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# RAILVISION™

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ENABLING EFFICIENT RAIL TRACK INSPECTIONS  
BY RAPIDLY GENERATING ACTIONABLE RESULTS  
FROM VISUAL SPECTRUM IMAGERY



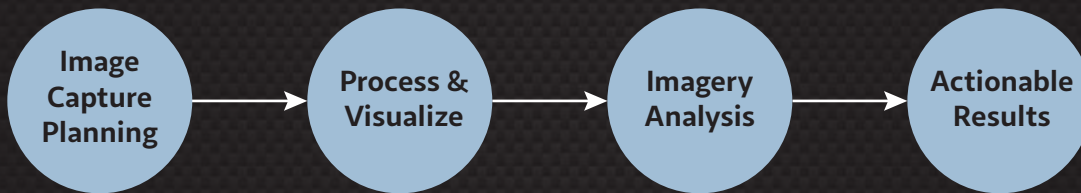
Key Consultants & Solution of Choice for **BNSF**  
RAILWAY

# Results. Fast, Safe, Accurate.

When it comes to supplemental railroad track inspections, today's railway companies are faced with several business challenges, including (1) the ability to conduct track inspections without equipment occupying the track, (2) the extraction of relevant and actionable information, and (3) the timely delivery of results. The use of unmanned aircraft provides a solution to the first challenge by moving the data collection task off of the rails and into the sky. Bihle Applied Research Inc. has developed a solution called RailVision that addresses the two remaining challenges.

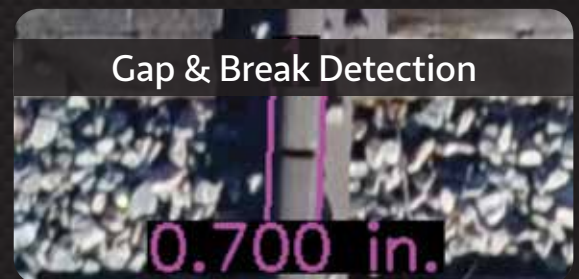
RailVision is a hybrid-cloud software solution that automates the processing of terabytes of aerial imagery for the detection of dozens of unique features and the rapid reporting of actionable results. RailVision provides the capability to inspect hundreds of miles of track, assessing multiple tracks simultaneously and covering a wide range of detections including concrete & timber tie condition, frog condition, switch position, missing fastener detection, spike/hole pattern, rail break/gap detection & ballast fouling. RailVision is a proven technology that is available today and serves as the single solution selected by BNSF Railway for its UAS-based supplemental track inspection activities.

## PROCESS



## 7 features representing multiple unique detection points

- Multiple rail tracks and gauge
- Rail breaks
- Crosstie slew, spacing, and count
- Crosstie type and condition
- Fastener type and count
- Switch detection and position
- Ballast fouling



## Benefits:

- Improved safety & regulation compliance
- Improved productivity and faster results
- Consistent, repeatable processes
- Improved efficiency leading to lower costs
- Highly effective qualitative & quantitative analysis

