



*Revised Tier 2 Environmental Assessment
I-66 Alternatives Development Technical Report*

Appendix B

Decision Chronicles

DRAFT – NOVEMBER 23, 2015

Decision Chronicle

Draft – May 12, 2015

TOPIC: Haymarket Park-and-Ride

RECOMMENDATION: Carry the following concepts forward for additional analysis:

Route 15 Concept 8 for Alternative 2B

Not considered as part of Alternative 2A

RATIONALE: Concept 8/Alternative 2B needs additional study and traffic analysis.

Recommend continued study of the Haymarket Park-and-Ride at this site for the following reasons:

- Town of Haymarket was opposed to the site in the Northeast quadrant of the Route 15 interchange
- Park-and-Ride would provide access to Express Lanes if Route 15 does not have access and no flyover ramps are constructed in the area.

BACKGROUND: Alternatives 8/2B were presented at the Public Information Meetings.

OUTCOME: **Approved.**

Decision Chronicle

Draft – May 12, 2015

TOPIC: US 15 & I-66 Interchange

RECOMMENDATION: Carry the following concepts forward for additional analysis:

Concept 1 (as part of Alternative 2A)

Concept 8 (as part of Alternative 2B)

Drop the following concepts from further consideration:

Concept 2.1

Concept 2.2

Concept 2.3

Concept 3

Concept 4

Concept 5

Concept 6

Concept 7

RATIONALE: Concept 1/Alternative 2A and Concept 8/Alternative 2B need additional study and traffic analysis.

Recommend dropping Concepts 2.1, 2.2, 2.3, 3, 4, 5, 6, and 7 from further consideration for the following reasons:

- Concepts 2.1 and 2.2 do not accommodate access from the southbound direction on US 15. These improvement alternatives introduce weaving and merging issues on US 15 interchange ramp. Also, there are additional structural costs associated with the long flyover ramps.
- Concepts 2.3 and 3 introduce weaving and merging issues on US 15 interchange ramp and have additional right-of-way impacts at the US 15 interchange.
- Concept 4 introduces weaving and merging issues on US 15 interchange ramp and has additional right-of-way impacts at the US 15 interchange. There are additional structural costs associated with the long flyover ramps.

- Concept 5 introduces a substandard weave distance for Express Lane traffic to and from US 15. The Express Lanes slip ramp does not provide direct access to US 15.
- Concept 6 introduces a substandard weave distance for Express Lane traffic to and from US 15. The Express Lanes slip ramp does not provide direct access to US 15. There are additional right-of-way impacts at the US 15 interchange.
- Concept 7 introduces a substandard weave distance for Express Lane traffic to and from US 15. The Express Lanes slip ramp does not provide direct access to US 15. There are additional right-of-way impacts for the loop ramp at the US 15 interchange.

BACKGROUND: Concept 1/Alternative 2A and Concept8/Alternative 2B were presented at the Public Information Meetings.

OUTCOME: **Approved.**

Decision Chronicle

Draft – May 12, 2015

- TOPIC:** US 29 (Gainesville) & I-66 Interchange
- RECOMMENDATION:** Drop the following from further consideration
Concept 1
- RATIONALE:** Recommend dropping Concept 1 for the following reasons:
- There are no significant advantages to an access point at this location.
 - Not geometrically feasible (right-of-way conflicts).
 - Spacing available between University Boulevard connection and ramps between US 15 and US 29 not feasible.
- BACKGROUND:** Access at US 29 (Gainesville) as not provided in Alternatives 2A and 2B.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – May 12, 2015

- TOPIC:** University Boulevard
- RECOMMENDATION:** Carry the following concepts forward for additional analysis:
Concept 1 for both Alternative 2A and 2B
- RATIONALE:** Recommend continued study of access at University Boulevard for the following reasons:
- Important connection to the VRE connection and proposed park-and-ride facilities
 - Proposed connection is geometrically feasible and cost effective
 - Redirects traffic from the US 29 interchange
 - Captures development and high transit demand in area
- BACKGROUND:** Alternatives 2A and 2B both reflecting Concept 1 were presented at the Public Information Meetings
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – May 12, 2015

- TOPIC:** Route 234 Bypass (Prince William Parkway) & I-66 Interchange
- RECOMMENDATION:** Carry the following concepts forward for additional analysis:
- Concept 4 (as part of Alternative 2A)
 - Concept 4 (as part of Alternative 2B)
- Drop the following concepts from further consideration:
- Concept 1
 - Concept 2
 - Concept 3
- RATIONALE:** Concept 4/Alternative 2A and Concept 4/Alternative 2B need additional study and traffic analysis.
- Recommend dropping Concepts 1, 2, and 3 from further considering for the following reasons:
- Concept 1 would require the relocation of approximately 1,100' of existing Pageland Road realignment and increases right-of-way impacts along I-66 mainline. Direct connection to the park-and-ride facility is not provided.
 - Concept 2 has increased costs associated with the flyover structures at the interchange. This alternative does not have direct connection to the existing park-and-ride facility. Expanded park-and-ride access onto northbound Route 234 would impact traffic flow.
 - Concept 3 does not provide direct connection to the park-and-ride facility. There are additional structural costs associated with the flyover ramps.
- BACKGROUND:** Concept 4/Alternative 2A and Concept 4/Alternative 2B were presented at the Public Information Meetings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – May 12, 2015

