary report of the budget analysis, pavement network condition, assumptions, methodology, and recommendations; 4) update



Education

BS, Civil Engineering, University of California, Davis, 2023

Registrations and Certifications

Engineer-in-Training, CA (anticipated in April)

MTC StreetSaver® Rater Certification Program

Joined NCE

2023

Total Years of Experience

2 years

geographic information system road segments on StreetSaver® Online. NCE will prepare maps for inclusion in the Final Report. A Budget Options Report and a Final Report will be the deliverables.

FY 2023/2024 Pavement Management Services

Interwest, City of Elk Grove, CA

Staff Engineer I. NCE is providing pavement management services for the City's Pavement Management Program Update. NCE is performing pavement condition surveys per the Metropolitan Transportation Commission distress protocols on half of the arterials and collectors and one-quarter of residential streets in the City (totaling approximately 184 centerline miles of city-maintained streets). Semi-automated procedures are being conducted with a 100% sampling rate to collect distress data. Roadway inspections, pavement profiling, Global Positioning System, and surface distress data will be collected continuously and seamlessly by our pavement technician team using our automated data collection vehicle which makes available a wide range of survey technologies. The pavement distress data collection process involves the use of 3D digital imaging technology along with customized, integrated keyboards and lasers to collect the type, severity, and extent of all Metropolitan Transportation Commission pavement surface distresses. All data collected from the condition inspections will be uploaded into the StreetSaver® database. NCE also provides quality control of condition inspection data, performs Pavement Condition Index calculations, and corrects any errors found. NCE will review maintenance and rehabilitation strategies with Interwest and City staff and recommend appropriate treatments in the decision tree. NCE will review the City's recent bid tabs to update unit costs in StreetSaver®, as well as maintenance and rehabilitation strategies records in 2023 and 2024. NCE will perform a budget needs analysis using an analysis period to be determined by the City. This will identify maintenance and rehabilitation strategies requirements for each street section and determine the total maintenance and rehabilitation requirements over the entire analysis period.

2022 West of 101 Pavement Rehabilitation

City of South San Francisco, CA

Staff Engineer I. NCE is providing engineering and design services to facilitate a rehabilitation project of all eligible streets west of 101. The 2022 West of 101 Pavement Rehabilitation Project's goal is to perform deferred maintenance west of 101, outside of the annual surface seal program. The City is responsible for the maintenance and repair of approximately 140 centerline miles, comprised of 33 arterial miles, 39 collector miles, and 68 residential miles. The City utilizes a program of slurry seals, overlays, and surface reconstruction as maintenance and rehabilitation strategies. West of US-101 there are approximately 123 centerline miles, comprised of 23 arterial miles, 35 collector miles, and 65 residential miles. Every two years the City surveys the streets and enters the data into the South San Francisco Pavement Management Program StreetSaver® database program. NCE is responsible for project management, pavement rehabilitation design, plans, specifications, and estimates, and bidding and construction support services.

FY 2024/2025 Pavement Resurfacing Program

City of Pacifica, CA

Staff Engineer I. Saint assisted with surface seal and rehabilitation projects funded by SB1 by conducting field reviews and pavement condition verification. NCE has been working with the City on its 5-year work plan since 2020 and we have completed the FY 2020/21 to FY 2023/24 pavement resurfacing projects since then. The work plan for the City involves surface seal and rehabilitation projects based on the City's SB1 funding, as well as pavement management database review and unit cost update. For the FY 2020/21 and FY 2023/24 projects, field reviews were performed to verify pavement conditions and treatments to finalize the work plan. NCE then scheduled a field calibration meeting with City staff to discuss various surface seal applications and base repair criteria. Cost-effective cape seals with leveling courses were designed on residential streets with a lower Pavement Condition Index to prevent water from damaging pavement and help resist reflective cracking. As part of these projects, NCE civil and pavement engineering design services included pavement coring, curb/gutter replacement, utility coordination, curb ramp design, drainage improvements, pavement design recommendations, plans, specifications, and estimates, and bidding and construction support services. The City has retained NCE to complete the FY 2024/25 Pavement Resurfacing project.

