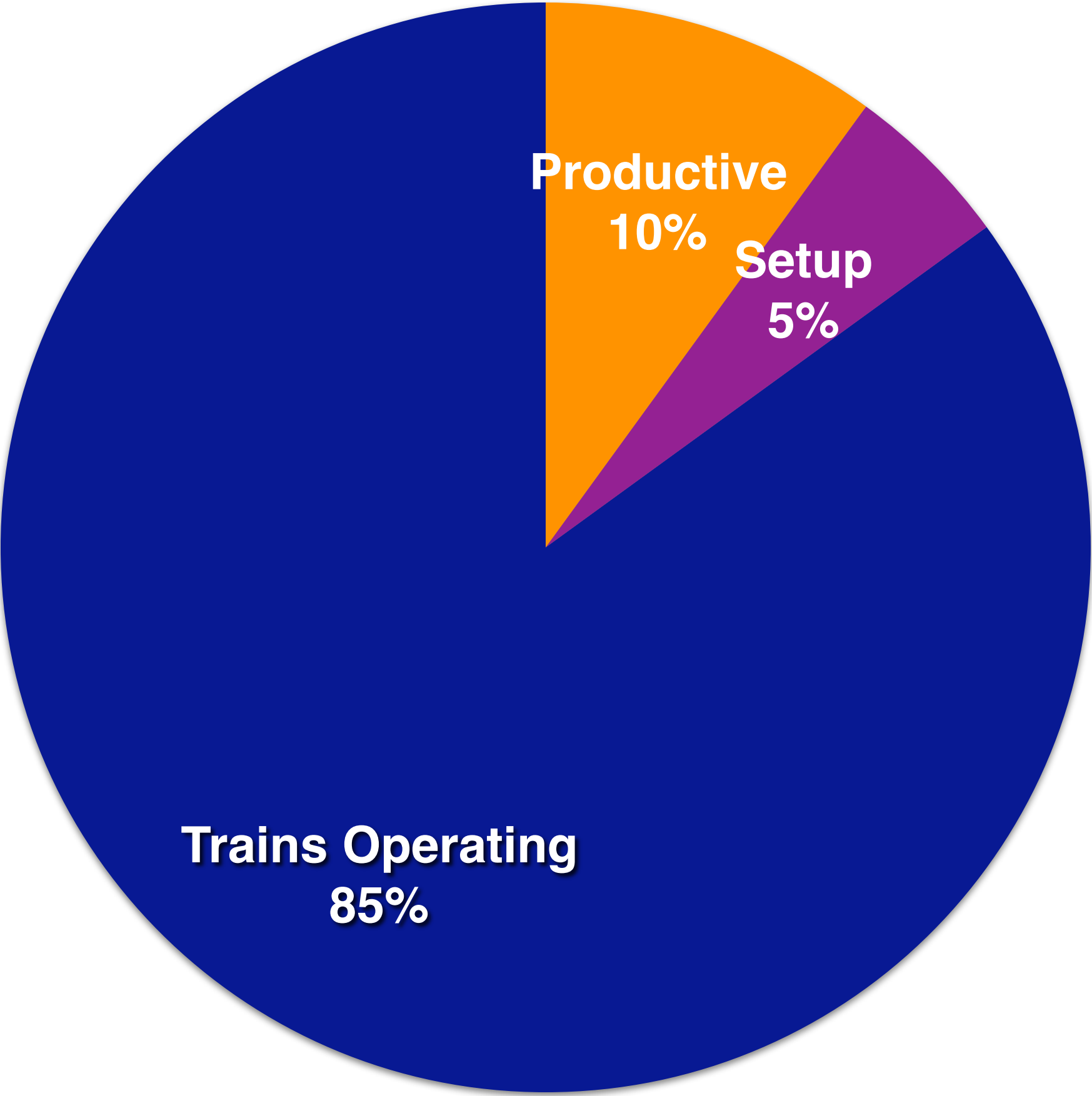




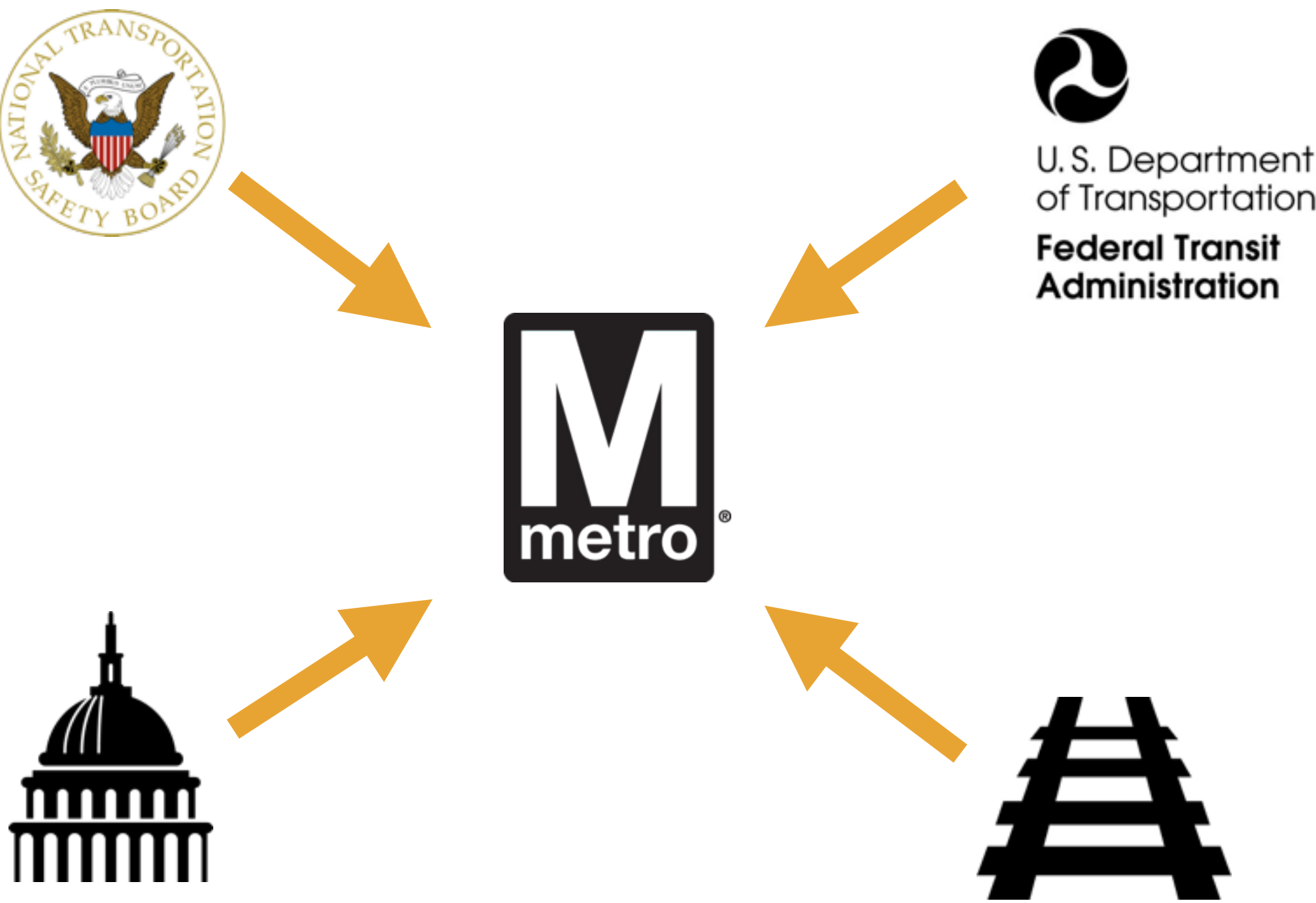
SafeTrack Plan

DRAFT May 6, 2016
** UPDATED 4PM **

Track Access Demands Continue to Increase



Metrorail open **135** out of **168** hours/week



- NTSB Recommendations
- FTA Safety Directives
- Congressional Mandates (e.g. Radio System, Cellular Installation)
- Deferred Maintenance
- Routine Maintenance

- **Massive effort to address safety recommendations and rehabilitate system on accelerated basis**
- **3 years worth of work accelerated into approx. 1 year**
- Includes expansion of track-work hours on weeknights, weekends and during certain rush hours — both above ground and in tunnels
- Achieves safety and state of good repair of basic track structure and advances critical NTSB/FTA work
- Includes line segment shutdowns of less than one month
- Uses contractors to augment existing workforce

SafeTrack: New Right-of-Way Access Plan



SafeTrack reallocates access to tracks for passenger trains and safety work:

- **WEEKNIGHT:** Maintenance crews start at 8PM on weeknights (adds 2 hours of productive time)
- **WEEKENDS:** Close system at **midnight** on Friday and Saturday (adds 6 hours/week).
 - Midnight closings will start Friday, June 3.
(Last 3 a.m. closing Saturday, May 28.)
- **MORATORIUM ON EXTENDED HOURS:** No additional early openings or late closings during SafeTrack. Will reevaluate once system is in state of good repair
- **SAFETY SURGES:** Long-duration outages on selected line segments