- TOPIC:** Balls Ford Road Park-and-Ride
- RECOMMENDATION:** Carry the following concepts forward for additional analysis:
- Concept 2 (as part of Alternative 2A)
 - Concept 3 (as part of Alternative 2B)
- Drop the following concepts from further consideration:
- Concept 1
 - Concept 4
- RATIONALE:** Concept 2/Alternative 2A and Concept 3/Alternative 2B need additional study and traffic analysis.
- Recommend dropping Concepts 1 and 4 from further considering for the following reasons:
- Concept 1 would require modifications to the existing Balls Ford Road and Ashton Avenue intersection lane configuration and traffic signals to accommodate an additional approach to the intersection.
 - Concept 4 would require additional turn bays and signal modifications at the intersection of Balls Ford Road and Ashton Avenue. Additionally, a traffic signal may be required at the proposed park-and-ride lot intersection with Balls Ford Road.
- BACKGROUND:** Concept 2/Alternative 2A and Concept 3/Alternative 2B were presented at the Public Information Meetings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – May 12, 2015

TOPIC: Route 234 Business (Prince William Parkway) & I-66 Interchange

RECOMMENDATION: Drop the following concepts from further consideration:

Concept 1

Concept 2

RATIONALE: Recommend dropping Express Lane access from Concepts 1 and 2 for the following reasons:

- Concept 1 does not provide access to southbound Route 234 Business. It also includes additional costs and impacts from flyover ramps on the I-66 mainline.
- Concept 2 introduces a weave movement for southbound Route 234 Business on I-66 mainline. It also includes additional costs and impacts from flyover ramps on the I-66 mainline.
- The interchange is too congested to provide access.

BACKGROUND: Express Lane access was not included in either Alternative 2A or Alternative 2B at the Public Information Meetings. However, the general purpose lane improvements in the concepts were incorporated into the plans.

OUTCOME: **Approved.**

Decision Chronicle

Draft – May 12, 2015

- TOPIC:** US 29 (Centreville) & I-66 Interchange
- RECOMMENDATION:** Drop the following from further consideration
Concept 1 and Concept 2
- RATIONALE:** Recommend dropping Concept 1 and Concept 2 for the following reasons:
- Increases width of I-66 mainline which increase property impacts and project cost.
 - Introduces new weaving and merging points on I-66.
 - Right-of-way is currently zoned commercial and would only be purchased if a Metrorail station is proposed
 - Low traffic demand (Route 28 captures the majority of traffic in this area).
 - Access spacing is not feasible due to the proximity with the Route 28 interchange
- BACKGROUND:** Access at US 29 (Centreville) was removed from study alternatives.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – May 12, 2015

TOPIC:	Route 28 & I-66 Interchange
RECOMMENDATION:	<p>Carry the following concepts forward for additional analysis:</p> <p>Concept 3 (as part of Alternative 2A)</p> <p>Concept 4 (as part of Alternative 2B)</p> <p>Concept 5 (modification of Alternative 3, as part of Alternative 2B)</p> <p>Concept 6 (modification of Alternative 4, as part of Alternative 2A)</p> <p>Concept 7 (as part of Alternative 2C)</p> <p>Drop the following concepts from further consideration:</p> <p>Concept 1</p> <p>Concept 2</p>
RATIONALE:	<p>Concept 3/Alternative 2A, Concept 4/Alternative 2B, Concept 5/Alternative 2B, Concept 6/Alternative 2A, and Concept 7/Alternative 2C need additional study and traffic analysis.</p> <p>Recommend dropping Concepts 1 and 2 from further considering for the following reasons:</p> <ul style="list-style-type: none">• Concepts 1 and 2 do not provide access to Express Lanes from Route 28. Both alternatives introduce a substandard weave and merge lengths at the on ramps.
BACKGROUND:	Concept 3/Alternative 2A, Concept 4/Alternative 2B, Concept 5/Alternative 2B, Concept 6/Alternative 2A, and Concept 7/Alternative 2C were presented at the Public Information Meetings.
OUTCOME:	Approved.

Decision Chronicle

Draft – May 12, 2015

TOPIC:	Stringfellow Road
RECOMMENDATION:	<p>Carry the following concepts forward for additional analysis:</p> <p>Concept A2 (as part of Alternative 2A)</p> <p>Concept C1 (as part of Alternative 2B)</p> <p>Drop the following concepts from further consideration:</p> <p>Concept A1</p> <p>Concept B1</p> <p>Concept D1</p>
RATIONALE:	<p>Concept A2/Alternative 2A and Concept C1/Alternative 2B need additional study and traffic analysis.</p> <p>Recommend dropping Concepts A1, B1, and D1 from further considering for the following reasons:</p> <ul style="list-style-type: none">• Concept A1 does not provide sufficient width to allow barrier separation of HOV ramps in the existing median. Improvements would require reconstructing the retaining wall which increases costs and results in constructability issues. Additionally, Concept A1 does not preserve space for future median fixed guideway transit.• Concept B1 was deemed undesirable due to high construction costs. The alternative requires construction of retaining wall structures and a bridge, and these elements would result in constructability issues.• Concept D1 would impact right-of-way on both sides of I-66. Additionally, the alternative would require more structures than in other concepts, increasing construction costs. Concept D1 would also introduce two new signals on Stringfellow Road.
BACKGROUND:	Concept A2/Alternative 2A and Concept C1/Alternative 2B were presented at the Public Information Meetings.
OUTCOME:	Approved.

