Achieving State of Good Repair with Facility Condition Assessments

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Advancing Infrastructure

The Federal Transit Administration (FTA) Facility Condition Assessment guidebook was released in April 2017, and it introduced new data collection and reporting requirements for transit agencies. Per the MAP-21 legislation, transit agencies are now required to routinely collect and report facility conditions to the National Transit Database (NTD). Bentley's OpenRail facility condition assessment module is purpose-built for FTA Facilities and Inspections and is the ideal solution to satisfying the new FTA requirements and advancing any agency's Transit Asset Management (TAM) Plan.

With limited resources and tight budgets, transit agencies now have a new responsibility to comply with these requirements. To satisfy the updated regulations, agencies are required to report the condition of each facility supporting transit operations, including administrative and maintenance facilities as well as passenger and parking facilities. The guidebook outlines a new methodology for collecting, aggregating, and reporting facility data to the National Transit Database. Facility condition assessments must be conducted by assessing the condition and assigning a rating for facility assets using FTA's Transit Economic Requirements Model (TERM) scale. Additionally, the rule requires assessments to be at a level of detail sufficient for monitoring and predicting the future performance of assets for investment prioritization within the agency's TAM plan.

Transit agencies are newly tasked with incorporating facilities into their TAM Plans, creating policies around these condition assessments, performing the assessments, and implementing capabilities to support their staff in assessment planning, data collection, investment planning, and reporting this information to the FTA. Few cost-effective facilities management solutions are available on the market. Typical solutions in use today include rudimentary capabilities such as Microsoft Access or Excel or large Enterprise Asset Management (EAM) systems. Microsoft-based applications are difficult to securely manage as a single source of truth with multiple contributors, and EAM's require significant investments and lengthy implementation rollouts.

Bentley's Facility Condition Assessment offering is a set of tailored and streamlined capabilities specifically designed to support the new FTA requirements. These capabilities are part of Bentley's OpenRail Asset Reliability solution, which is proven and capable of supporting the entire process from maintaining the facility inventory, inspection planning, field data collection using mobile devices, electronic inspection reviews, and back office reporting. The module includes standard configurations for detailed data collection of all facility components, automatically calculates the overall facility condition assessment score per the FTA guidebook, and supports the FTA reporting requirements. Mobile data collection capabilities enable inspectors to quickly record facility conditions in the field with a mobile device that uses familiar and purpose-built forms. Transit agencies can achieve significant cost savings by leveraging the out-of-the-box module, which enables rapid deployment of the solution to achieve immediate results in the hosted and purpose-built web and mobile applications. Although this solution ensures compliance with FTA requirements, administrators can further tailor the application by utilizing the included configuration capabilities to quickly extend the inventory and condition assessments based on specific agency needs. Doing this mitigates change management risk and provides a consistent method to produce high quality decision support outcomes and prioritization.

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It is critical that agencies deploy comprehensive capabilities for reliability strategy development, inspection, maintenance, and management of all transit assets. Being built on Bentley's OpenRail platform, the Facility Condition Assessment module affords agencies an opportunity to expand beyond facilities to take advantage of Bentley's entire OpenRail for Asset Performance solution for their transit inventory. OpenRail integrates operational asset data to support multiple operational objectives, from inspecting and reporting to capital-project decision making. By implementing OpenRail Asset Performance, many agencies have the power to determine optimal maintenance strategies across facilities, track, rolling stock, and equipment and have seen millions of dollars in cost savings through improved maintenance efficiency, reduced salary costs, and the ability to reinvest those savings into capital projects. Utilizing these capabilities is enabling agencies to reduce risk, improve safety, achieve higher customer satisfaction, and avoid potential loss of ridership.

Industry-leading rail and transit organizations are developing and implementing enterprise-wide information systems and processes in compliance with emerging BIM and asset management standards to ensure consistent application across all planning, projects, operations, and maintenance functions. Many agencies rely on OpenRail for Asset Performance to support their journey to digitalization by empowering effective asset management practices and enabling BIM management of information through the whole lifecycle of a built asset. As a result, these agencies have a spatially-enabled common data environment to manage rail, transit, bridge, and tunnel assets and related information for infrastructure operations. It delivers complete information management during the transportation infrastructure's operating life and supports safe and reliable life extensions.