Expected Work Elements

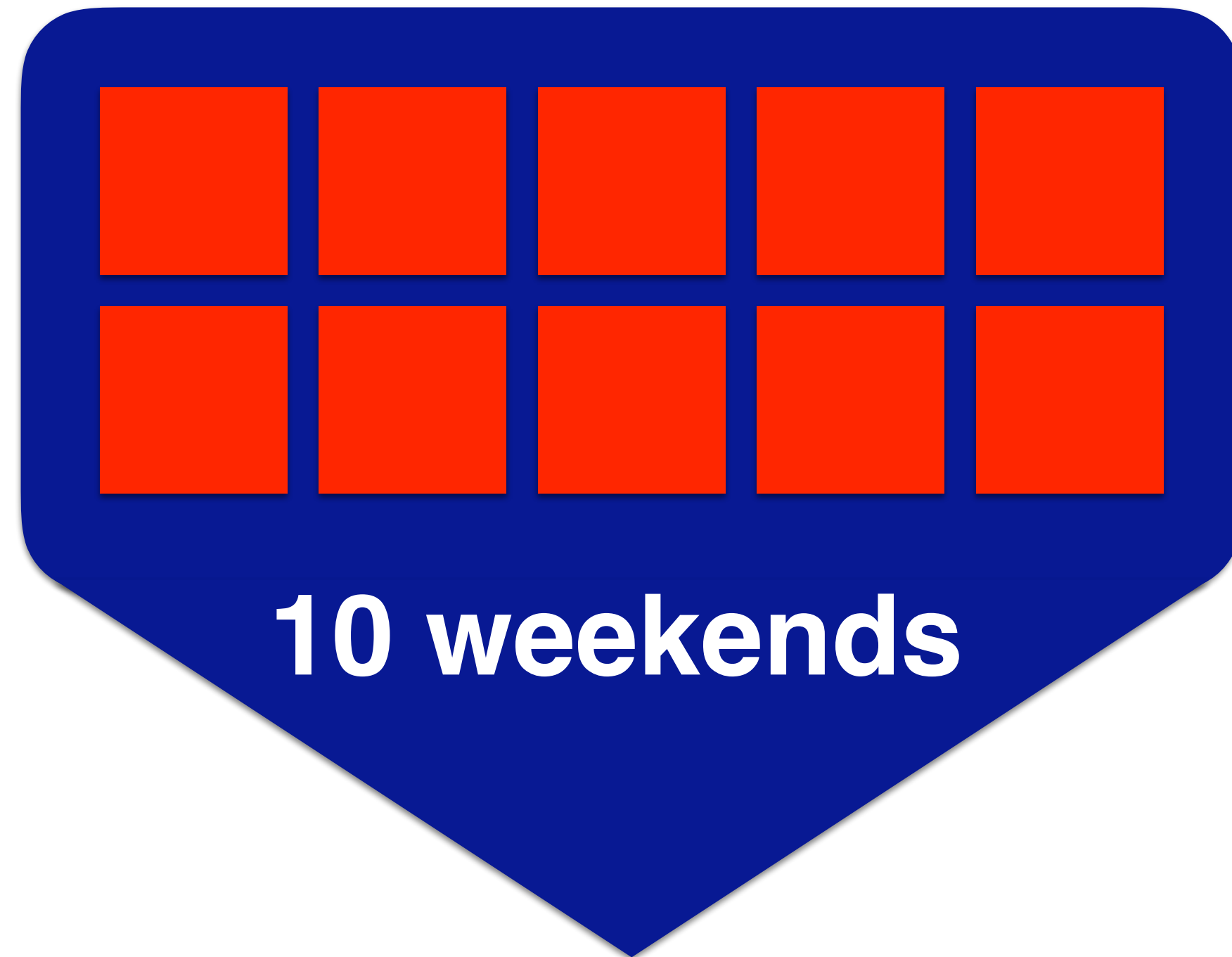


- Tunnel lighting
- Third rail cables/boots
- Emergency signage
- Debris clearing
- Ventilation work & fan control
- Tunnel washing
- Insulator replacement
- Fastener replacement
- Rail renewal
- Radio system/cell phone installation
- Interlocking maintenance
- Third rail cover boards

- Requires **continuous track outage** for **long duration**
- Primarily **above ground** where longer-duration outages most needed
- Frees up resources for underground work on nights/weekends
- Type of work that cannot be achieved via weekends or “early outs” alone
- Impacts rush hour service — many riders will be impacted; encouraged to use alternate travel options if possible
- Shuttle buses will serve closed stations; transit service maintained at all times, although service levels will be reduced significantly
- Will require regional coordination, resources, communication and shared pain

- Installation of NTSB-recommended **boots and seals** on all 3rd rail cables by end of summer*
 - Note: All underground boots will be retrofitted by end of this month
- Replacement of **12,000 insulators**
- Remove **3rd rail expansion joints in underground system**, reducing risk
- Eliminate **ALL temporary gauge bars** that prevent spread of tracks
- Replacement of approx. **48,000 wooden ties** (achieves state of good repair)
 - Will need to replace 11,000 ties/year to maintain steady state
- Replacement of approx **36,000 direct fixation fasteners** (achieves state of good repair)
 - Will need to replace 18,000 fasteners/year to maintain steady state
- Clearing of **87,000 linear feet of drains**
- Extensive **tunnel leak mitigation**

Surges Maximize Productivity




21 days

- Achieves safety results faster
- Shortens impact to customers
- More cost effective

Surge Projects

Surge Schedule

#	Type of Service Disruption	Stations	Start - Finish	# of Days	2016								2017				
					May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
1	Continuous Single Track	Franconia-Springfield to Van Dorn	June 4 – June 19	15d													
2	Continuous Single Track	College Park to Greenbelt (PG Plaza)	June 20 – July 3	13d													
3	Total Shutdown	National Airport to Braddock Road	July 5 – July 12	7d													
4	Total Shutdown	Pentagon City to National Airport	July 12 – July 19	7d													
5	Continuous Single Track	College Park to Greenbelt	July 20 -July 31	11d													
6	Continuous Single Track	Takoma to Silver Spring	Aug 1 – Aug 8	7d													
7	Continuous Single Track	Twinbrook to Shady Grove	Aug 9 – Aug 19	10d													
8	Total Shutdown	Eastern Market to Minnesota Ave; Benning Road	Aug 20 – Sept 6	16d													
9	Continuous Single Track	West Falls Church to Vienna	Sept 9 – Oct 21	42d													
10	Total Shutdown	NoMa to Ft. Totten	Oct 9 – Nov 2	23d													
11	Continuous Single Track	East Falls Church to West Falls Church	Nov 2 – Nov 12	10d													
12	Continuous Single Track	East Falls Church to Ballston	Nov 12 – Dec 5	23d													
13	Total Shutdown	Rosslyn to Pentagon	Dec 6 – Dec 24	18d													
14	Continuous Single Track	Braddock Road to Huntington; Van Dorn Street	Jan 2 – Jan 26	24d													
15	Continuous Single Track	East Falls Church to West Falls Church	Mar 6 – Mar 20	14d													

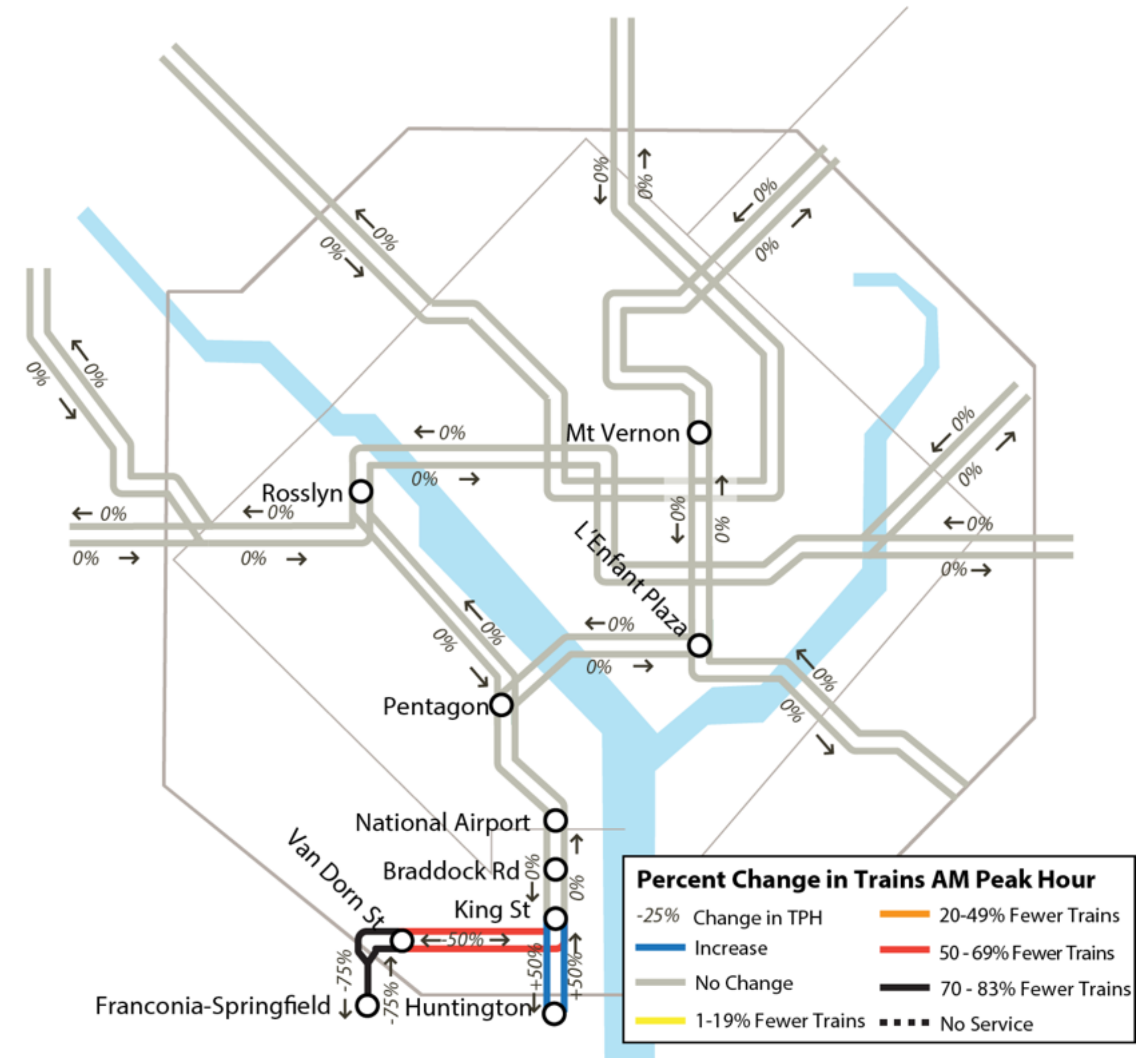
June 4 - 19 (15 days)



Continuous single tracking between Franconia-Springfield & Van Dorn St

REDUCED SERVICE AT FRANCONIA-SPRINGFIELD & VAN DORN ST ONLY

- Major impact to **18,000** weekday trips
- Trains from Franconia every **24 minutes**
- Trains from Van Dorn Street every **12 minutes**
- All other Blue Line stations will have near-normal service
- Some trains will run to/from Huntington instead
- Riders who use Franconia-Springfield or Van Dorn St stations should consider alternates, especially during rush hour
- Bus shuttles will be available during rush hour between Franconia and Pentagon