Decision Chronicle

Draft – May 12, 2015

TOPIC: Fairfax County Parkway Express Lane Access

RECOMMENDATION: Provide access to and from the Express lanes via Stringfellow Road and Monument Drive and not direct access at Fairfax County Parkway.

Drop the following concepts from further consideration:

Concept 1

Concept 2

Concept 3

Concept 4

Concept 5

RATIONALE: Direct access to the I-66 Express lanes have been evaluated at parallel arterials Stringfellow Road and Monument Drive as well as at Fairfax County Parkway replacing those parallel access points.

Provide access to and from the Express lanes via Stringfellow Road and Monument Drive and not direct access at Fairfax County Parkway for the following reasons:

- In order to make a direct access connection between the future Fairfax County Parkway HOV lanes to the proposed I-66 Express lanes, the interchange design would require a third level (and potentially a fourth level) of directional flyover ramps and would increase the ROW impacts and overall project cost. The interchange concepts reviewed would also impact the recently constructed Fairfax County Parkway at Fair Lakes Interchange and impact existing trails.
- Currently both Stringfellow Road and Monument Drive have access to I-66 for HOV-2 users during the weekdays. The future design at these interchanges allows for potential optimization of use of the existing access.
- Stringfellow Road and Monument Drive both have existing park-and-ride lots that are currently being served by existing bus routes
- Locations of potential future transit/Metrorail stations adjacent to Stringfellow Road and Monument Drive offer direct access locations (per Fairfax County Comprehensive Plan)

NOTE: It is important to note that the future I-66 and Fairfax County Parkway interchange is being designed to not preclude future direct access ramps to and from the I-66 Express Lanes.

Recommend dropping Concepts 1, 2, 3, 4, and 5 from further considering for the following reasons:

- Concept 1 would have relatively high construction costs and right-of-way impacts due to the proposed direct ramp connections between I-66 Express Lanes and future HOV access on Fairfax County Parkway.
- Concept 2 would be capable of handling the least capacity to and from the I-66 Express Lanes of the proposed alternatives. Additionally, interchange spacing would not meet AASHTO standards when access points at Stringfellow Road and Monument Drive are taken into consideration.
- Concept 3 introduces two flyovers and a substandard weaving area. The construction of new ramps creates increased construction costs and right-of-way impacts at the interchange.
- Concept 4 introduces a flyover to the north and a substandard weaving area. Additional right-of-way costs are associated with this alternative.
- Concept 5 requires a higher cost than other alternatives due to the construction of larger ramp structures and increased widening of I-66.

BACKGROUND:

There has been numerous meetings between VDOT and Fairfax County discussing the interchange configuration at Fairfax County Parkway and I-66. The Decision Chronicle is intended to clarify proposed interchange configuration.

OUTCOME:

Approved.

Decision Chronicle

Draft – May 12, 2015

TOPIC: Monument Drive

RECOMMENDATION: Carry the following concepts forward for additional analysis:

Concept C2 (as part of Alternative 2A)

Concept E2 (as part of Alternative 2B)

Drop the following concepts from further consideration:

Concept A1

Concept A2

Concept B1

Concept B2

Concept C1

Concept C3

Concept D1

Concept D2

Concept E1

Concept F1

RATIONALE: Concept C2/Alternative 2A and Concept E2/Alternative 2B need additional study and traffic analysis.

Recommend dropping Concepts A1, A2, B1, B2, C1, C3, D1, D2, E1 and F1 from further considering for the following reasons:

- Concept A1 requires two signals on Monument Drive and reconstruction of Monument Drive bridge. This alternative was not carried forward due to high costs associated with the reconstruction and signals. Additionally, no access is provided to and from the Express Lanes.
- Concept A2 requires two signals on Monument Drive and the reconstruction of the Monument Drive bridge. This alternative was not carried forward due to high costs associated with the reconstruction of the bridge and signals.

- Concept B1 requires reconstruction of Monument Drive bridge which includes high construction costs. Additionally, no access is provided to and from the Express Lanes.
- Concept B2 was eliminated due to the high construction costs associated with reconstructing Monument Drive bridge.
- Concepts C1, C3, and D1 require the reconstruction of Monument Drive bridge which results in high construction costs. Additionally, no access is provided to and from the Express Lanes.
- Concept D2 was eliminated due to the high costs associated with reconstructing the Monument Drive bridge and the western ramps. Additional right-of-way impacts are introduced with this alternative.
- Concepts E1 and F1 do not preserve the proposed rail corridor in the I-66 median nor do they provide access to and from the west Express Lanes.

BACKGROUND: Concept C2/Alternative 2A and Concept E2/Alternative 2B were presented at the Public Information Meetings.

OUTCOME: **Approved.**

Decision Chronicle

Draft – May 12, 2015

TOPIC: US 50 (Lee Jackson Highway)

RECOMMENDATION: Carry the following concepts forward for additional analysis:

Concept A1 (as part of Alternative 2A)

Concept A2 (as part of Alternative 2B)

Drop the following concepts from further consideration:

Concept B1

Concept C1

Concept D1

Concept D2

Concept E1

Concept E2

Concept F1

RATIONALE: Concept A1/Alternative 2A and Concept A2/Alternative 2B need additional study and traffic analysis.

