



# Washington Metropolitan Area Transit Authority

## Moving from “Build It and They Will Come” To “Maintain It So It Will Last”

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# Build It: 1976-2013

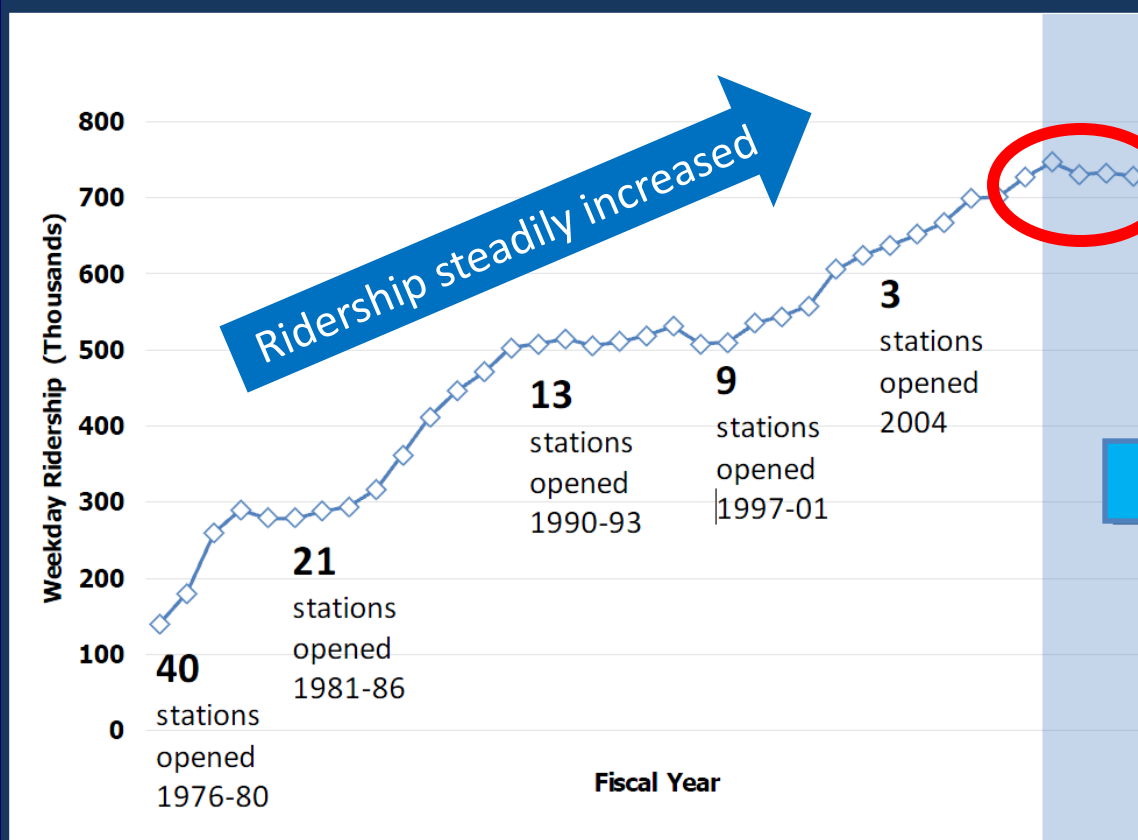
Metro has undergone three major phases of construction:

- Construction 103-mile system (83 stations) by Metro (1976-2001)
- Jurisdictions initiated and funded limited extensions/infill stations, construction by Metro (2001-2004)
- Jurisdictions lead, fund, and construct extensions (today)



# Did They Come? Yes.

## ...but now declining.



FY 2009 marks a notable shift

- “Pause” on expansions
- Accident in 2009
- Age is showing (50% of rail delays due to cars)

**Why?**

# Shifting to “Maintain It So It Will Last”

## Example #1: Rail Fleet Average Age

1,100 rail cars

= Asset management

22 Years today  
Declining reliability



16 Years in 2018  
First replacement cars



# Shifting to “Maintain It So It Will Last”

## Example #2: Escalators

Preventative Maintenance Inspection Compliance  
588 escalators

- **588 escalators** (most of any U.S. transit agency)
  - **75% of units over 25 years old**
  - Exposure to extreme conditions
  - Manufacturers out of business
- Preventative maintenance compliance improving
  - Jan/Feb 2012 = 84%
- Result: approx. 70% of maintenance hours spent addressing unscheduled repairs (2010) down to approx. 50% of maintenance hours (Q1 2012)
- Positive impact of unit availability