CERTIFICATE OF ACHIEVEMENT

This is to certify that

Jakrit Yoojaroen

has completed the requirements of the

MTC StreetSaver Rater Certification Program

with the skills and knowledge on pavement condition
assessment based on the MTC's modified ASTM D6433

Certificate valid until Jun 24 2026

Serial no: 1176



Sui Tan, StreetSaver Program Manager
Metropolitan Transportation Commission



Randolph Plett

Senior Field Technician

Randy Plett has been working in the pavement field since 1989, starting with the Long Term Pavement Performance North Atlantic Regional Contractor. In that role, Randy performed profile testing and distress surveys and was responsible for the collection and quality control of traffic data. Duties included collecting data for and implementing asset management systems, including a pavement management system for Virginia Beach and a traffic sign management system for the City of Las Vegas. Starting in 2003, Randy worked for the Long Term Pavement Performance Technical Support Services Contractor and was responsible for quality assurance of distress and traffic data, including working on the development and implementation of procedures for validating weigh-in-motion scales and assisting with administering the distress accreditation workshop. Other duties included profile testing, including a full round of data collection of all roads in the Western Federal Lands region.

Since joining NCE in 2010, Randy has performed distress surveys, falling weight deflectometer testing, coring, and surveys of traffic signs, culverts, and other non-pavement assets.

Representative Projects

2021 Transportation Infrastructure Rehabilitation

City of Davis, CA

Field Technician. NCE performed pavement condition surveys of the arterials and collectors as per StreetSaver[®] protocols and developed a multi-year work plan for both streets and bike paths. Approximately 67 centerline miles were surveyed. In addition, all collected data was entered into the StreetSaver[®] database and analyzed to generate a Pavement Condition Index for each segment. The City has utilized the StreetSaver[®] program for pavement management for over 20 years and last conducted a pavement condition update for the entire network in 2019.

2019 Annual Street Overlay and Rehabilitation

City of San Leandro, CA

Field Technician. In 2018, NCE was contracted by the City of San Leandro to prepare construction documents and pavement rehabilitation and reconstruction design for 23 arterial, collector, and residential streets (5 miles) for the 2019-2020 contract. NCE's scope of work included pavement investigation and design and preparation of civil design plans, specifications, and estimates for construction. Pavement design solutions included conventional and rubberized hot mix asphalt overlays, full-depth asphalt reconstruction, full-depth reclamation in place of more expensive conventional reconstruction, and a pilot project for cold central plant recycling on an arterial street based on recommendations provided by NCE. NCE was selected again to provide these services for the 2020/21 contract with an estimated construction value between \$7.0 to \$10.0 million.

Winchester Boulevard Rehabilitation and Bike Lane

Town of Los Gatos, CA

Field Technician. The Town is planning within the next ten years for Winchester Boulevard to implement a complete street corridor project. In the interim, the Town has retained Kimley-Horn and Associates to develop quick-build striping



Education

MS, Civil Engineering, University of Manitoba, 1989

BS, Civil Engineering, University of Manitoba, 1986

Registrations and Certifications

MTC StreetSaver[®] Rater Certification Program

Joined NCE

2010

Total Years of Experience

36 years

plans for Class IV or protected bike lanes with new pedestrian crosswalks. These striping plans will generally eliminate northbound travel lanes and modify existing lanes to make sufficient width to accommodate protected bike lanes. The longer-term complete street project will develop more permanent hardened features to provide protection as well as other landscape and median improvements. NCE is developing the pavement rehabilitation design for the subject section of Winchester Boulevard to support these new quick-build striping improvements and take into consideration longer-term plans that may include the reconstruction of portions of the roadway.

San Francisco International Airport As-Needed Civil and Pavement Engineering

City and County of San Francisco/Telamon Engineering, CA

Field Technician. The scope included collecting pavement distress data for both airside and landside pavements as per American Society for Testing and Materials D5340 and D6433, respectively. A semi-automated vehicle was used to collect data on the runways and taxiways with walking surveys used on the aprons. Updated San Francisco International Airport's PAVER™ Pavement Management System and submitted reports to the Federal Aviation Administration. Determining the Aircraft Classification Number/Pavement Classification Number for runways and taxiways, and performed deflection testing and pavement designs (FAARFIELD) for Runways 1L/19R, Taxiways E, F, and L.