Recommend dropping Concepts B1, C1, D1, D2, E1, E2, and F1 from further considering for the following reasons:

- Concept B1 does not provide access to Express Lanes from US 50 and it does not address the weave/merge issue on I-66 WB. A new weave/merge area is introduced on existing ramps and there are additional structural costs associated with the flyover ramp.
- Concept C1 requires vertical grade adjustments to US 50 and does not address the weave/merge issue on I-66 WB. A new weave/merge area is introduced on existing ramps and there are additional structural costs associated with the flyover ramp.
- Concepts D1, D2, E1, E2, and F1 do not provide access between Express Lanes and US 50 east. There are minor right-of-way impacts along I-66 mainline and increased impacts and costs associated with new loop ramp and bridge structure.



BACKGROUND: Concept A1/Alternative 2A and Concept A2/Alternative 2B were presented at the Public Information Meetings.

OUTCOME: **Approved.**

Decision Chronicle

Draft – May 12, 2015

TOPIC: Route 123 & I-66 Interchange

RECOMMENDATION: Carry the following concepts forward for additional analysis:

Concept 4A (as part of Alternative 2A)

Concept 4A-DA (as part of Alternative 2B)

Drop the following concepts from further consideration:

Concept 1

Concept 1A

Concept 2

Concept 3

Concept 3A-DA

RATIONALE: Concept 4A/Alternative 2A and Concept 4A-DA/Alternative 2B need additional study and traffic analysis.

Recommend dropping Concepts 1, 1A, 2, 3, and 3A-DA from further considering for the following reasons:

- Concept 1 does not make any major improvement to the interchange: weaving sections on the eastbound I-66 CD road and northbound Route 123 still exist, and no access is proposed to or from the I-66 Express Lanes. Additionally, this concept would require staged construction to maintain traffic operation. A left-turn detour and signalized intersection would be required for reconstruction of the westbound-to-southbound bridge over I-66.
- Concept 1A does not make any major improvement to the interchange: weaving sections on the eastbound I-66 CD road and northbound Route 123 still exist, and no access is proposed to or from the I-66 Express Lanes. Additionally, this alternative would require staged construction to maintain traffic operation and would require construction of a new embankment for the ramp bridge.

- Concept 2 does not remove the weaving movement present on the eastbound I-66 CD road and does not propose access to or from the I-66 Express Lanes. Additionally, this concept carries higher construction costs due to the construction of a new embankment and an additional flyover ramp.
- Concept 3 does not propose access to or from the I-66 Express Lanes. Additionally, this alternative carries higher construction costs due to the construction of a new embankment and an additional flyover ramp. The concept proposes the addition of a traffic signal on Route 123.
- Concept 3A does not propose access to or from the I-66 Express Lanes. Additionally, this alternative carries higher construction costs due to the construction of a new embankment and an additional flyover ramp. The concept proposes the addition of a traffic signal on Route 123.
- Concept 3A-DA would carry higher construction costs due to the proposed directional ramp and new embankment construction. Additionally, the alternative would include two new signals along Route 123. Express Lane connection is not provide to and from the west.

BACKGROUND: Concept 4A/Alternative 2A and Concept 4A-DA/Alternative 2B were presented at the Public Information Meetings.

OUTCOME: **Approved.**

Decision Chronicle

Draft – May 12, 2015

- TOPIC:** Route 243 (Nutley Street) and I-66 Interchange
- RECOMMENDATION:** Carry the following concepts forward for additional analysis:
- Concept 3 (as part of Alternative 2A)
 - Concept 1 (as part of Alternative 2B)
- Drop the following concepts from further consideration:
- Concept 2
- RATIONALE:** Concept 3/Alternative 2A and Concept 1/Alternative 2B need additional study and traffic analysis.
- Concept 2 was dropped from further consideration because it would require lowered design speeds for some ramps, substandard ramp terminal spacing, and possibly higher construction costs. Additionally, Nutley Street would be at a higher elevation and would require a new signal south of the bridge.
- BACKGROUND:** Concept 3/Alternative 2A and Concept 1/Alternative 2B were presented at the Public Information Meetings
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – May 12, 2015

- TOPIC:** Vaden Drive and I-66 Interchange
- RECOMMENDATION:** Carry the following concepts forward for additional analysis:
- Concept 1 (as part of Alternative 2A)
 - Concept 2 (as part of Alternative 2B)
- RATIONALE:** Concept 1/ Alternative 2A and Concept 2/Alternative 2B need additional study and traffic analysis for the following reasons:
- Critical access point to Vienna Metrorail station
- BACKGROUND:** Concept 1/ Alternative 2A and Concept 2/Alternative 2B were presented at the Public Information Meetings
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – May 12, 2015

TOPIC:	I-495 (Beltway) Interchange
RECOMMENDATION:	Carry the following concepts forward for additional analysis: Concept 1 (as part of Alternative 2A) Concept 2 (as part of Alternative 2B) Drop the following concepts from further consideration: Concept 3 Concept 4
RATIONALE:	Concept 1/Alternative 2A and Concept 2/Alternative 2B need additional study and traffic analysis Recommended dropping Concepts 3 and 4 from further consideration for the following reasons: <ul style="list-style-type: none">• Concept 3 would lead to weaving across lanes in both eastbound and westbound directions on I-66, which causes congestion and increases potential for accidents. Additionally, the concept would not provide any interface between the two tolling systems present on the Interstates involved.• Concept 4 would require the reconstruction of all existing bridges and the relocation of a WMATA Metro substation, leading to high project costs and major right-of-way impacts.
BACKGROUND:	Both Concept 1/Alternative 2A and Concept 2/Alternative 2B were presented at the Public Information Meetings
OUTCOME:	Approved.