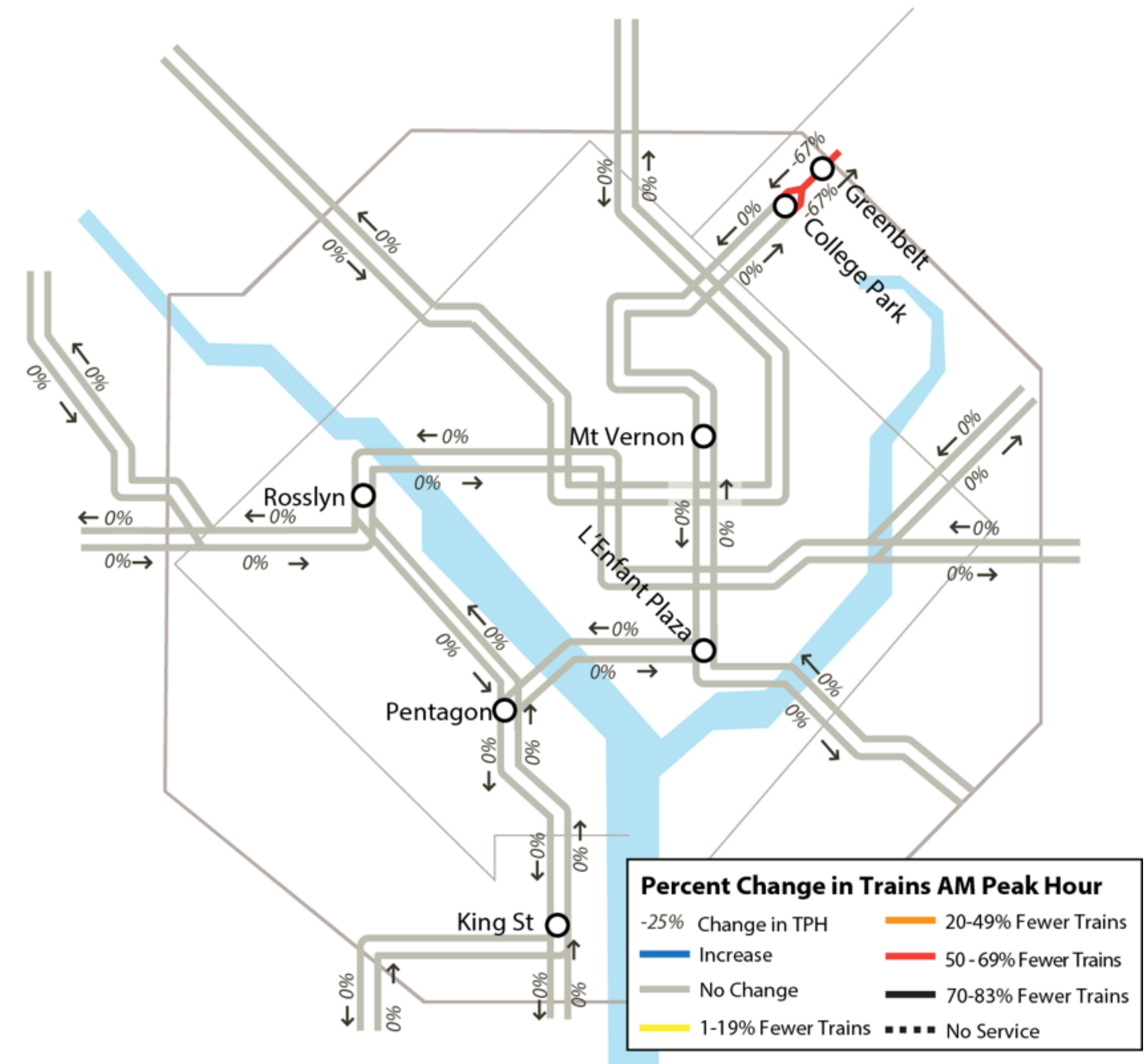
June 20 - July 3 (13 days)



Continuous single tracking between Greenbelt & College Park

REDUCED SERVICE AT GREENBELT ONLY

- Major impact to **12,400** weekday trips
- Trains from Greenbelt every **12 minutes**
- Normal service levels at all other stations
- Buses on standby in the event of a service disruption in the single track zone
- Customers encouraged to use New Carrollton or College Park as alternates



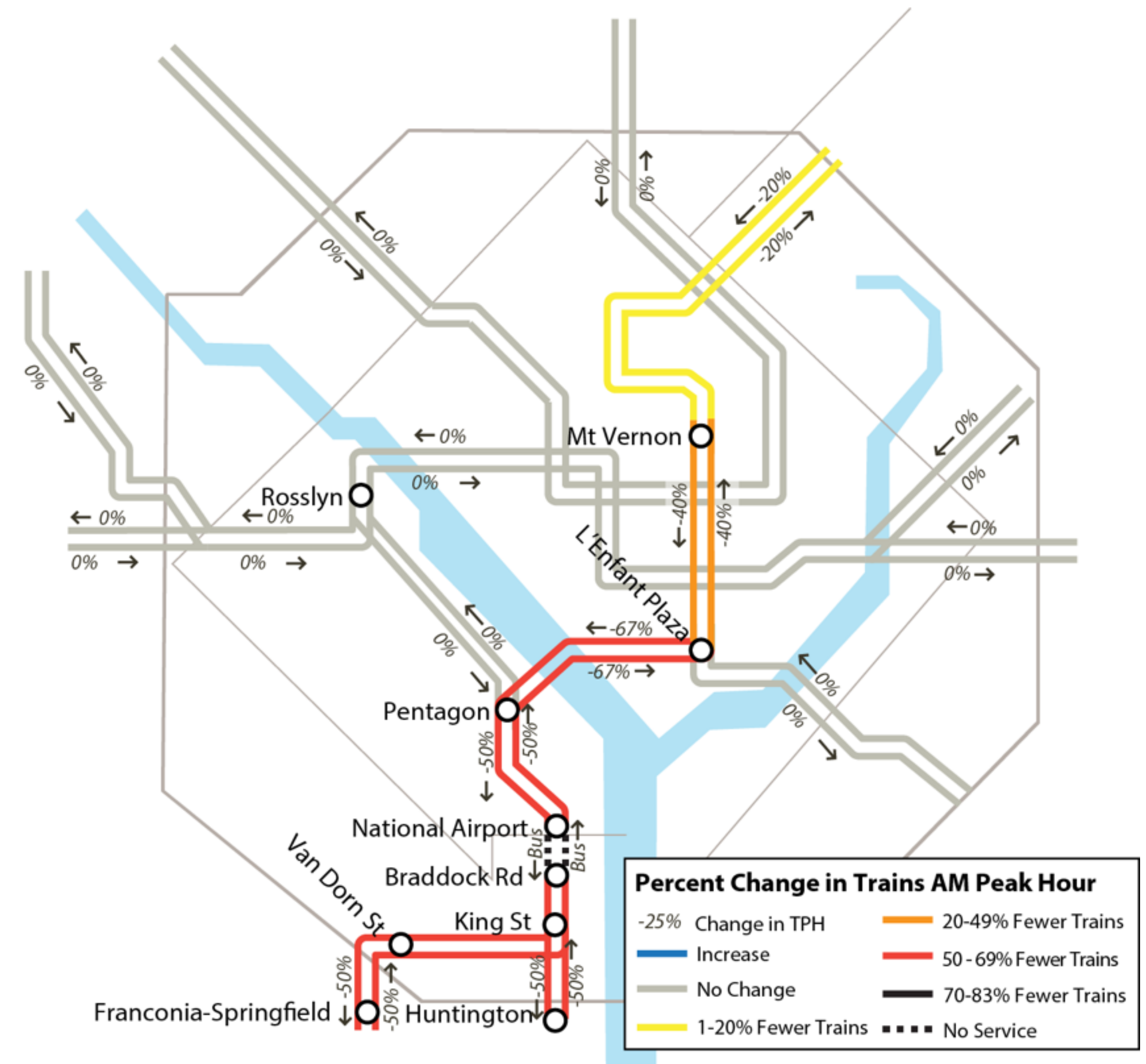
July 5 10PM - July 12 (7 days)



Line segment shutdown between National Airport & Braddock Road

REDUCED SERVICE AT ALL TIMES AT MANY STATIONS, PRIMARILY YELLOW/BBLUE IN VIRGINIA

- Major impact to **50,000** weekday trips
- 50% reduction in rail service south of Pentagon (**trains every 12 minutes/line**)
- Blue/Yellow customers encouraged to consider alternate travel options during this time
- Shuttle buses operate via Metroway between Braddock Road, Crystal City and Pentagon City
- Service between DC and National Airport available via train



