

FRA's ATIP – Automated Track Inspection Program: TRB Update 2021

Research to reality

FRA pioneered automated track inspection technology now used by every Class I railroad

ATIP fleet

- 3 Crewed geometry platforms
- 2 Non-crewed geometry box cars
- 1 Flex platform (operable with or without crew)
- 1 Hi-rail geometry vehicle
- 1 Hi-rail ultrasonic rail test vehicle (in development)

FRA has three contractors for ATIP

- Two of the three contracts are under recompet
- New contracts will be awarded by the end of FY 22

ATIP Operations	2020	2021 (Thru 10/31)
Miles Surveyed	130,439	119,474
Total Exceptions	9,444	5,955
Safety Critical Exc.	1,786	1,530

Data collected by ATIP vehicles support:

- Track safety trend analyses
- State of good repair assessments
- Provide data to railroads for targeted repairs and improved maintenance
- GIS mapping
- Risk analyses
- Manual inspection resource allocation
- Foot-by-foot analyses
- Asset inventory
- Research by various departments, agencies, universities
- Machine learning
- Research and development