

# FRA's ATIP – Automated Track Inspection Program (December 2022)

## Research to reality

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

## ATIP fleet

- 3 Staffed geometry platforms
- 2 Autonomous geometry box cars
- 1 Flex platform (operable with or without crew)
- 1 Hi-rail geometry vehicle
- 1 Hi-rail ultrasonic rail test vehicle

## FRA has three contractors for ATIP

- Two of the three contracts are under recompet
- New contracts will be awarded first half of CY 23

ATIP Operations	2020	2021	2022 (Thru 11/30)
Miles Surveyed	130,439	152,670	171,089
Total Exceptions	9,725	7,951	8,848
Safety Critical Exc.	1,786	1,898	2,034

## 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