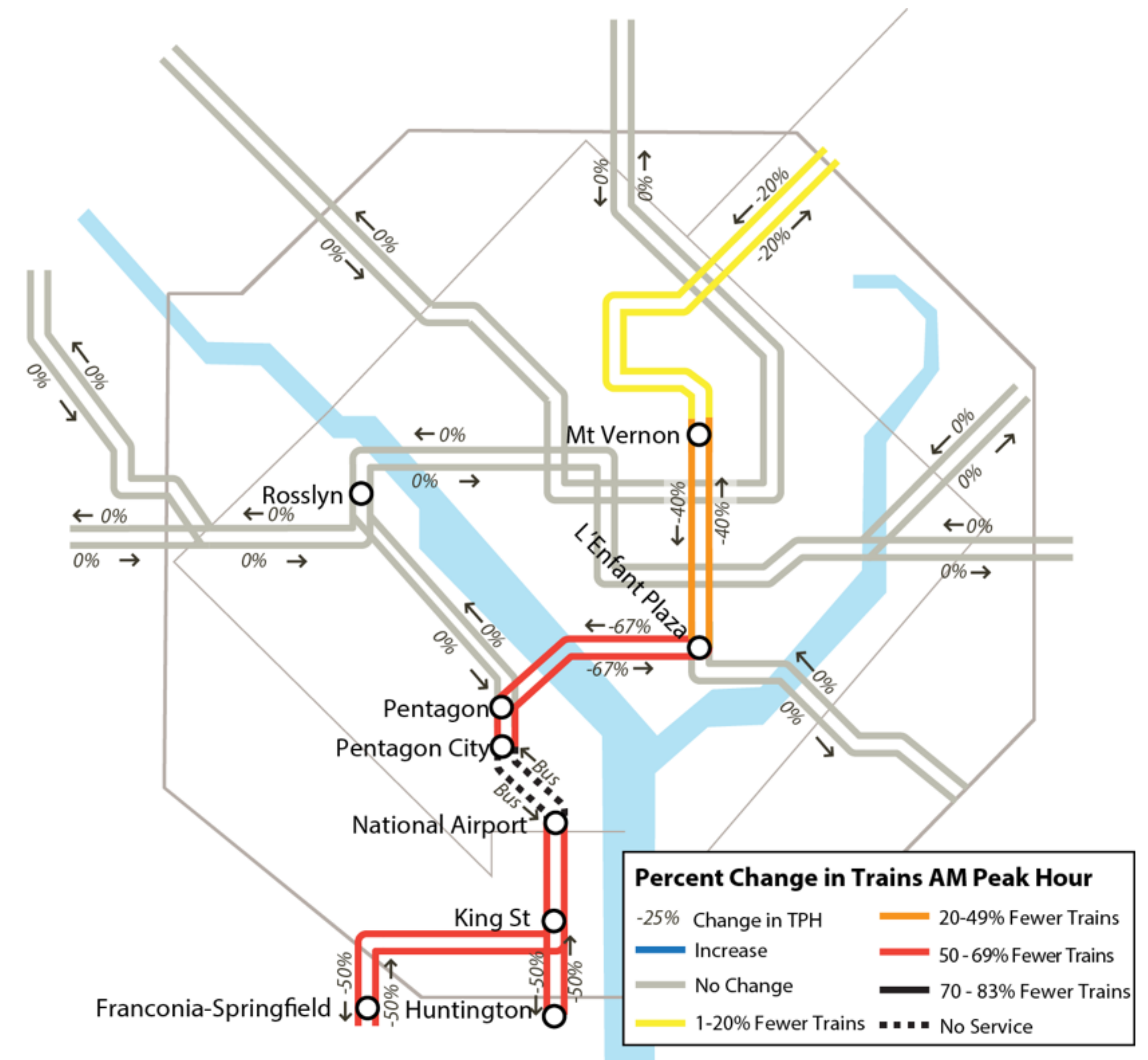
July 12 - 19 (7 days)



Line segment shutdown between National Airport & Pentagon City

REDUCED SERVICE AT ALL TIMES AT MANY STATIONS, PRIMARILY YL/BL IN VIRGINIA

- Major impact to **86,000** weekday trips
- 50% reduction in rail service south of Pentagon
- Shuttle buses operate via Metroway between Braddock Road, Crystal City and Pentagon City
- Reagan National Airport served via shuttle bus to/ from Pentagon City & Braddock Road
- Blue/Yellow customers encouraged to consider alternate travel options during this time
- Blue Line every **12 minutes**
- Yellow Line every **12 minutes**
- No Rush+ Yellow



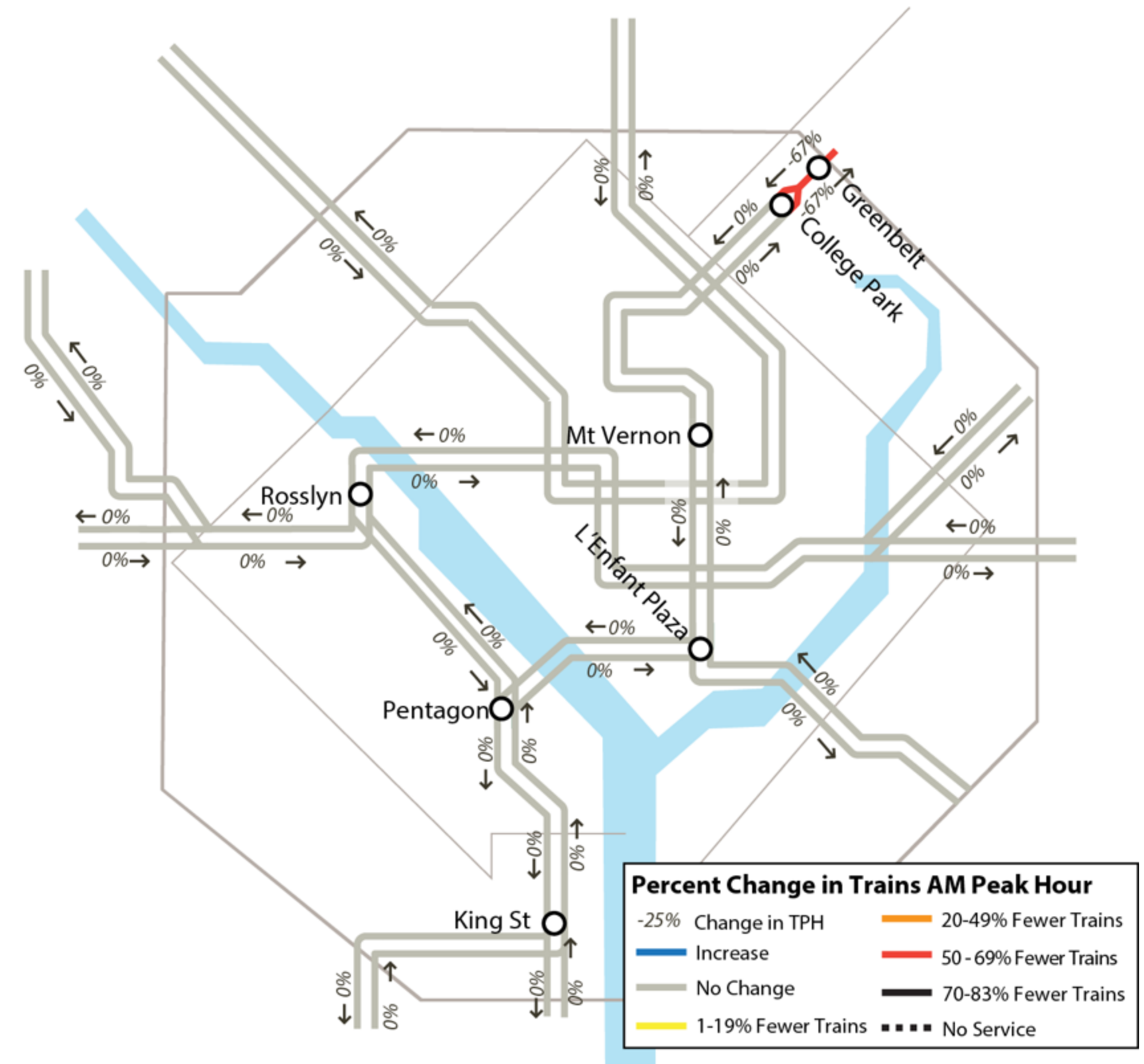
July 20 - July 31 (11 days)



Continuous single tracking between Greenbelt & College Park

REDUCED SERVICE AT GREENBELT

- Major impact to **12,400** weekday trips
- Trains from Greenbelt every **12 minutes**
- Normal service levels at all other stations
- Buses on standby in the event of a service disruption in the single track zone
- Customers encouraged to use New Carrollton or College Park as alternates



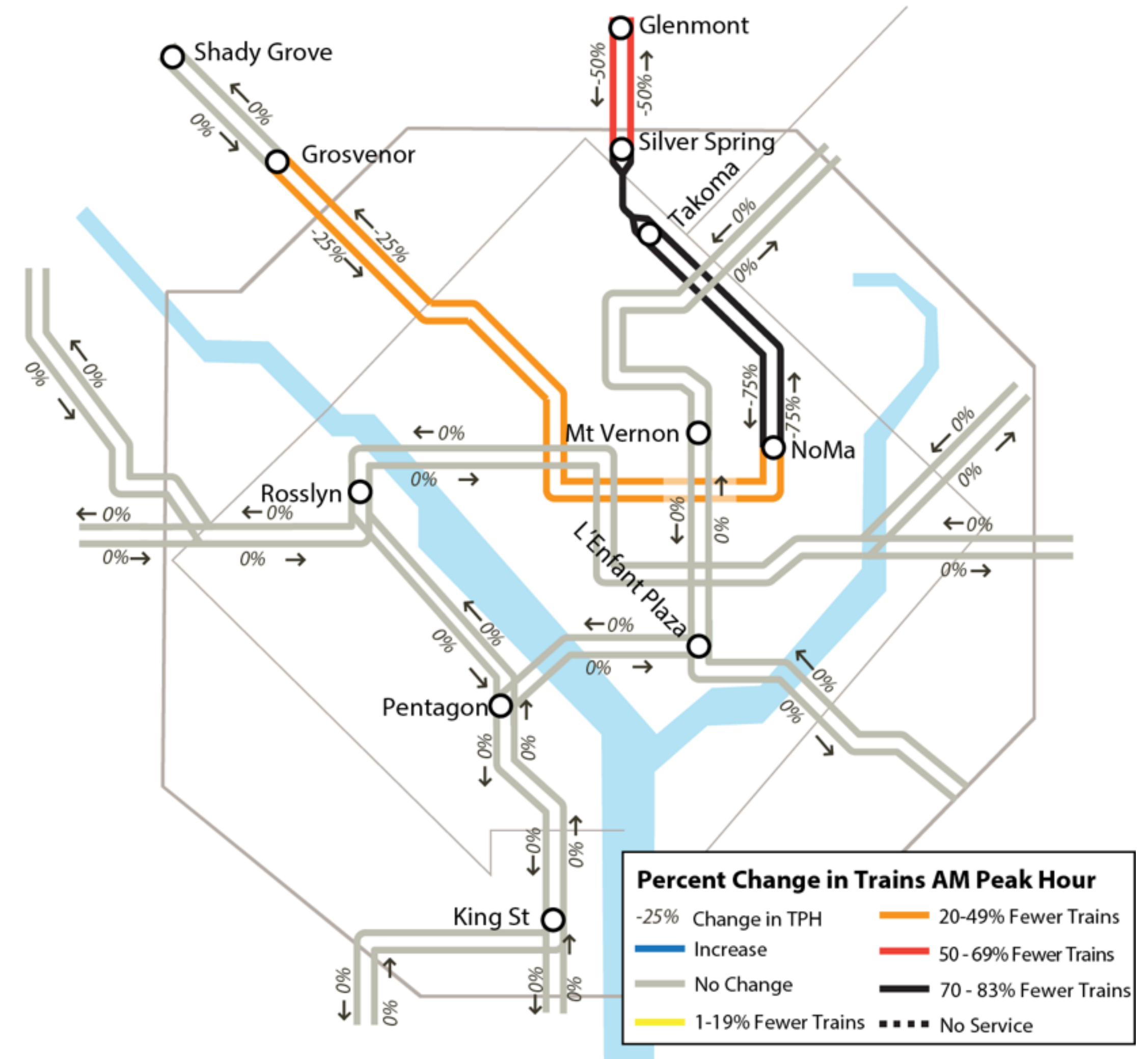
August 1 - 8 (7 days)