Decision Chronicle

Draft – May 12, 2015

- TOPIC:** Mainline Alternatives
- RECOMMENDATION:** Carry the following concepts forward for additional analysis:
- Alternative 2A
- Alternative 2B
- Drop the following concepts from further consideration:
- Alternative 1
- Alternative 2C
- RATIONALE:** Recommended dropping Alternatives 1 and 2C from further consideration for the following reasons:
- Alternative 1 consists of a 2-foot concrete barrier-separated section with 12-foot shoulders and a 42-foot center median for potential future center transit, with auxiliary lanes providing ramp-to-ramp connections if needed. A total of four full shoulders would be provided in each direction. This typical section width is 266 feet from edge of shoulder to edge of shoulder, increasing to 290 feet with auxiliary lanes between interchanges. Based on the substantial ROW impacts, this alternative was not carried forward.
 - Alternative 2C is similar to Alternative 2A but providing space for future Metrorail extension stations by increasing the median width from 42 feet from Alternative 2A to 60 feet in the locations future Metrorail stations are anticipated. Based on the substantial ROW impacts, this alternative was not carried forward.
- BACKGROUND:** Both Alternative 2A and 2B were presented at the Public Information Meetings
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** Haymarket Park-and-Ride
- RECOMMENDATION:** Drop the Haymarket Park-and-Ride from the project and pursue a location in coordination with Prince William County as a coordinated by separate project.
- RATIONALE:** After further coordination with the public, stakeholders and Prince William County, it was determined that this effort would be directed under the County and coordinated with the project moving forward.
- BACKGROUND:** Alternatives 8/2B were presented at the Public Information Meetings, but based on additional coordination have since been removed from the project.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** US 15 & I-66 Interchange
- RECOMMENDATION:** Carry the following concepts forward for:
- Alternative 2B was selected as the Preferred Alternative. (Haymarket Park & Ride Facility to be provided by others in the vicinity of I-66 and Route 15 Interchange with direct or nearly direct access to I-66 Express Lanes to be provided in the future).
- No direct access to and from the Express Lanes was proposed for the Phase 1.
- RATIONALE:** Recommend dropping Alternative A from further considering for the following reasons:
- Alternative 2A does not accommodate direct access to and from the Express Lanes and Haymarket Park & Ride facility. These improvement alternatives introduce a weave and merge issues on US 15 interchange ramp and have additional right-of-way impacts. Also, there are additional structural costs associated with the long flyover ramps.
- BACKGROUND:** Alternative 2B was presented at the October 2015 Public Information Meetings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** Route 840 (University Boulevard) & I-66 Interchange
- RECOMMENDATION:** Carry Alternative 2A concept forward for the Preferred Alternative and Phase 1.
- RATIONALE:** Recommend dropping Alternatives 2B from further considering for the following reasons:
- Alternative 2B does not preserve the I-66 median for a future center transit.
 - Refinement of Alternative 2A was developed after Public Information Meetings and the Dominion/VRE coordination meeting for the Gainesville-Haymarket future infrastructure projects. For both Preferred Alternative and Phase 1, the Refinement Alternative 2A design provides the requested full width to accommodate the 3rd rail track and requires no property take from Norfolk Southern.
- BACKGROUND:** Refinement of Alternative 2A was presented at the October 2015 Public Information Meetings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** Route 234 Bypass (Prince William Parkway) & I-66 Interchange
- RECOMMENDATION:** Carry the following concept forward for:
Alternative 2C (modified Alternative 2B) as the Preferred Alternative
No improvement was proposed for the Phase 1.
- RATIONALE:** Recommend dropping Alternatives 2A and 2B from further considering for the following reasons:
- Alternative 2A would require relocation of approximately 1,100' of existing Pageland Rd realignment and increases right-of-way impacts along I-66 mainline. Direct connection to park-and-ride facility is not provided.
 - Alternative 2B increased costs associated with the flyover structures at the direct connect park-and-ride facility. This alternative does not preserve space for future center transit.
 - Alternative C was developed by modifying alternative 2B to provide space for I-66 median future center transit and replacing the flyover ramps with a new "T" intersection bridge. This alternative also has been modified to provide additional access via the existing ramps serving Route 234 traffic south of I-66. As part of the Preferred Alternative, access from the eastbound Express Lanes will consist of a flyover ramp that will merge with the existing eastbound I-66 general purpose ramp to southbound Route 234. Access to the westbound Express Lanes will be provided by a proposed flyover ramp from the existing northbound Route 234 ramp to the eastbound I-66 general purpose lanes.
- BACKGROUND:** Alternative 2C was presented at the October 2015 Public Information Meetings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** Balls Ford Road Park-and-Ride
- RECOMMENDATION:** Carry the following concept forward for the Preferred Alternative and Phase 1:
Alternative 2C (modification of Alternative 2B with preserving the I-66 median for a future center transit, the location of the Express Lanes ramps was shifted west to the existing Balls Ford Road and Notes Drive intersection.)
- RATIONALE:** Recommend dropping Alternatives 2A and 2B from further considering for the following reasons:
- Alternatives 2A would require a longer bridge structures with higher construction costs, and would have greater impact to the Manassas Historic District property.
 - Alternative 2B does not preserve space for future center transit and would require additional infrastructure construction in the future. It would also have significant impacts to the Manassas Historic District property.
- BACKGROUND:** Alternative 2C was presented at the October 2015 Public Information Meetings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