2022 West of 101 Pavement Rehabilitation

City of South San Francisco, CA

Field Technician. NCE is providing engineering and design services to facilitate a rehabilitation project of all eligible streets west of 101. The 2022 West of 101 Pavement Rehabilitation Project's goal is to perform deferred maintenance west of 101, outside of the annual surface seal program. The City is responsible for the maintenance and repair of approximately 140 centerline miles, comprised of 33 arterial miles, 39 collector miles, and 68 residential miles. The City utilizes a program of slurry seals, overlays, and surface reconstruction as maintenance and rehabilitation strategies. Thereof US-101 there are approximately 123 centerline miles, comprised of 23 arterial miles, 35 collector miles, and 65 residential miles. Every two years the City surveys the streets and enters the data into the South San Francisco Pavement Management Program StreetSaver® database program. NCE is responsible for project management, pavement rehabilitation design, plans, specifications, and estimates, and bidding and construction support services.

Long Term Pavement Performance Western Regional Support Contract

Federal Highway Administration (Western United States)

Field Technician. The Long-Term Pavement Performance program is a long-term study of in-service flexible and rigid pavements. There are over 2,500 asphalt concrete and Portland cement concrete test sections located throughout the Western United States. Various performance, materials, and traffic data are collected; the data is processed and/or entered into an Oracle database, and quality control checks are performed. This data is utilized in broad-spectrum State, Federal, and Local research projects (i.e., performance model development) and to support planning and implementation activities. Long Term Pavement Performance-related products have resulted in over \$2 Billion in savings to owner agencies. NCE is also responsible for the coordination with state agencies, Federal Highway Administration, and other Federal Highway Administration contractors. NCE has worked on the contract continuously since 1990 with six separate contracts.

Maintenance Achievement Program Data Collection

Nevada Department of Transportation, NV

Field Technician. NCE conducts field surveys, collecting data and calculating the level of service achieved through highway maintenance activities. The project includes the development of professional and accurate documentation to present the level of service to the Nevada Department of Transportation.

Pavement Condition Data Collection

Washoe County, NV

Field Technician. This project involves collecting pavement condition survey data on the County's roadway and parking lot networks, including inspecting approximately 3,000 sample units every year. NCE's services include coordinating with the County, collecting data, quality control/quality assurance, updating the management system, developing geographic information system shapefiles, and linking those to the management system. This work also includes establishing new sample units and identifying unrecorded maintenance activities.

CERTIFICATE OF ACHIEVEMENT

This is to certify that

Randy Plett

has completed the requirements of the

MTC StreetSaver Rater Certification Program

with the skills and knowledge on pavement condition
assessment based on the MTC's modified ASTM D6433

Certificate valid until Feb 07 2026

Serial no: 1160



Sui Tan, StreetSaver Program Manager
Metropolitan Transportation Commission



Jacob (Jake) Rajnowski

Senior Field Technician

Jake Rajnowski joined NCE in 2016 as a pavement management technician and since then, has gained in-depth knowledge and expertise in collecting distress data and coring samples for pavement management systems. Apart from conducting field inspections, Jake performs all functions related to data collection and is an active participant in the quality control process, including crosschecks of data in the Pavement Management System database, quality control checks of field-collected data, and pavement maintenance history to ensure that Pavement Management System databases are accurate and up to date. During this process, detailed reports are generated to perform crosschecks of the data collected. Jake has completed the Orange County Transportation Authority's PAVER™ 'Distress Identification' course for Asphalt Concrete and Portland Cement Pavements. Jake is also certified by the Metropolitan Transportation Commission to perform pavement distress inspections; the certification testing involves passing a rigorous field test to test the inspector's knowledge of the distress procedures once a year. The Pavement Inspector Certification/Testing covers both American Society for Testing and Materials D6433 for PAVER™ and StreetSaver® modified American Society for Testing and Materials D6433 distress types.