Continuous single tracking between Takoma & Silver Spring

REDUCED SERVICE AT MOST RED LINE STATIONS

- Major impact to **94,000** weekday trips
- All Red Line customers should consider alternates
- Trains Shady Grove to NoMa every **6 minutes**
- Trains Glenmont to Grosvenor every **12 minutes**
- Additional bus trips on regular route services (e.g. S9, 79, 80, 60/62)



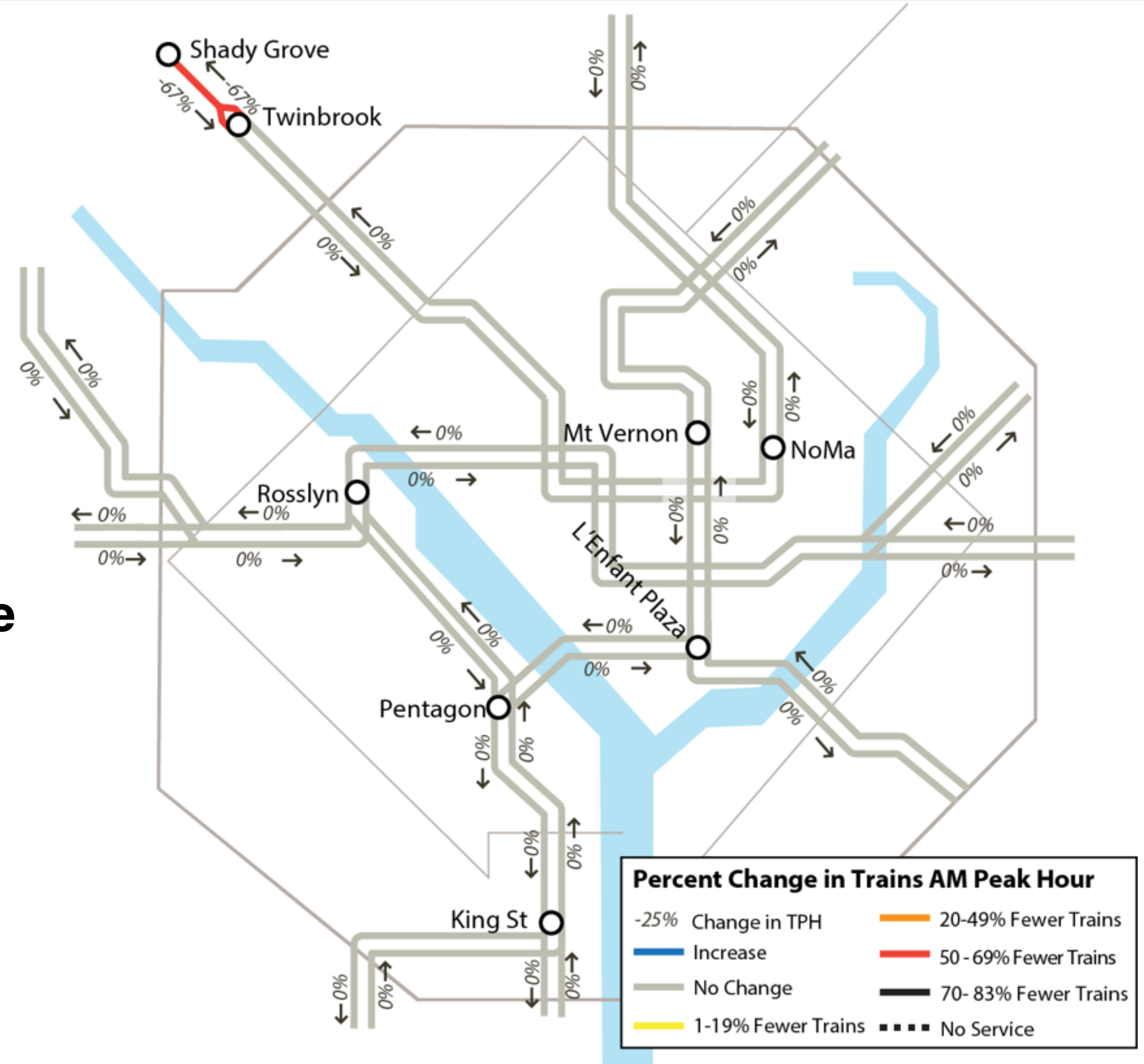
August 9 - 19 (10 days)



Continuous single tracking between Shady Grove & Twinbrook

REDUCED SERVICE AT SHADY GROVE & ROCKVILLE

- Major impact to **32,200** weekday trips
- Trains from Shady Grove & Rockville every **18 minute** (regularly every 6 minutes)
- All other stations with regular service
- Customers encouraged to use Twinbrook as alternate during this time
- Buses on standby in the event of a service disruption in the single track zone



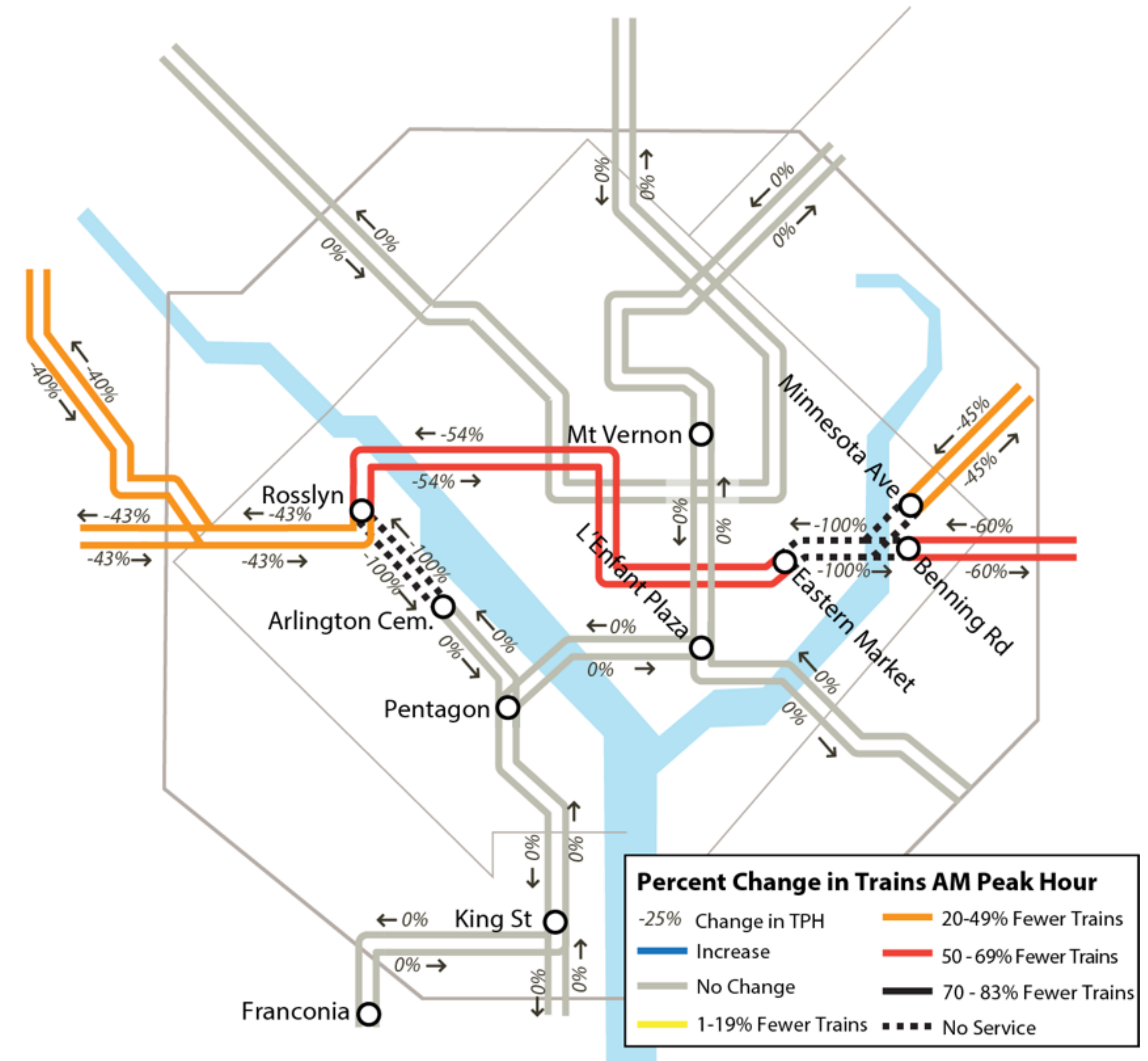
August 20 - September 6 (16 days)



Line segment shutdown between Eastern Market & Minnesota/Benning

REDUCED SERVICE AT ALL OR/SV/BL STATIONS

- Major impact to **61,000** weekday trips
- All Blue, Orange and Silver customers encouraged to consider alternate travel options
- Stadium-Armory & Potomac Ave stations **closed**
- Orange **every 10 minutes** outside shutdown
- Silver **every 10 minutes** outside shutdown
- Blue **every 12 minutes** between Franconia & Arlington Cemetery only
- Yellow Rush+ runs all day between Franconia & Mt Vernon Square



