

PROJECT SUMMARY

PROJECT OWNER
Los Angeles County Metropolitan
Transportation Authority

CONSTRUCTION MANAGEMENT
Hill International, Inc., (Hill)

LOCATION
Santa Clarita Valley, California

PROJECT VALUE
\$679M

PROJECT DURATION
5 YEARS

PROJECT OBJECTIVES

- Ease congestion on a major Los Angeles freeway.
- Streamline workflows to provide real-time data to distributed teams.
- Make critical decisions faster with instant field access via a digital portal.
- Generate consistent project documentation to speed successful claim resolution.

FAST FACTS

- Solution: HeadLight Fieldbook.
- 30,102 Personnel.
- 35,540 Images.
- 1,512 Videos.
- 889 Equipment.

ROI

- Reduced project claims by up to 75%.
- Increased productivity by saving 2 hours per day, per inspector with 1-click report generation.
- Collected up to 200% more information to generate irrefutable project data that lives on beyond the project.

Hill International Leverages Digital Innovation to Deliver Complex Highway Rehabilitation in Southern California

Paving the Way for Growth

Santa Clarita, California is the third-largest city in LA County and is expected to increase its population by more than 25,000 by 2035. [Los Angeles County Metropolitan Transportation Authority](#) (Metro) is tasked with improving mobility and easing congestion on Southern California freeways. Successful delivery of the \$679M [I-5 North County Enhancement Project \(I-5 NCEP\)](#) is critical as this ambitious project will bolster safety, and accommodate booming growth along this 14-mile corridor. Metro chose [Hill International, Inc.](#), (Hill) ranked 6th largest overall U.S. construction management firm by [Engineering News-Record](#) to deliver this large-scale roadway rehabilitation project.



The Challenge: Providing reliable project data in real-time across dispersed teams

An expert in delivering complex infrastructure projects, Hill recognized that implementing a technology-forward approach during construction would minimize risk and reduce the impact of downstream claims. This approach is backed up by [research from Arcadis](#), which found that a leading cause for claims was a lack of compliance or understanding of the project owner's requirements. Consistent documentation and clear communication of the project details are vital for the avoidance, mitigation, and resolution of construction disputes.

The Arcadis report notes that dispute resolution can last an average length of 14 to 18 months, costing project teams over \$30M annually.

The Hill team sought innovative technology to successfully leverage project data workflows and coordinate distributed teams to ultimately prevent claims.

The team set the following goals:

- Standardize the data collected and documentation processes yielding consistent and reliable project data.
- Connect the field to the back office with real-time data to support collaboration, reducing the need for staff to be physically present at the jobsite.
- Create a cloud-based database of project information, readily available to dispersed and remote stakeholders.

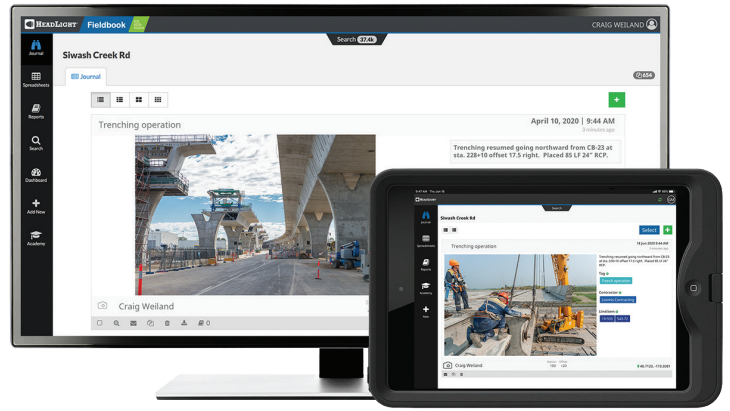
Technology Improves Risk Management in Construction

Digital inspection technology plays a crucial role in helping to mitigate project risk on large infrastructure construction projects such as this. According to study findings by [Dodge Data & Analytics](#), real-time site monitoring was widely recognized as one of the primary functions of technology to reduce risk onsite. However, traditional inspection methods often have limited uniformity in data collection resulting in inconsistent observations, unhelpful reports, and a lack of ability to adhere to industry best practices. Hill leveraged HeadLight's capabilities to create consistency in inspection workflows and reporting. This uniformity paired with real-time remote access allowed for the immediate identification of potential issues and fluid communication.

Improving Stakeholder Confidence with Real-Time Data

Hill's innovative use of field data not only minimized project risk, but also allowed all stakeholders to be confident they had the most up-to-date information. This transparency empowered decision-making and reduced delays.

Inspectors took observations of the project throughout the day, which created a comprehensive overview of the project. These observations included photos and videos from the job site and sheets to track equipment and personnel in the field. Inspectors were able to upload reference files, flag areas of on-site concern, and use data validation tools to further ensure the accuracy of project information.



All project observations were then automatically added to the Daily Work Reports (DWR), saving up to 2 hours of additional administrative work time per day, per inspector. Faster, more timely reporting resulted in a myriad of benefits including timely payments, better projection of project trends, and reducing or avoiding costly rework.

Given the scope of this project, a 24/7 schedule, and a large number of inspectors, contractors, and staff, this standardization improves accountability and transparency across teams. Stakeholders not only have a portal to see what's happening in real-time, on-site—the collected data was also integrated into other systems to streamline workflows. This enabled project stakeholders to identify and address potential risks promptly, minimizing the chances of costly errors, delays, or rework.



Mitigating Risk with Technology

The ongoing data validation and robust reporting not only ensured that issues were resolved in real-time but also built an easily searchable bank of data as a single source of truth. This data was stored securely in the cloud making it easily accessible to all stakeholders regardless of physical location. In the event of a dispute, it was easy to mine this project database to review and resolve disputes quickly.

Ongoing Benefits

While Hill's use of Fieldbook brought instant value to this project by providing real-time data during construction, Metro will benefit for years to come by having access to archived, well-organized data and reports covering each phase of the I-5 NECP rehabilitation. This information will provide insights into cost estimating, construction phasing, and delivery, ultimately serving as a critical resource in optimizing Hill's projects for years to come.

With construction ongoing and poised to complete in 2026, I-5 NECP will create a more efficient, smooth driving experience in the area for locals and travelers alike, and serve as an instrumental component in Metro's Long Range Transportation Plan to more resilient, sustainable, and accessible transportation within LA County.

Reduce project risk with improved field data collection with HeadLight

HeadLight offers Hill's integrated construction team a field-friendly inspection and documentation approach that seamlessly connects the field with the office. By leveraging HeadLight, Hill International can create an irrefutable, clear, and comprehensive project database, guaranteeing the highest standards of project quality.

“Bigger and more complex projects requiring coordination among multiple stakeholders will require sophisticated delivery methods and rapidly changing technology.”

— Roy Cooper,
PE Head of Contract Solutions,
North America at Arcadis

Schedule a demo to learn how you can reduce your risk with field inspection software from HeadLight.