Representative Projects

2020 Pavement Condition Data Collection

City of Rocklin, CA

Field Technician. NCE was selected to provide pavement condition data collection and to update the City's Pavement Management Application. The City utilizes StreetSaver® developed by the Metropolitan Transportation Commission as its Pavement Management Application. NCE was responsible for delivering the data formatted for this application. The City maintains approximately 565 lane miles of streets in its Pavement Management Application. To manage these assets and be able to proactively schedule maintenance activities, surface distress data was collected on these segments accurately and effectively. The pavement surface distress data collection identified the type of distress present on each pavement segment and determined their severity and quantity. NCE posted the process and formatted the collected data for seamless upload/integration with StreetSaver®.

Pavement Condition Data Collection and Analysis

City of Sacramento, CA

Field Technician. NCE provided professional services to the City for pavement condition data collection and updating of the City's Pavement Management Application. The Pavement Management Application update included data entry of field survey results into the City's StreetSaver® Pavement Management Application database. To maintain an adequate transportation infrastructure, the City of Sacramento typically performs yearly pavement condition data collection on all City arterials, and 1/3 of the rest of the road network. This amounts to approximately 630 survey miles each year. The last data collection occurred in 2019 and is currently loaded in the Pavement Management Application database. Jake performed automated surveys for pavement distress data collection.



Education

Sterling High School, Sterling, IL, 2003

Registrations and Certifications

Orange County Transportation Authority PAVER™ Certification (Expires June 2025)
MTC StreetSaver® Rater Certification Program

Joined NCE

2016

Total Years of Experience

9 years

2020 Pavement Management Program Update

Willdan, City of Elk Grove, CA

Field Technician. As a subconsultant to Willdan, NCE is providing pavement management services for the City of Elk Grove. Scope of services includes a review of the scope of work, an inspection of the work plan, project schedule, and budget analyses. NCE is performing pavement condition surveys per the Metropolitan Transportation Commission distress protocols on half of the arterials and collectors and one-quarter of residential streets in the City. All data collected from the condition inspections will then be uploaded into the StreetSaver® database. NCE provides quality control of condition inspection data, then performs the Pavement Condition Index calculations, and corrects any errors found. NCE is reviewing the maintenance and rehabilitation strategies with City staff and recommending appropriate treatments in the decision tree. NCE is also performing a budget needs analysis using an analysis period to be determined by the City. This identifies maintenance and rehabilitation requirements for each street section and determines the total maintenance and rehabilitation requirements over the entire analysis period.

Pavement Technical Assistance Program 2021

Metropolitan Transportation Commission, San Francisco, CA

Field Technician. NCE was selected to help local jurisdictions better manage and maintain their streets and roads. The focus of Pavement Technical Assistance Program Round 22 (Pavement Technical Assistance Program 22) and later rounds will be to maintain existing Pavement Management System databases while providing each jurisdiction's decision-makers with information that allows them to better manage and maintain their local pavement assets and to advocate for increased funds for pavement maintenance if funding gaps exist. The types of projects include performing pavement inspections and database updates for Pavement Management System and Non-Pavement Asset Management Data Collection.

2020 Pavement Management Program Update

Yolo County, CA

Field Technician. The County is responsible for the construction, operation, and maintenance of 757 centerline miles of road, and 147 bridges. The road network includes 33 miles of arterials, 142 miles of collectors, 40 miles of residential roads, and 542 miles of other rural roads. NCE provided pavement management inspections and updated the County's StreetSaver® database.

2019 Pavement Management System Update

City of Citrus Heights, CA

Field Technician. The 2019 Pavement Management System update included a comprehensive automated pavement condition survey and inventory of the City streets and roadway system (approximately 214 centerline miles) and the preparation of various strategies and reports to assist the City in maintaining and rehabilitating said streets and roadway system. The City's previous pavement management software, implemented in 2003, was StreetSaver®, Metropolitan Transportation Commission Pavement Management System v.8. In addition to the pavement condition survey and report preparation, work included the implementation of the current version of the StreetSaver® Pavement Management System and training of staff in the operation of this new software.