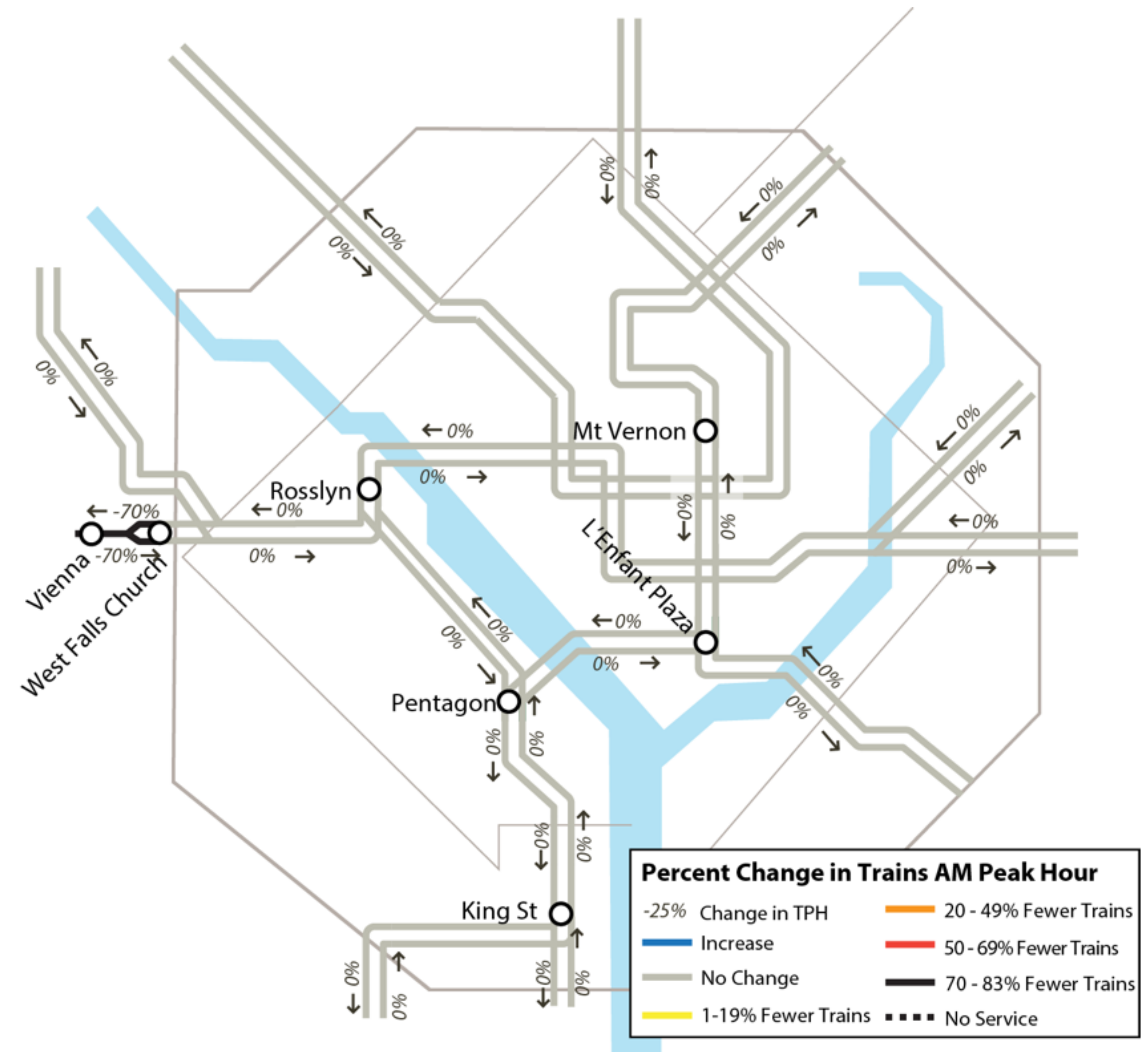
September 9 - October 21 (42 days)



Continuous single tracking between Vienna & West Falls Church

REDUCED SERVICE AT VIENNA & DUNN LORING

- Major impact to **30,000** weekday trips
- At Vienna & Dunn Loring, trains **every 18 minutes** (regularly every 6 minutes)
- Expect trains to/from Vienna to be extremely crowded
- Normal service levels at other Orange Line stations



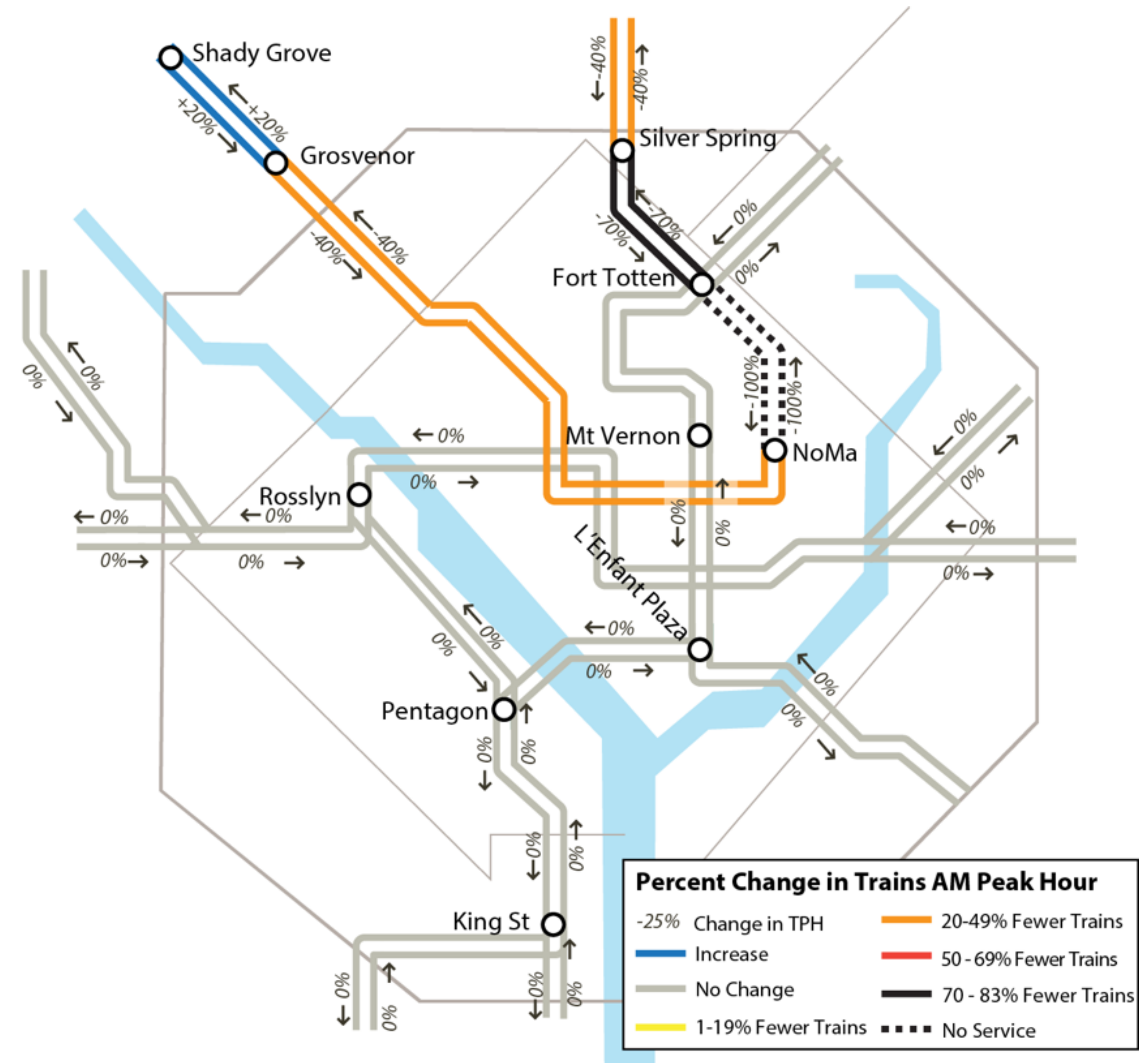
October 9 - November 2 (23 days)



Line segment shutdown between NoMa & Fort Totten

REDUCED SERVICE AT MOST RED LINE STATIONS

- Major impact to **108,000** weekday trips
- Trains in two segments:
 - Shady Grove - Noma **every 5 minutes**
 - Glenmont - Fort Totten **every 10 minutes**
- Less frequent Red Line service; expect crowding
- Green Line provides alternate path for thru travel



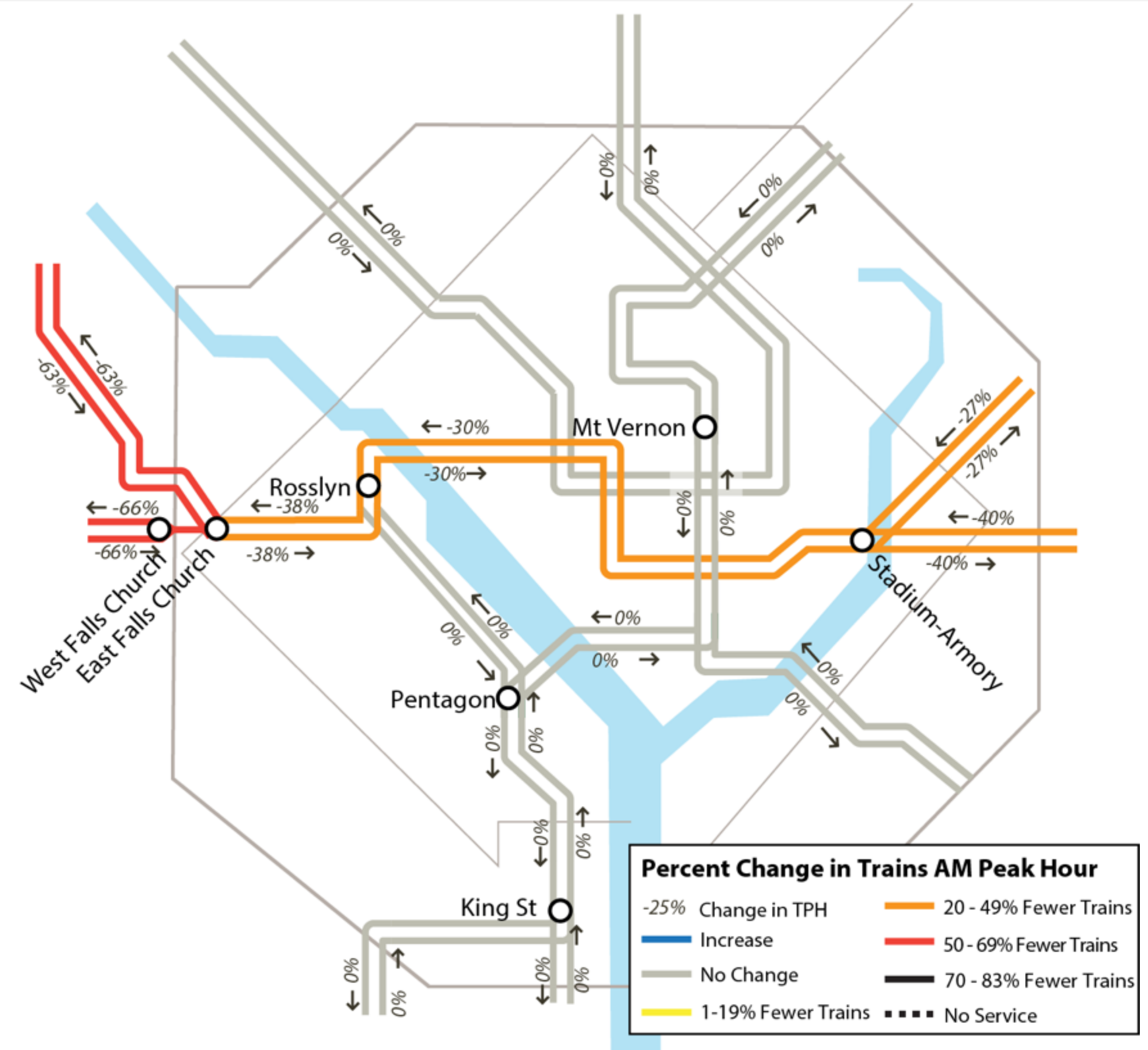
November 2 - 12 (10 days)