TOPIC: US 28 & I-66 Interchange

RECOMMENDATION: Carry the following concept forward for the Preferred Alternative and Phase 1:

Alternative 2C

Drop the following concepts from further consideration:

Alternative 2A

Alternative 2B

RATIONALE: Recommend dropping Alternatives 2A and 2B from further considering for the following reasons:

- Alternatives 2A and 2B would require higher structures and a larger number of structures than Alternative 2C. Alternative 2C is more cost effective than either Alternative 2A or 2B.
- Alternatives 2A and 2B require taking land from Ellanor C. Lawrence Park in order to build the interchange ramps and access to Braddock/Walney. This is not required in Alternative 2C. Right of Way takes from the park have been eliminated from Alternative 2C.
- Alternatives 2A and 2B do not provide the same number of access points as Alternative 2C. Access between Braddock/Walney and the Express Lanes and Route 28 has been cut off. Alternative 2C provides greater access to Braddock/Walney via the access road between northbound and southbound 28. Alternative 2A does not provide access to 28 Southbound from the Express Lanes. Alternative 2C, like Alternative 2B maintains this access via a slip ramp to the General Purpose Lanes.
- Alternatives 2A and 2B do not perform as well as Alternative 2C from a traffic operation standpoint. Alternative 2C alleviated more of the congestion throughout the corridor.
- Alternative 2A impacts the Centreville historical district. Alternatives 2C and 2B tie in on the South end of 28 before this district.

BACKGROUND: Alternatives 2A, 2B, and 2C were presented at the Public Hearings.

OUTCOME: Approved.



Decision Chronicle

Draft – November 23, 2015

- TOPIC:** Express to GP Slip Ramps between Route 28 and Stringfellow Road
- RECOMMENDATION:** Carry the following concept forward for the Preferred Alternative and Phase 1 of the Preferred Alternative:
- Alternative 2B
- Drop the following concepts from further consideration:
- Alternative 2A
- RATIONALE:** Recommend dropping Alternatives 2A from further considering for the following reasons:
- Alternative 2A does not provide access from the Express Lanes to 28 Southbound. This movement is preserved by the slip ramp from the Express Lanes to the General Purpose Lanes.
 - Alternative 2A does not provide access from the Express Lanes to Fairfax County Parkway. This movement is preserved by the slip ramp from the Express Lanes to the Fairfax County Parkway collector-distributor road.
 - Alternative 2B does have greater right of way impacts than Alternative 2A. However, the design has been modified since the Public Hearings and impacts to property owners have been reduced.
 - A high volume of traffic enters 66 from 28 and exits onto Fairfax County Parkway. The collector-distributor road separates this movement and allows smoother traffic flow throughout the segment.
- BACKGROUND:** Alternatives 2A and 2B were presented at the Public Hearings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

TOPIC: Stringfellow Road

RECOMMENDATION: Carry the following concepts forward for additional analysis:

Alternative 2B as the Preferred Alternative

Concept E1 as Phase 1 which is a combination of Alternatives 2A and 2B

RATIONALE: Recommend dropping Alternative 2A from the Preferred Alternative for the following reasons:

- Alternative 2A does not preserve the median for the future Metro extension of the Orange Line
- Alternative 2A's median ramp will back up onto the Express Lanes by 2040.

Recommend combining alternatives for the following reasons:

- Reduce project costs.
- Once the metro is built, the interchange can be reconfigured as part of that project.
- Greater flexibility in future design when the median transit option is more defined.

BACKGROUND: Alternatives 2A and 2B were presented at the Public Hearings.

OUTCOME: **Approved.**

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** Fairfax County Parkway
- RECOMMENDATION:** Carry the following concepts forward for the Preferred Alternative and Phase 1:
- The eastbound collector-distributor road to Fairfax County Parkway shown in Alternative 2B will be built as part of the Preferred Alternative and Phase 1. Express Lane access will be provided via Monument Drive and Stringfellow Road.
- RATIONALE:** Recommend not providing direct access to and from Express Lanes for the following reasons:
- In order to make a direct access connection between the future Fairfax County Parkway HOV lanes to the proposed I-66 Express lanes, the interchange design would require a third level (and potentially a fourth level) of directional flyover ramps and would increase the ROW impacts and overall project cost. The interchange concepts reviewed would also impact the recently constructed Fairfax County Parkway at Fair Lakes Interchange and impact existing trails.
 - Currently both Stringfellow Road and Monument Drive have access to I-66 for HOV-2 users during the weekdays. The future design at these interchanges allows for potential optimization of use of the existing access.
 - Stringfellow Road and Monument Drive both have existing park-and-ride lots that are currently being served by existing bus routes
 - Locations of potential future transit/Metrorail stations adjacent to Stringfellow Road and Monument Drive offer direct access locations (per Fairfax County Comprehensive Plan)
- BACKGROUND:** Alternatives 2A and 2B were presented at the Public Hearings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

TOPIC: Monument Drive

RECOMMENDATION: Carry the following concepts forward:
Alternative 2A as the Preferred Alternative
Alternative 2B as Phase 1A

RATIONALE: Recommend dropping Alternative 2B from the Preferred Alternative for the following reasons:

- Alternative 2B does not preserve the median for the future Metro extension of the Orange Line
- Bridge reconstruction on Monument Drive and West Ox Road allows additional bike/pedestrian access to be included in the design.