2019 Pavement Management Program Update

City of Folsom, CA

Field Technician. NCE assisted in updating the StreetSaver® Pavement Management Program. The City's pavement network is composed of approximately 237 centerline miles of publicly maintained streets, 37 centerline miles of bike paths, and 46 parking lots. The last condition surveys were performed in 2014. For the 2019 update, the City desired to perform pavement condition surveys on the entire network, including streets, bike paths, and parking lots. Jake performed walking surveys for pavement distress data collection.

CERTIFICATE OF ACHIEVEMENT

This is to certify that

Jacob Rajnowski

has completed the requirements of the

MTC StreetSaver Rater Certification Program

with the skills and knowledge on pavement condition
assessment based on the MTC's modified ASTM D6433

Certificate valid until Jul 02 2027

Serial no: 1196



Sui Tan, StreetSaver Program Manager
Metropolitan Transportation Commission



Ken Huisman

Field Supervisor

Mr. Huisman brings more than 35 years of experience in the pavement and infrastructure management consulting industry. Over the course of Mr. Huisman's career, he has provided many aspects of infrastructure management to government agencies across North America. During this time, Mr. Huisman has supervised the creation of large and complex public pavement infrastructure and GIS databases for many municipal, state, and federal projects. Over the course of Mr. Huisman's career, he has developed an extensive portfolio in providing PMS services and is proficient with most off-the-shelf pavement management programs in the marketplace. He is routinely consulted by various agencies to provide helpful solutions that are applied throughout the entire life cycle of public infrastructure management.

Mr. Huisman is a graduate of the School of Engineering at Georgian College in Canada. He spent 17+ years of his career with Stantec Consulting working his way up to Senior Associate before founding Mission Geographic in 2007, now known as märker geospatial, a firm dedicated to providing public works users and decision makers with a variety of innovative and useful infrastructure asset management tools. His experience with various operation management software technologies together with data collection and GIS mapping services—such as infrastructure asset inventories, condition assessments, GIS field infrastructure mapping, and 3D reality capture using LiDAR, has made him a great resource for all the clients that he works with.

Representative Projects

Mr. Huisman has worked collectively with the NCE team on many pavement management projects for many cities and counties in California as noted below:

- Anaheim
- Bakersfield
- Baldwin Park
- Beverly Hills
- Calaveras County
- Clearlake
- Citrus Heights
- Contra Costa County
- Davis
- Diamond Bar
- Elk Grove
- Fresno City/County
- Glenn County
- Hermosa Beach
- Highland
- Humboldt CAOG
- Kern County
- Kings County
- Lake County APC
- Lakeport
- Madera City/County
- Manhattan Beach
- Mendocino COG
- Merced County
- Monterey County and Cities (TAMC)
- Metropolitan Transportation Commission
- Orange County
- Rancho Cordova
- Redondo Beach
- Rocklin
- Sacramento City/County
- San Diego County
- San Francisco City/County
- Santa Barbara City/County
- Santa Cruz City/County
- Santa Maria
- Shasta County
- Siskiyou County
- Stanislaus COG
- Thousand Oaks
- West Sacramento
- Woodland
- Yolo County
- Yorba Linda
- Caltrans



Education

Environmental Engineering Degree, School of Engineering, Georgian College, Ontario, Canada, 1997

Registration/Certifications

Registration/Certifications
MTC StreetSaver® Rater
Certification Program
OCTA Prequalified for
Automated Data Collection

Joined märker

2007

Total Years of Experience

35 years

John Zimmer, MS

Field Data Collection Coordinator

Mr. Zimmer has more than 30 years of experience in transportation engineering. With this experience he has become an instrumental part of märker's field team in delivering timely, accurate and reliable data. He always strives to provide the best possible service for each of märker's clients. Mr. Zimmer will be on-site for the entire data collection timeline. He will also provide his extensive pavement profiling and infrastructure management experience to this project. He has hands-on experience in completing pavement data collection, transfer, delivery, and analysis.

Mr. Zimmer is certified by MTC through the StreetSaver® Pavement Inspection Rater Certification Program. The Rater Certification criteria is designed to improve the quality of pavement management data for MTC StreetSaver® program users.

