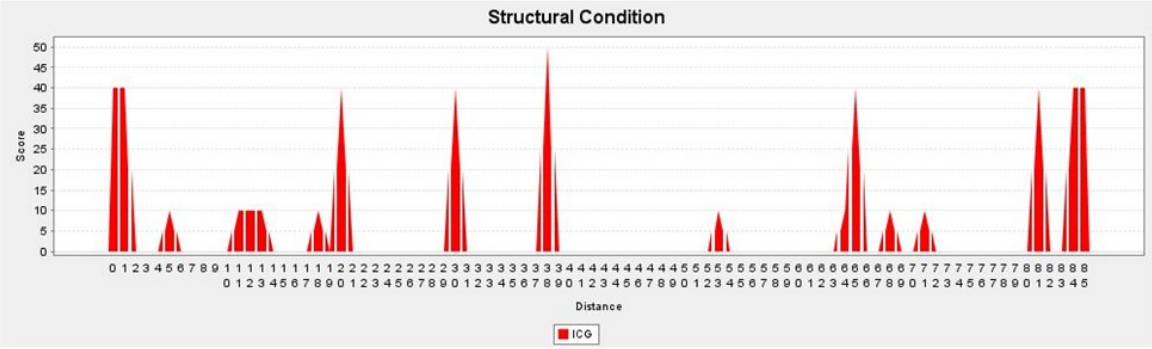
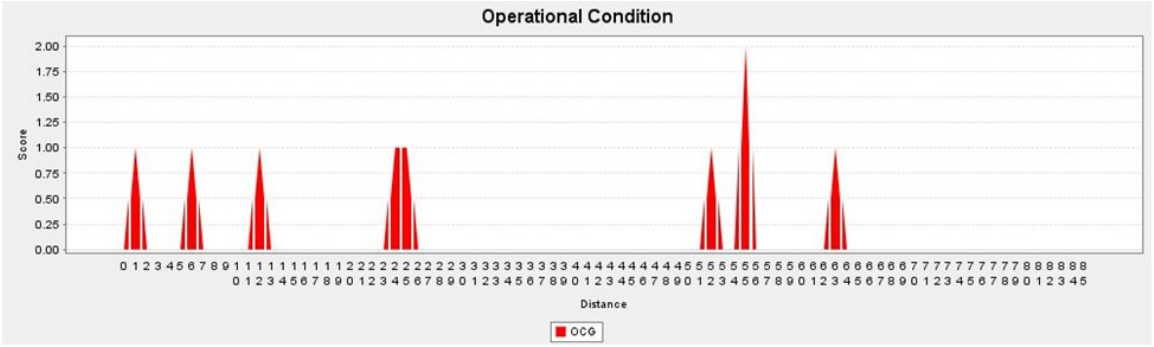
CCTV Analysis

Riva DS supports various analysis modules developed to meet specific user requirements. One of these modules is the CCTV analysis module. This provides Riva DS with the ability to load, analyze and utilize Closed Circuit Television (CCTV) inspection data in developing accurate current condition data on underground linear assets. Once loaded, inspection data for structural and operational defects can be used to determine actual issues affecting the subject assets, and subsequently the best treatment selection to address those issues. Historical inspection data is retained in the Riva system, providing a means of tracking defect progression over the lifespan of an asset.



Inspection Data

Typical inspection data is contained in a header record and associated detail records. The Riva DS CCTV Inspection system mimics this framework. Support for the full WRC and PACP defect scoring frameworks is built into the system, and other scoring frameworks can be added at any time. Riva DS uses the built-in Excel loader to make loading header and detail records simple. Detailed defect data is represented linearly for easy reference. Weighting of the scoring frameworks can be adjusted to fit your own requirements for priority of defect.



Analysis Process

Each inspection is examined for detailed structural and operational defects. Structural Defect Indexes are built using standard methodologies, or you can tweak the scores to fit specific requirements. These SDI ratings provide an overall structural integrity value for the entire segment, using the worst segment as the baseline. In addition to maximum scores, mean scores and average scores can also be calculated. Structural defects like deformations, dropped inverts, holes and cracks all inform what repair, relining or replacement activities are best to maximize segment life and minimize risk and cost.

Operational defects are also analyzed to determine how well the segment can meet operational requirements. Debris, infiltration, encrustation, and other operational defects can be evaluated for prioritization of flushing, cutting or machine cleaning activities. In addition, structural defects can be examined to inform when maintenance activities may not be the best option.

By utilizing defect details, the Riva analysis becomes a powerful tool for managing underground linear infrastructure. The end result is a profile of where inspection dollars are best spent to address high priority and marginal infrastructure assets.

Defect profiles can be viewed as a table or in a graphical linear view, allowing for instant identification of problem areas along the segment length.