Recommend dropping Alternative 2A from Phase 1A for the following reasons:

- Alternative 2A has much greater right of way impacts than Alternative 2B. Alternative 2B does not require any additional right of way.
- Alternative 2B has greater structural costs than Alternative 2A to build the flyover ramps and to reconstruct both the Monument Drive bridge and the West Ox Road bridge.
- Alternative 2B does not require realigning Random Hills Road.
- Once the metro is built, the interchange can be reconfigured as part of that project.

BACKGROUND: Alternatives 2A and 2B were presented at the Public Hearings.

OUTCOME: **Approved.**

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** US 50 (Lee Jackson Highway)
- RECOMMENDATION:** Carry the following concepts forward for the Preferred Alternative and Phase 1:
Alternative 2A
- RATIONALE:** Recommend dropping Alternative 2B from further considering for the following reasons:
- Alternatives 2A and 2B are the same except for access to and from the Express lanes. Alternative 2A provides access to and from the Express lanes on the east side of the interchange, while 2B does not. Express Lane access would help ease traffic congestion in the area.
 - No additional right of way takes are required in order to provide access at Route 50.
- BACKGROUND:** Alternatives 2A and 2B were presented at the Public Hearings.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

TOPIC: Route 123 & I-66 Interchange

RECOMMENDATION: Carry Alternative 2D concept forward for both the Preferred Alternative and Phase 1.

Drop the following concepts from further consideration:

Alternative 2A (Modified Interchange Configuration without Express Lane Access)

Alternative 2B (Modified Interchange Configuration with Express Lane Access)

Alternative 2C (Modified 2B - Partial Clover-leaf /ParClo with Signals)

Alternative 2D (Modified 2B - ParClo with Signals and CD Road on EB & WB)

RATIONALE: Alternative 2D is selected as the Preferred Alternative as it provides the best balance between traffic operations, safety, construction cost, right-of-way impact and social/environmental effects. However, Alternative needs additional study and traffic analysis to refine the interchange and intersection configurations.

Recommend dropping Alternatives 2A, 2B, 2C from further consideration for the following reasons:

- Alternative 2A doesn't provide express lane access at this interchange. The concept doesn't address the existing operation and safety issues at the intersection north of I-66. The direct access flyover ramp from EB I-66 to NB RTE. 123 may further aggravate the northbound weaving issue prior to the intersection with Rose Forest Dr. And the latest traffic demand volume doesn't justify this flyover ramp. Also, there are additional structural costs associated with the long flyover ramps. In addition, the latest traffic analysis shows that after eliminating the existing CD systems, the volume entering from the loop ramps creates turbulence on the mainline operation. Alternative 2A doesn't provide connection between the proposed shared-used path and the existing pedestrian access network.
- Alternative 2B, while providing express lane access at this interchange does not address the issues identified above for Alternative 2A.

- Alternative 2C is developed by modifying alternative 2B to provide signals on either side by removing direct connection flyover ramps. Also the northbound left turn volume at Rose Forest Dr signal is buffer or median separated from the through volume to eliminate weaving, improving the signal operation. From operations & safety standpoint, it was noted that volume entering from the loop ramp (from RTE.123) creates turbulence on the mainline operations due to speed differential and merge at this interchange.
- Alternative 2D is developed to further improve Alternative 2C concept by separating the volume entering through the loop ramp to merge with direct connection ramp before merging with mainline reducing the number of merge points and at the same time eliminating turbulence on the mainline on both directions at this interchange.

BACKGROUND:

Alternatives 2A was presented at both Public Information and Public Hearing Meetings. Alternative 2B was originally presented at Public Information Meeting and modified based on the public comments. The revised Alternative 2B was presented at Public Hearing meeting. Alternatives 2C and 2D were successively developed after Public Hearing meetings based on the public/stakeholder's comments and the updated traffic analysis.

OUTCOME:

Approved.