Additionally, Mr. Zimmer is a graduate of the University of Nevada, Las Vegas with his master's in engineering. He also obtained a BS Environmental Engineering at the California Polytechnic State University in San Luis Obispo, CA. Between his academic and professional career, he has gained valuable experience on numerous transportation projects using a multitude of spatial remote sensing and pavement scanning technology.

Accomplishments with Similar PMS Projects

- City of Bakersfield, CA: 1,275-mile network
- Sacramento County, CA: 1,550-mile network.
- Kern County, CA: 2,100-mile network.
- Monterey County and Cities (TAMC), CA: 1,045-mile network.
- Glenn County, CA: 820-mile network.
- Siskiyou County, CA: 440-mile network.
- Madera County, CA: 2,100-mile network.
- City of Fresno, CA: 1,495-mile network.
- Orange County, CA: 460-mile network.
- RTP Washoe County, City of Reno and Sparks, NV: 450-mile Arterial network.
- San Diego County DOT, CA: 1,950-mile network.
- Kings County, CA: 1,250-mile network.
- City of Augusta, GA: 3,500-mile network.
- Columbia County, GA: 850-mile network.
- Adams County, CO: 900-mile network.
- City/County of Honolulu, HI: 2,550-mile network.
- City of Napa, CA: 450-mile network.
- Fort Lauderdale, FL: 375-mile network.



Education

MS, Engineering, University of Nevada, Las Vegas, 2006

BS, Environmental Engineering, Cal Poly State, San Luis Obispo, 1997

Registration/Certifications

MTC StreetSaver® Rater Certification Program

Certified, Operation/Maintenance of Automated Pavement Profiler, ICC ~

ESRI GIS Software Certification, On-line course

Certified, Principles of Radiation Protection Petroleum and Minerals

Certified, Coring & Perforation Field Engineer 1 Halliburton Energy Services

Joined märker

2016

Total Years of Experience

30 years

CERTIFICATE OF ACHIEVEMENT

This is to certify that

Märker Geospatial, LLC

has completed the requirements of the

**MTC StreetSaver Automated Rating
Vendor Certification Program**

with the skills and knowledge on pavement condition
assessment based on the MTC's modified ASTM D6433

Serial no: 1215

Certificate valid until May 28, 2027



Sui Tan, StreetSaver Program Manager
Metropolitan Transportation Commission





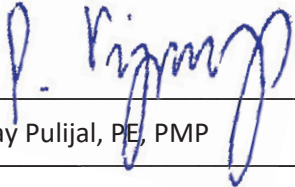
Appendix C
Receipt of Addendum No. 1

PROJECT:

STREETS AVER DATABASE AND INSPECTION SERVICES
Citywide

Received from the City of Lodi ADDENDUM NO. 1 to the specifications for the above referenced project.

Date: February 21, 2026 _____

By  _____
Vijay Pulijal, PE, PMP
Principal

NOTE: This acknowledgment must be submitted with the Bid Proposal.

Collaboration. Commitment. Confidence.

ncenet.com



EXHIBIT C

NOTE: The City of Lodi is now using the online insurance program PINS Advantage. Once you have been awarded a contract you will receive an email from the City's online insurance program requesting you to forward the email to your insurance provider(s) to submit the required insurance documentation electronically

Insurance Requirements for Professional Services

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor, his agents, representatives, employees or subcontractors.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$1,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto or if Contractor has no owned autos, then hired, and non-owned autos with limit no less than **\$1,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease.
4. **Professional Liability (Errors and Omissions)** Insurance appropriate to the Consultant's profession, with limits not less than **\$1,000,000** per occurrence or claim, \$2,000,000 aggregate. May be waived by Risk Manager depending on the scope of services.

