April 2018
NPS Presentation at GAC
Presentation on one of the Transportation Programs
NPS Navigator 2.0

Navigator is a web map application intended to provide transportation planners and related officials in the NPS, DOI, and DOT with a suite of map overlays that depict NPS road infrastructure conditions along with contextual reference data (demographics, political boundaries, NPS regional boundaries, et al). For:

- Project Planning
- Information Reporting
- Performance Management
FHWA Federal Lands Highway Office & The Road Inventory Program (RIP)

- Mid 1970’s tasked to identify surface condition deficiencies and corrective priorities on NPS roads and parkways.
- Also tasked with establishing an integrated maintenance features inventory, locating features such as culverts, guardrails, signs etc.
- Thus entered into an MOA that Established the Road Inventory Program or RIP.
The Road Inventory Program (RIP)

- In the 1990s, a cyclical program was developed that relied heavily on electronic data collection and computer technology.
- Cycles are a group of parks that will be Inventories over a period of time ranging from 3 to 8 years.
- In 2005, the FHWA began implementing the use of a Pavement Management System (PMS) to assist the NPS in prioritizing Pavement Maintenance and Rehabilitation activities (ex. Pavement Condition Rating or PCR).
- Currently on cycle 6 (2014 – 2020).
NPS RIP Cycle 6

(last updated on: 5/26/2016)

[Map showing RIP status for parks across the United States, including legends and notes on DC parks not shown on map.)
The Road Inventory Program Data (RIP)

- RIP data delivered as a Geodatabase.
- Linearly referenced product.

**Tables**

- **BIP_STRUCTURES**
- **MAINTENANCE_DISTRICT**
- **PARK_TOTALS**
- **PMS_20**
- **PMS_FEATURE**
- **PMS_FEATURE_BRIDGES**
- **PMS_FEATURE_Frequency**
- **PMS_MILE**
- **PMS_TENTH**
- **ROUTE_GPS**
- **ROUTE_ID**
- **ROUTEID_COMP**
- **SAFETY**
- **SAFETY_SPT_LOC**
- **TRAFFIC_LINKS_CY3**

**Feature Classes**

- **MRL** – Manually Rated Lines. Linear features that could not be collected by Data Collection Vehicle (DCV).
- **MRP** – Manually Rated Polygons, same as line.
- **PKG** – Parking polygons collected by the DCV.
- **Route_Condition** – Linear referenced product derived from the Route feature class and the PMS_20 table.
- **Routes** – Roads collected by the DCV.

- **PMS_20** – Pavement Management System info in intervals of .02 miles
- **PMS_FEATURES** – Roadside features (Signs, retaining walls etc.) collected in C4 and C5 only based on funding.
- **ROUTE_ID** – Route information by route records.
Navigator Home page

https://navigator.nps.gov/

As of March 2018
Navigator 2.0

• Use Case – Live Demo using Yellowstone
  – The following are items to be shown.
    • Data Sources
    • User control for sources – Legend (toggle)
    • RIP Cycle
      – Cycle 4, Cycle 5, Cycle 6 and aggregate
    • Road View
    • Query tool
    • Reports
    • Search tool
Navigator – B/U material

• I will use the live site, but the following slides are for back up support if needed if the internet is down.
Menu Bar

Map Gallery
- Park Tiles
- Streets
- Imagery with Labels
- Light Gray Canvas
- Topographic

Reports
- BIP Reports
- GIP/WIP Reports
- RIP Reports
- National Transit Inventory

RIP Cycle

Info

Search...
Legend Features

- Bridge Inspection Program
- Federal Boundaries
- Traffic Count
- Park Boundaries
- Crashes
- Roads Aggregate
- Guardrail Wall Inventory Program
- Political Boundaries
- Demographics
Legend Features Cont.
Demographics - % Housing
Demographics – Population Density
Congressional Districts
Select a Park
Road conditions - Rip Cycle
Detail pop-up

- National Park Service Boundaries
  - Park Name: Yellowstone National Park
  - Park Alpha: YELL
  - Unit Type: National Park
  - Zoom To

- Pavement Condition
  - Route Identifier: YELL-0010E
  - RIP Cycle: 6
  - PCR: 95
  - Park Alpha: YELL
  - State: Wyoming
  - Beginning Milepost: 88.777
  - Ending Milepost: 88.797
  - Number of Lanes: 3
  - Lane Number: 1
  - Zoom To
Detail pop-up
Road viewer – Auto scroll
Grid View - Category
Grid View – Select Area
Traffic Count - Location and Stats