Continuous single tracking between West Falls Church & East Falls Church

REDUCED SERVICE AT ALL OR/SV STATIONS

- Major impact to **65,000** weekday trips
- Vienna-New Carrollton trains **every 16 minutes**
- Silver Line **every 16 minutes**
- Expect crowding on Orange/Silver line trains
- Orange/Silver customers should consider alternate travel options
- Additional trains East Falls Church - New Carrollton



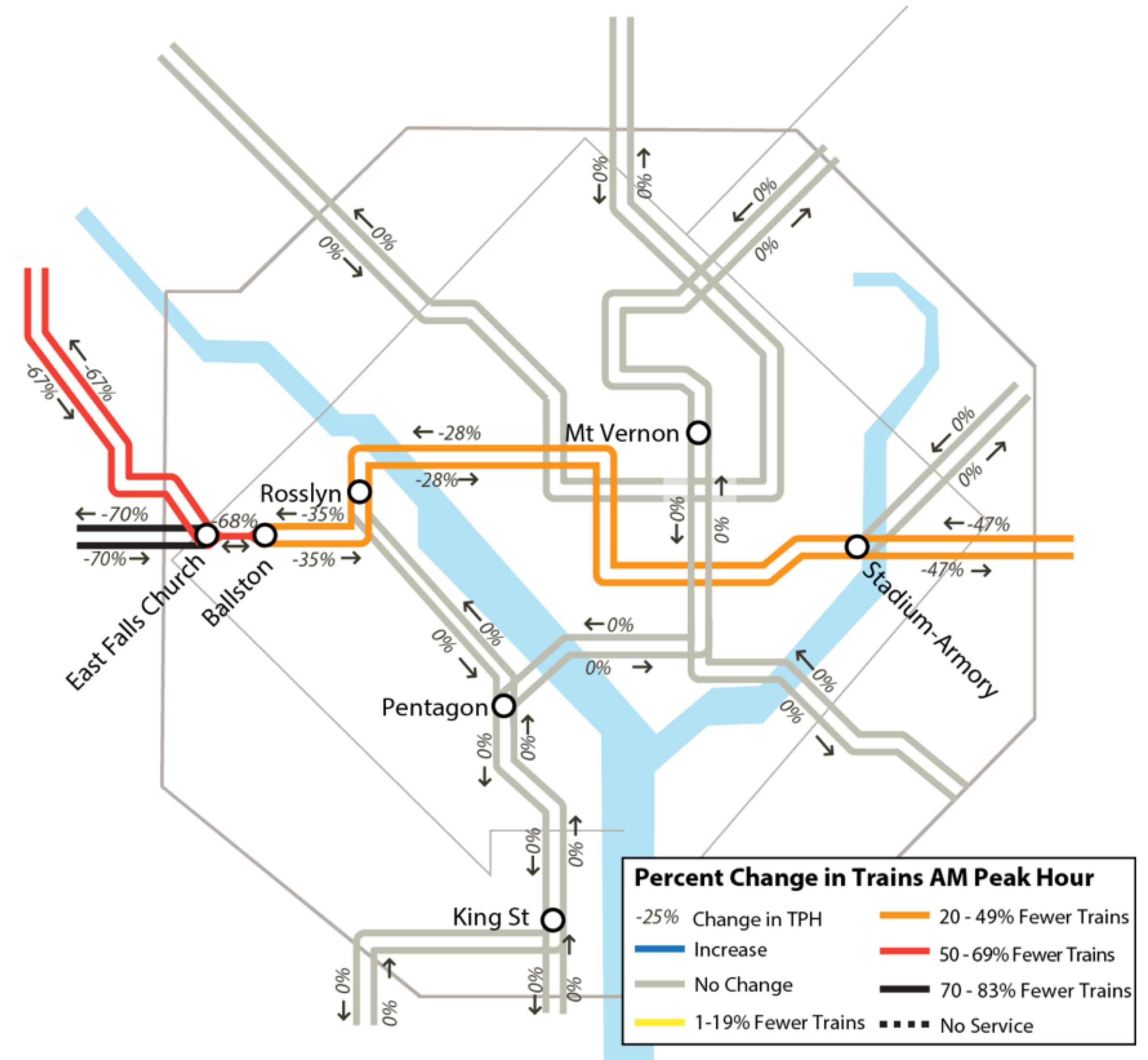
November 12 - December 5 (23 days)



Continuous single tracking between East Falls Church & Ballston

REDUCED SERVICE AT ALL OR/SV STATIONS

- Major impact to **73,000** weekday trips
- Trains **every 18 minutes** from Vienna - Ballston
- Silver Line **every 18 minutes**
- Expect crowding on Orange/Silver line trains
- Orange/Silver customers should consider alternate travel options
- Additional trains Ballston - New Carrollton



December 6 - 24 (18 days)

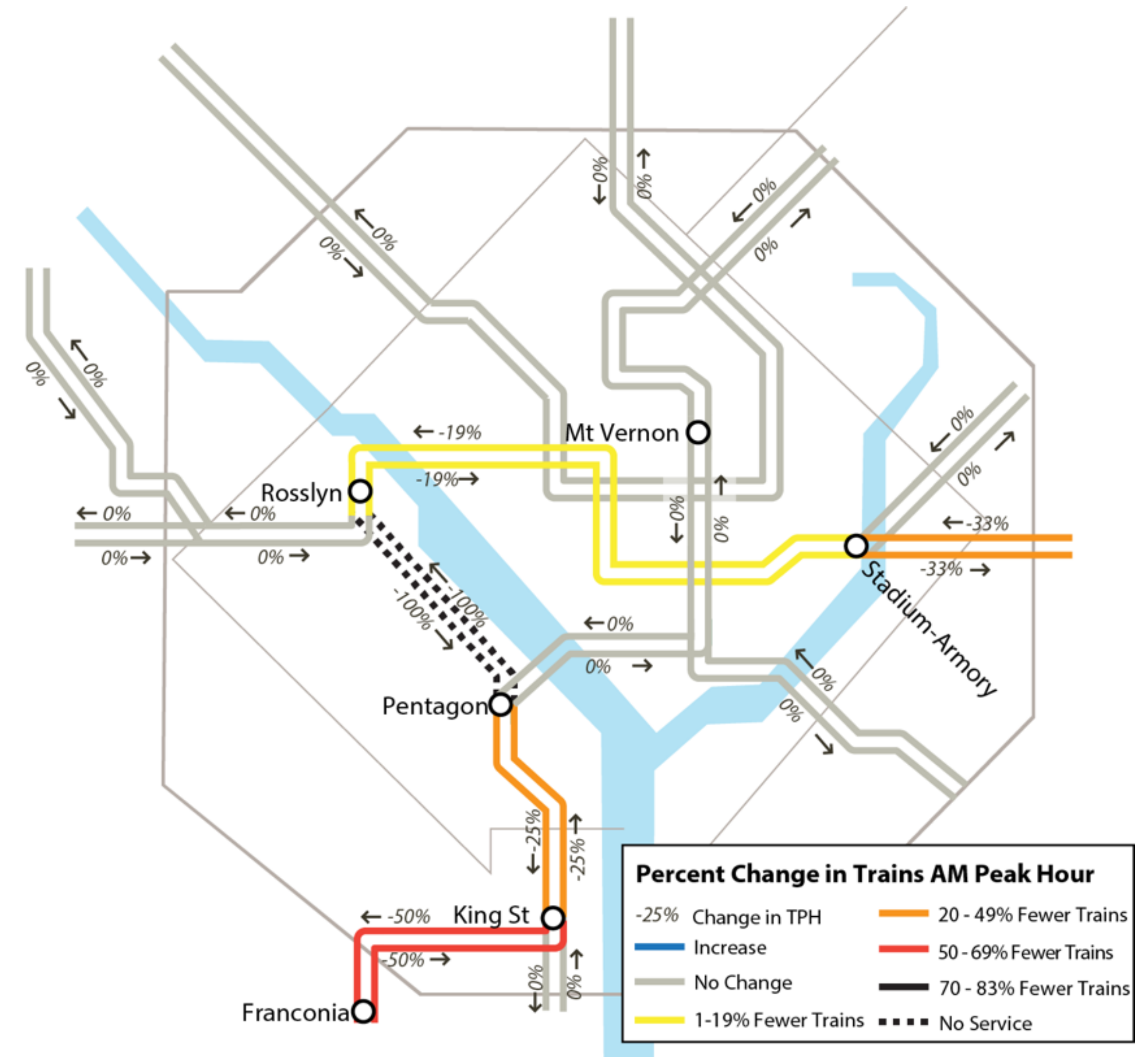


Line segment shutdown between Pentagon & Rosslyn

REDUCED SERVICE AT ALL BLUE LINE STATIONS

NOTE: Blue Line service will run on Saturday, Dec. 17 for Wreaths Across America at Arlington National Cemetery