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** Vaden Street and I-66 Interchange
- RECOMMENDATION:** Carry the following concept forward as the Preferred Alternative and Phase 1:
Alternative 2A as presented during PH
- Drop the following concepts from further consideration:
Alternative 2B
- RATIONALE:** Recommend dropping Alternatives 2B from further consideration for the following reasons:
- Alternative 2A provides access to and from the Express lanes to Vaden Drive providing direct connection to the WMATA facilities and adjacent communities for both express traffic as well as buses, moving more people per lane compared to Alternative 2B. Alternative 2A provides for better traffic operations while reducing the right-of-way impacts and eliminating any residential relocations.
- BACKGROUND:** Alternatives 2A and 2B were presented at the Public Hearing.
- OUTCOME:** **Approved.**

Decision Chronicle

Draft – November 23, 2015

- TOPIC:** Route 243 (Nutley Street) and I-66 Interchange
- RECOMMENDATION:** Carry the following concept forward as the Preferred Alternative and Phase 1:
Alternative 2A as presented during PH
Drop the following concepts from further consideration:
Alternative 2B
- RATIONALE:** Recommend dropping Alternatives 2B from further consideration for the following reasons:
- Alternative 2B concept has large footprint and major ROW impacts to the adjacent WMATA facilities. The existing retaining wall, pedestrian bridges, parking lot and Vienna Metro Station South of I-66 will be impacted. Combination of ramp horizontal and vertical alignment in this concept is also undesirable with potential safety and operation related issues. There are additional structural costs associated with the long flyover ramps and undesirable ramp vertical alignment.
- BACKGROUND:** I-64 Interchange at Route 15, Zion Crossroads was the first Diverging Diamond Interchange (DDI) in Virginia (construction completed on April 15, 2014).
- OUTCOME:** **Approved**

Decision Chronicle

Draft – November 23, 2015

TOPIC: I-495 (Beltway) Interchange

RECOMMENDATION: Carry Alternative 2D concept forward for the Preferred Alternative and Phase 1
Drop the following concepts from further consideration:
Alternative 2A (Full Access *except movements between north and east*)
Alternative 2B (Partial Access with EB Flyover at Dunn Loring)
Alternative 2C (Modified 2B to reduce ROW impacts in NW quadrant)

RATIONALE: Alternative 2D, revision/refinement of Alternative 2C, was developed after Public Hearing Meetings to further address the public and stakeholders' concerns on the flyover ramp height (± 78 ft above I-495) and the Section 4(f) impact at Stenwood Elementary School. It is selected as the Preferred Alternative as this concept provides the same traffic movements as Alternatives 2B and 2C without encroaching into the Stenwood school baseball field, and reduced flyover ramp height (<60ft above I-495).

Recommended dropping Alternatives 2A, 2B and 2C from further consideration for the following reasons:

- Alternative 2A provides for full access connecting all possible required movements at the interchange, with the exception of movements between north and east which are currently provided via Dulles Connector Road (DCR). The recently constructed NB to WB two-lane GP loop ramp (as part of I-495 HOT Lane project) will be abandoned and replaced with a new flyover ramp which is approximate 78ft over the I-495 GP/Express lanes at its highest point. In addition to a total of 15 potential residential parcel relocations, Alternative 2A will also require relocation of the existing baseball field and a newly constructed sidewalk at the Stenwood Elementary school. Based on the public, agency and stakeholder inputs, this alternative is dropped from further consideration due to significantly higher ROW impacts, higher construction costs, along with potential for longer duration of traffic disruption due to MOT and construction.
- Alternative 2B provides for partial access at the interchange while providing the missing movements through a proposed flyover ramp from GP to Express lanes on I-66EB at Dunn Loring Metro station. Compared to Alternative 2A, this concept reduces the right of way impact at the NE and SE quadrants. The number of potential residential

parcel relocations is reduced to 8. However, this concept doesn't address the public concerns with respect to the height of flyover ramp, abandonment of newly constructed loop ramp, and the impact at the Stenwood Elementary School.

- Alternative 2C based on the refinements to Alt 2B that eliminates impact to the properties located in the NW quadrant. This refinement is achieved by re-routing the traffic from I-495NB GP to I-66WB Express lanes using the existing infrastructure to some extent (newly constructed NB to WB loop ramp) and then using a proposed flyover on I-66WB to eventually tie to express lanes. This alternative, however, has not addressed the ramp height and school impact (Section 4(f)) issues.

BACKGROUND:

Alternatives 2A and 2B were presented at the Public Information meetings. Alternative 2C was presented at the Public Hearing meeting.

Alternative 2D was developed and presented to the public after Public Hearing.

Following Table lists the potential Right-of-way impact estimate for all four alternatives.

I-495/I66 (East of Gallows)		2A	2B	2C	2D
RR		15	8	8	8
Non RR Impact	Total Take	7	4	3	0
	Partial Impact	19	17	13	13
Total ROW Impact		41	29	24	21

RR= Residential Relocation

OUTCOME:

Approved.

Decision Chronicle

Draft – November 23, 2015

TOPIC: Mainline Alternatives

RECOMMENDATION: Carry the following concepts forward for additional analysis:

Alternative 2A for the Preferred Alternative from Catharpin Road to I-495 and 2A with a reduced median from Antioch Road to Catharpin Road

Alternative 2A for Phase 1 of the Preferred Alternative from US 29 (Centreville), Alternative 2B from US 29 (Centreville) to University Boulevard, and an open section from University Boulevard to Route 15

RATIONALE: Recommended dropping Alternative 2A from the Preferred Alternative for the following reason:

- Alternative 2B does not provide space in the median for future transit

Recommended a hybrid of Alternatives 2A and 2B for Phase 1 for the following reasons:

- By tapering down to Alternative 2B west of Centreville the project will reduce the total cost of the project
- When the Metrorail is extended, there will be greater design flexibility

BACKGROUND: Both Alternative 2A and 2B were presented at the Public Hearings.

OUTCOME: **Approved.**