Trails Dashboard

Pavement Condition Index

March 19, 2024

ARLINGTON
VIRGINIA

Overview

- Background

- Pavement Condition Index

- Methodology

- Lessons Learned

Overall Trail Network

- 48+ miles paved off-street trails
- 35+ miles maintained by Arlington

Public Space System

- public spaces
- primary multi-use trails
- planning corridors

Background

- Public Spaces Master Plan (2019)

  - Hiking and paved trails among top 3 requested assets during engagement

- Heavy weekly use (last 7 days):

  - W&OD (EFC) – 5,773

  - Crystal City Connector – 5,182

  - Custis Trail – 3,963

Pavement Condition Index (PCI)

- Based on pavement ride quality, cracking, potholes, streaking, wash-boarding, flushing, and crowning

- PCI scores calculated following methods in American Society for Testing and Materials D6433

  - Based on the "distress" observed on the surface of pavement
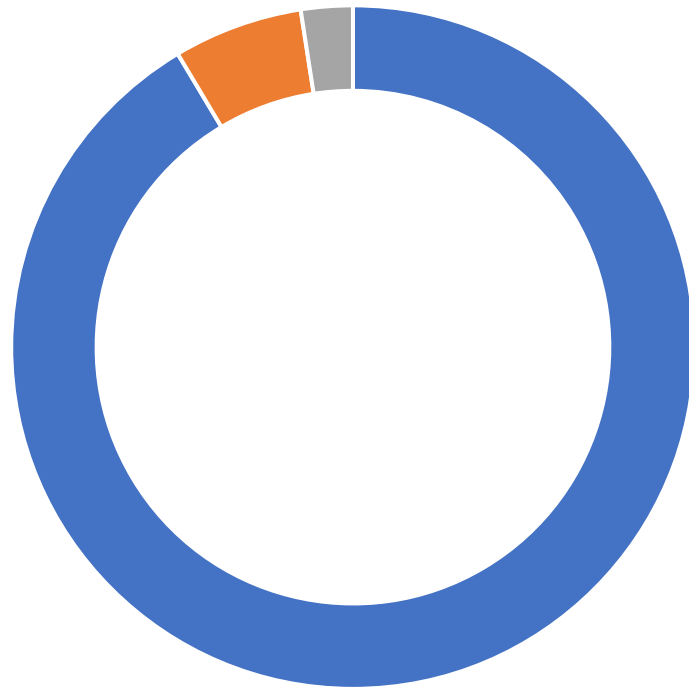
Source: Wisconsin DOT

Methodology

- Digital modeling of trail surfaces (2018)
  - Lasers to detect imperfections
- Visual tracking on-foot, then by vehicle (2022)
- No pavement testing, exploratory probing, dismantling, or subsurface studies were performed
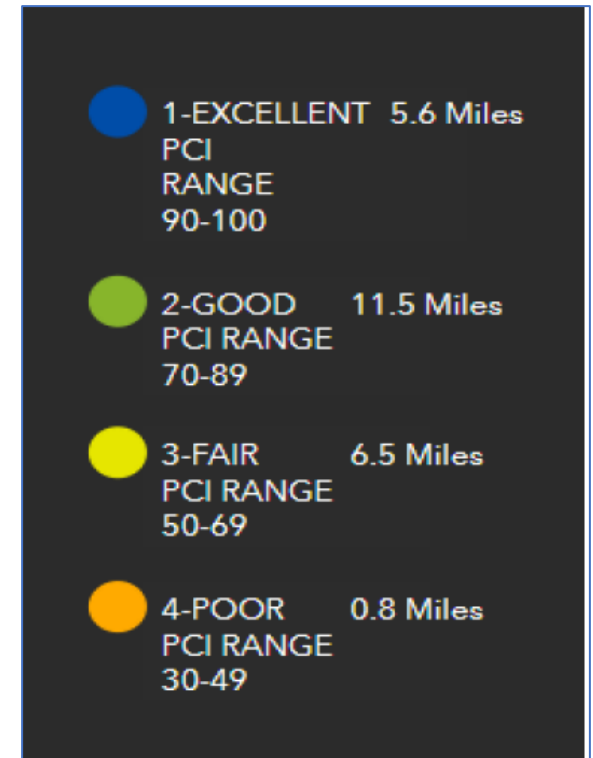
2022 Trail Surface Results

- Asphalt - Concrete - Pavers

- 24.4 mi. studied
  - 22.4 mi. asphalt (Avg score 77)
  - 1.5 mi. concrete (Avg score 87)
  - 0.6 mi. pavers (Avg score 98)

1-EXCELLENT   5.6 Miles
PCI
RANGE
90-100

2-GOOD   11.5 Miles
PCI RANGE
70-89

3-FAIR   6.5 Miles
PCI RANGE
50-69

4-POOR   0.8 Miles
PCI RANGE
30-49

1-EXCELLENT

2-GOOD

3-FAIR

4-POOR

GIS Mapping Center, Arlington County, Va

Lessons Learned

- PCI studies have helped the County prioritize resources

  - Next review in 2026

- Average PCI score of 78 for entire network ("Good" range) as of 2022

  - Roadway PCI is 83.3 (November 2023)

- Longevity approx. 25-30 years

- Tree root heaving biggest factor in trail surface degradation

Questions?

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