- Major impact to **12,000** weekday trips
- Arlington Cemetery Station **closed**
- Shuttle buses between Pentagon & Arlington Cemetery
- Yellow Line Rush+ will run all day



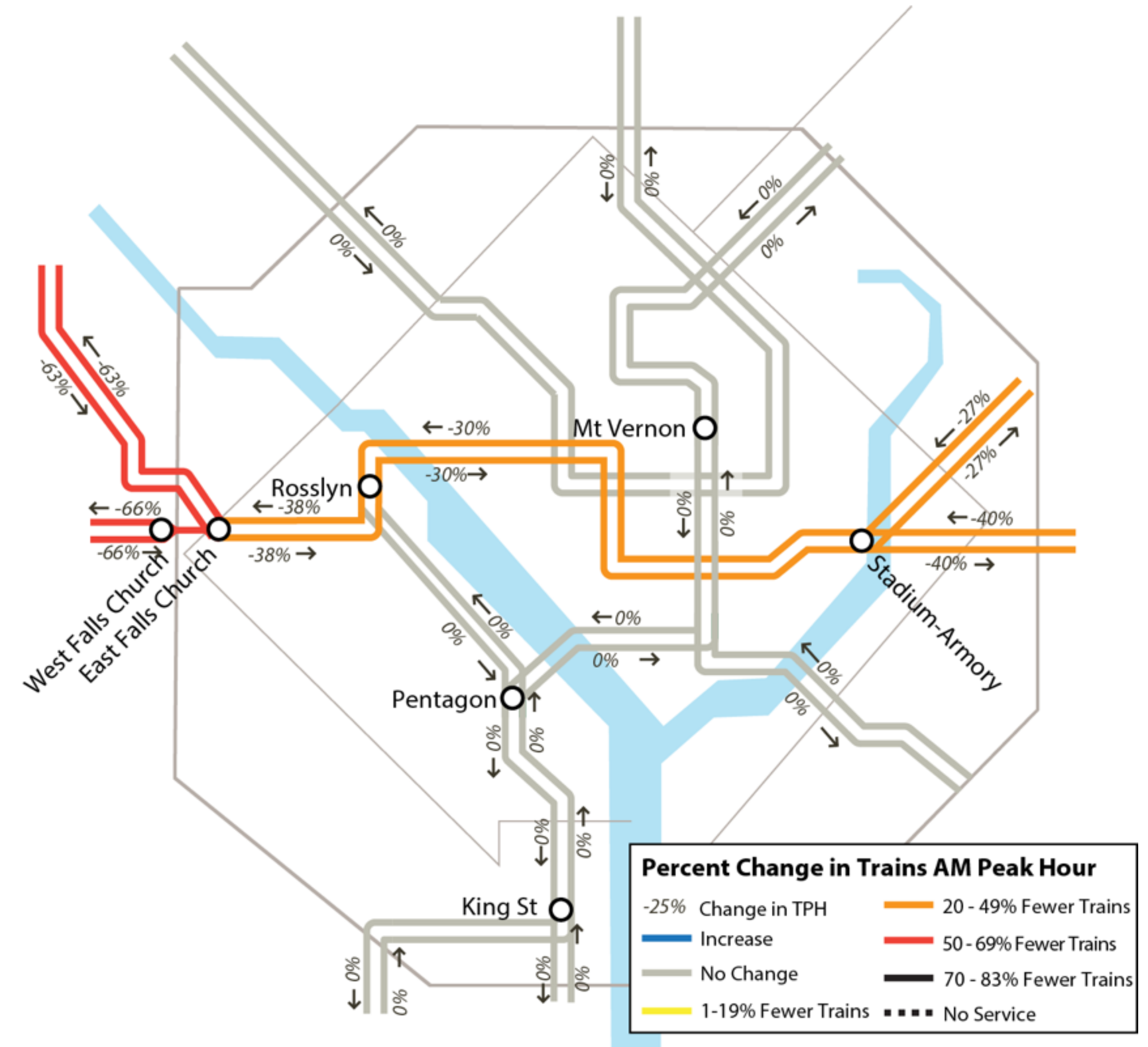
March 6 - 20 (14 days)



Continuous single tracking between West Falls Church & East Falls Church

REDUCED SERVICE AT ALL OR/SV STATIONS

- Major impact to **65,000** weekday trips
- Vienna-New Carrollton trains **every 16 minutes**
- Silver Line **every 16 minutes**
- Additional trains East Falls Church - New Carrollton



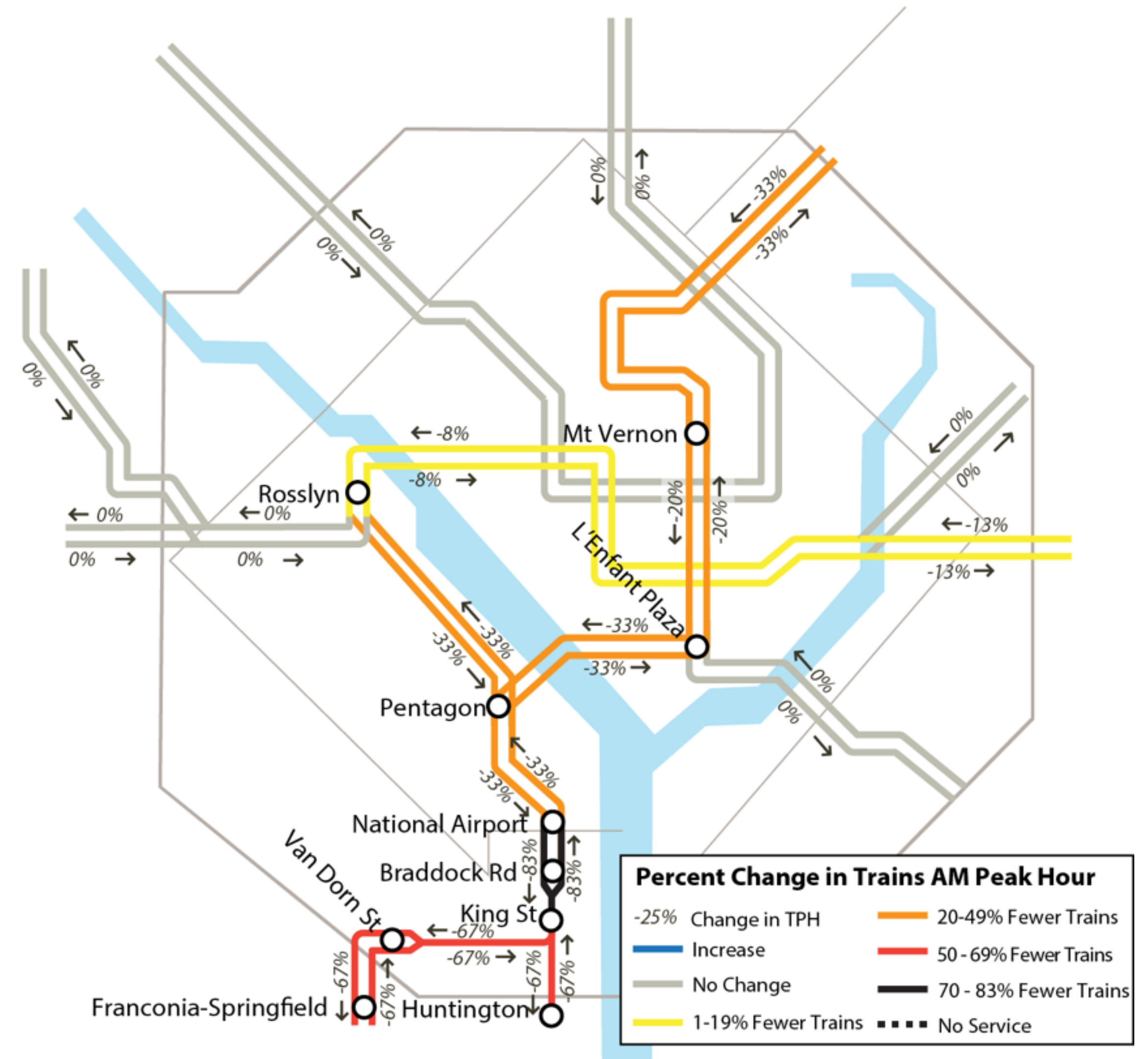
Jan 2 - 26 (24 days)



Continuous single tracking between Braddock Rd & Huntington/Van Dorn

REDUCED SERVICE AT ALL BL/YL STATIONS
NORMAL SERVICE JAN. 16-22 FOR INAUGURATION

- Major impact to **50,000** weekday trips
- Blue Line every **18 minutes**
- Shuttle train Huntington - King Street
- Yellow Line every **6 minutes** between National Airport & Mt Vernon Square
- All Blue/Yellow customers should consider alternate travel options



Red Line I January 2 — March 7, 2017

- Single tracking starting at 8 p.m. each night EXCEPT Inauguration Week
- Friendship Heights - Medical Center
- Trains every 15-20 minutes

- Most Safety Surges will have 40-50 buses dedicated to providing alternate service
- Additional 8-car trains on lines where capacity reduced
- Additional customer support staff at selected stations
- Requesting jurisdictional input/support for Safety Surges (e.g. traffic control, parking restrictions, bus support, HOV restrictions, etc.)
- Robust public outreach effort
- Requesting OPM/business community support (e.g. telework)
- Strategically positioned extra trains & personnel to respond quickly to issues

Public Outreach

- Informational website and brochures in English and Spanish
- In-station signage and announcements
- Customer information pop-ups
- Street teams
- Paid newspaper and radio advertising
- Direct mail to riders in impacted zip codes
- Email notifications to registered SmarTrip users
- Community group outreach
- MetroAlerts (sign up at wmata.com/metroalerts)
- Open house briefings for business community
- News conferences

Next Steps



- Coordinate with jurisdictions on mitigation strategies
- Final version for customers ready May 16
- First Safety Surge begins June 4
- Independent verification and inspection of work