**44% in 2010**



**64% in 2011**



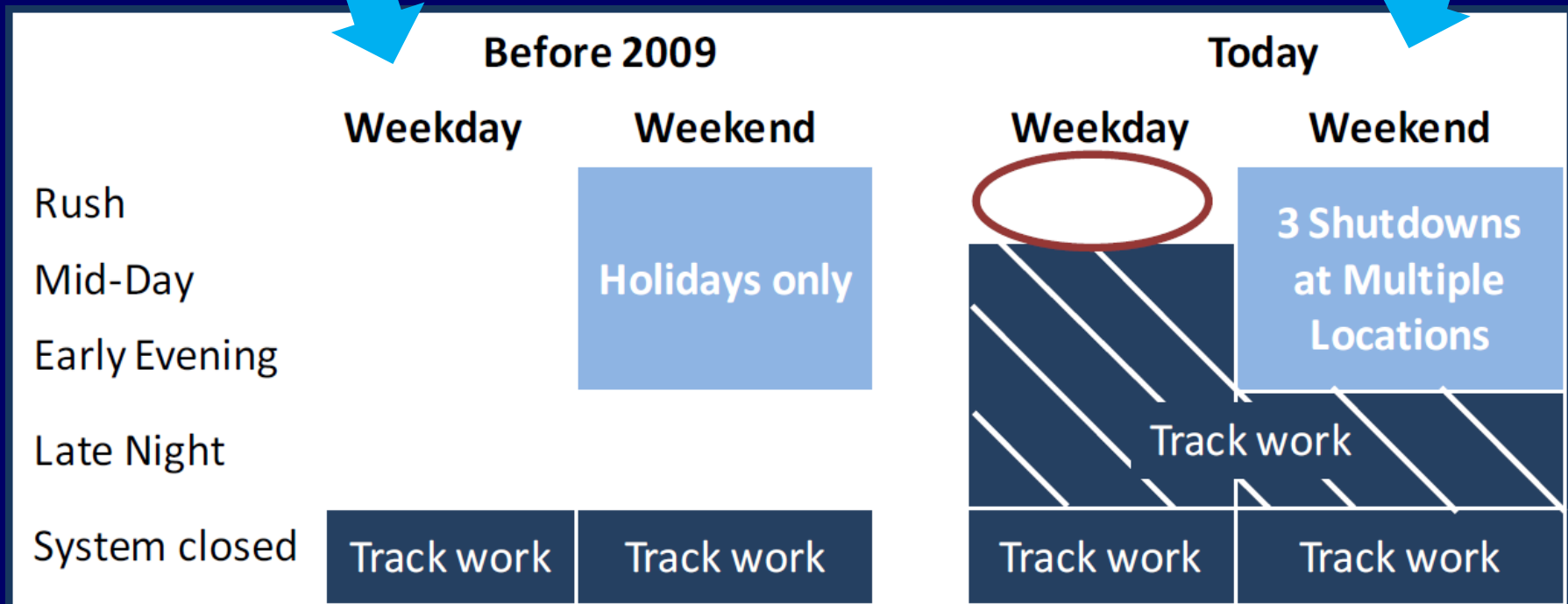
# Shifting to “Maintain It So It Will Last”

## Example #3: Track Maintenance Window

106 route miles

Limited window for track work  
(~ 3 hours/day)

Aggressively scheduling track work  
Conducting work when system  
operating; shutting down station(s) for  
~ 3 weekends/month



→ Result: maintenance backlog decreasing but OTP suffering



# Making the Case to “Maintain It So It Will Last”?

Will we be successful in prioritizing maintenance? A hard sell...



- Customer must endure maintenance work WHILE using system
- We're not making “shiny new things” with a ribbon
- Need to define when we will be finished



adding to the [#redline](#) [#wmata](#) annoyances this AM -> the Tenleytown section was closed recently for 'repair', what did they do? tidlywinks?



Delays due to another "cracked rail". Glad all the Metroforward weekend shutdowns are paying off [#wmata](#)

# What lessons can we apply to new Silver Line?

The Silver Line represents an opportunity to “maintain it so it will last” AND “build it so they will come.”

We will need to:

- Manage assets from the start
- Break down agency silos



# Parting Thoughts: Making the Case for Maintenance

## Manage Assets

- Asset management is not a system but a process

## Communicate Maintenance Benefits

- We need to make maintenance the “it” thing

## Federal Transit Administration



- FTA: partner with agencies (learn from FHWA’s role in asset management)

## U.S.-Based Benchmarking

- Learn from peers

# Contact Information

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