Other Insurance Provisions:

- (a) Additional Named Insured Status
The City of Lodi, its elected and appointed boards, commissions, officers, agents, employees, and volunteers are to be covered as additional insureds on the CGL and auto policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 if a later edition is used
- (b) Primary and Non-Contributory Insurance Endorsement
The limits of insurance coverage required may be satisfied by a combination of primary and umbrella or excess insurance. For any claims related to this contract, the Contractor's insurance coverage shall be primary coverage **at least as broad** as ISO CG 20 01 04 13 as respects the Entity, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the Entity, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- (c) Waiver of Subrogation Contractor hereby grants to City of Lodi a waiver of any right to subrogation which any insurer of said Contractor may acquire against the City of Lodi by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City of Lodi has received a waiver of subrogation endorsement from the insurer

NOTE: (1) The street address of the **CITY OF LODI** must be shown along with (a) and (b) and (c) above: 221 West Pine Street, Lodi, California, 95240; (2) The insurance certificate must state, on its face or as an endorsement, a description of the project that it is insuring.

- (d) Severability of Interest Clause
The term "insured" is used severally and not collectively, but the inclusion herein of more than one insured shall not operate to increase the limit of the company's liability under the Contractors commercial general liability and automobile liability policies.
- (e) Notice of Cancellation or Change in Coverage Endorsement
This policy may not be canceled nor the coverage reduced by the company without 30 days' prior written notice of such cancellation or reduction in coverage to the Risk Manager, City of Lodi, 221 West Pine St., Lodi, CA 95240.

- (f) Continuity of Coverage
All policies shall be in effect on or before the first day of the Term of this Agreement. At least thirty (30) days prior to the expiration of each insurance policy, Contractor shall furnish a certificate(s) showing that a new or extended policy has been obtained which meets the minimum requirements of this Agreement. Contractor shall provide proof of continuing insurance on at least an annual basis during the Term. If Contractor's insurance lapses or is discontinued for any reason, Contractor shall immediately notify the City and immediately obtain replacement insurance. Contractor agrees and stipulates that any insurance coverage provided to the City of Lodi shall provide for a claims period following termination of coverage which is at least consistent with the claims period or statutes of limitations found in the California Tort Claims Act (California Government Code Section 810 et seq.).
- (g) Failure to Comply
If Contractor fails or refuses to obtain and maintain the required insurance, or fails to provide proof of coverage, the City may obtain the insurance. Contractor shall reimburse the City for premiums paid, with interest on the premium paid by the City at the maximum allowable legal rate then in effect in California. The City shall notify Contractor of such payment of premiums within thirty (30) days of payment stating the amount paid, the name(s) of the insurer(s), and rate of interest. Contractor shall pay such reimbursement and interest on the first (1st) day of the month following the City's notice. Notwithstanding any other provision of this Agreement, if Contractor fails or refuses to obtain or maintain insurance as required by this agreement, or fails to provide proof of insurance, the City may terminate this Agreement upon such breach. Upon such termination, Contractor shall immediately cease use of the Site or facilities and commence and diligently pursue the removal of any and all of its personal property from the site or facilities.
- (h) Verification of Coverage
Consultant shall furnish the City with a copy of the policy declaration and endorsement page(s), original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time. **Failure to exercise this right shall not constitute a waiver of the City's right to exercise after the effective date.**
- (i) Self-Insured Retentions
Self-insured retentions must be declared to and approved by the City. The City may require the Consultant to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.
- (j) Insurance Limits
The limits of insurance described herein shall not limit the liability of the Contractor and Contractor's officers, employees, agents, representatives or subcontractors. Contractor's obligation to defend, indemnify and hold the City and its officers, officials, employees, agents and volunteers harmless under the provisions of this paragraph is not limited to or restricted by any requirement in the Agreement for Contractor to procure and maintain a policy of insurance.
- (k) Subcontractors
Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that City is an additional insured on insurance required from subcontractors
- (l) Claims Made Policies
If any of the required policies provide coverage on a claims-made basis:
1. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided for **at least** five (5) years after completion of the contract of work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the Consultant must purchase "extended reporting" coverage for a minimum of five (5) years after completion of contract work.
- (m) Qualified Insurer(s)
All insurance required by the terms of this Agreement must be provided by insurers licensed to do business in the State of California which are rated at least "A-, VI" by the AM Best Ratings Guide, and which are acceptable to the City. Non-admitted surplus lines carriers may be accepted provided they are included on the most recent list of California eligible surplus lines insurers (LESLI list) and otherwise meet City requirements.