



Northern Virginia Transportation Authority
The Authority for Transportation in Northern Virginia

TECHNICAL ADVISORY COMMITTEE

Wednesday, February 15, 2017, 7:00pm

**NVTA Office
3040 Williams Drive, Suite 200
Fairfax, Virginia 22031**

AGENDA

- I. Call to Order/Welcome** Chairman Boice

Action

- II. Approve Summary Notes of January 18, 2017 Meeting**
*Recommended Action: Approval [with abstentions
from those who were not present]*

Discussion/Information

- III. NVTA Update** Ms. Backmon, Executive Director
- IV. Development of Six Year Program Framework** Mr. Jasper, Principal, Transportation
Planning & Programming

Adjournment

- V. Adjourn**

**Next Meeting: March 15, 2017
7:00pm
NVTA Office**



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SUMMARY NOTES

I. Call to Order/Welcome Mr. Fahl

- Mr. Fahl called the meeting to order at 7:00pm.
- Attendees:
 - Members: Agnes Artemel; Armand Ciccarelli; Doug Fahl; Meredith Judy; Kathy Ichter; Pat Turner; Shanjiang Zhu.
 - NVTA Staff: Keith Jasper (Principal, Transportation Planning and Programming); Sree Nampoothiri (Transportation Planner).
 - Other: Tom Biesiadny (Fairfax County); James Davenport (Prince William County).

Action

II. Meeting Summary of November 16, 2016 Mr. Fahl

- Ms. Artemel moved approval of the November 16, 2016 meeting summary; seconded by Dr. Zhu. The motion carried unanimously with abstentions from those who were not present at the November meeting.

III. CY2017 Meeting Schedule Mr. Fahl

- Ms. Judy moved approval of the CY2017 Meeting Schedule with the December 20, 2017, meeting noted as optional; seconded by Ms. Artemel. The motion carried unanimously.

IV. CY2017 Chair/Vice Chair Nominations Mr. Fahl

- Ms. Turner nominated Mr. Boice and Mr. Fahl to continue as Chair and Vice Chair respectively; seconded by Dr. Zhu. The motion carried unanimously.

V. TransAction: Weightings of Performance Measures Mr. Jasper

- Mr. Jasper reported that the Authority adopted the proposed 15 performance measures for the evaluation and analysis of projects submitted to the TransAction Update, after considering the recommendations from the Technical Advisory Committee (TAC), Planning Coordination Advisory

Committee (PCAC), TransAction Subcommittee, and Planning and Programming Committee (PPC).

- Mr. Jasper pointed out that the FY2017 Program selection process included the House Bill 599 (HB 599) measures that together constituted a 45% total weight. He added that all of the HB 599 measures from the FY2017 Program analysis were included in the adopted measures for TransAction Update.
- In response to Ms. Artemel's question on the Authority's consideration of the weightings, Mr. Jasper responded that the weightings had not yet been presented to the Authority for consideration.
- Ms. Judy and Mr. Ciccarelli asked if the 45% weighting for the HB 599 measures was legally required and if the TAC can change it. Mr. Jasper replied that it is not a legal requirement and the TAC may recommend changes to the Authority, noting the Authority has the final decision making power.
- In response to Dr. Zhu's question of how quantitative and qualitative measures are treated, Mr. Jasper mentioned that the methodology to calculate qualitative measures is still being developed and it will be comparable to the quantitative measures.
- Members raised concerns about the difficulty of uniformly applying measures such as transit and bike-ped accessibility across urban, suburban, and rural areas of the region. Mr. Jasper noted that these measures are intended for relative comparisons among packages of projects.
- Mr. Fahl reiterated that the projects ought to result in improved safety in all cases, therefore the safety measure need not be given a high weighting.
- Mr. Jasper explained VDOT's Equivalent Property Damage Only (EPDO) values in response to questions from Mr. Fahl and Ms. Artemel. He added that these values will be divided into high/medium/low categories and packages will be scored accordingly. Mr. Ciccarelli suggested exploring the possibility of weighing EPDO values by vehicle miles traveled (VMT).
- Mr. Ciccarelli suggested exploring methods for modeling VMT by speed and its impacts on analyses, considering speeds more than 65 mph are bad for the environment. However, the model might be calibrated to a maximum of 65 mph to match the legal speed limit.
- The members started their deliberation on weightings from the 60-30-10 percentages for Goals 1-2-3 as agreed by the TAC at its November meeting. The TAC recommended the following weightings to the Authority:
 - 1.1.1 Total person hours of delay (HB 599) – 10%
 - 1.1.2 Transit crowding (HB 599) – 6%
 - 1.1.3 Person hours of congested travel in automobiles (HB 599) – 8%
 - 1.1.4 Person hours of congested travel in transit vehicles (HB 599) – 7%
 - 1.2.1 Congestion severity: Maximum travel time ratio – 2%
 - 1.2.2 Congestion duration (HB 599) – 15%
 - 1.3.1 Percent of jobs/population within 1/2 mile of high frequency and/or high performance transit – 7%
 - 1.3.2 Access to jobs within 45 mins by auto or within 60 mins by transit (HB 599) – 5%

- 1.4.1 Average travel time per motorized trip between Regional Activity Centers – 5%
 - 1.4.2 Walkable/bikeable environment within a Regional Activity Center – 5%
 - 2.1.1 Safety of the transportation system – 5%
 - 2.2.1 First and last mile connections – 8%
 - 2.3.1 Share of travel by non-SOV modes – 5%
 - 2.4.1 Person hours of travel caused by 10% increase in PM peak hour demand (HB 599) – 2%
 - 3.1.1 Vehicle miles traveled (VMT) by speed – 10%
- Mr. Nampoothiri presented the draft weightings being considered by the TransAction Subcommittee.
 - Mr. Jasper pointed out that the TransAction public engagement suggested that congestion measures are the top priority for the public.

Discussion/Information

VI. Development of Six Year Program Framework Mr. Jasper

- Mr. Jasper presented the key milestones in the development of Six Year Program, with approval of the framework expected in March 2017 and adoption of the FY2018-23 Six Year Program in spring 2018.
- Mr. Jasper added that the framework should include moving from plan to program, roles/responsibilities/schedule of the program, and financial principles.
- Mr. Jasper explained that the details will be discussed in upcoming TAC meetings. Mr. Fahl requested staff provide a copy/link to the presentation for reference.

VII. NVTA Update Mr. Jasper

- Mr. Jasper informed the Committee members that the Authority met on January 12, 2017, and noted the following:
 - ✓ The final four Standard Project Agreements (SPAs) from the FY2017 Program were approved. This completed the execution of agreements for all projects from the FY2017 Program, with the exception the I-66/Route 28 Interchange Project, which is on hold until the financial closure between the Commonwealth and the private concessionaire for Transform 66 Project – Outside the Beltway.
 - ✓ The Authority released its 2016 Annual Report.
 - ✓ NVTA staff plans to include monthly/quarterly congestion trends in future Executive Director’s reports to the Authority.

- ✓ The PCAC will meet on January 26, 2017 and the PPC on January 30, 2017. Both committees will develop their own recommendation on the weightings for the TransAction performance measures to be presented to the Authority at its February 9, 2017 meeting.
- ✓ The NVTA will host a VTrans Open House on January 26, 2017.

- In response to Mr. Fahl's question regarding Mr. Dunphy's resignation from the TAC, Mr. Jasper noted that the resignation was effective January 15, 2017, and that we are awaiting the appointment of a new member by the Commonwealth's Secretary of Transportation.

Adjournment

VIII. Adjourn

Mr. Fahl

- Meeting adjourned at 8:55pm.

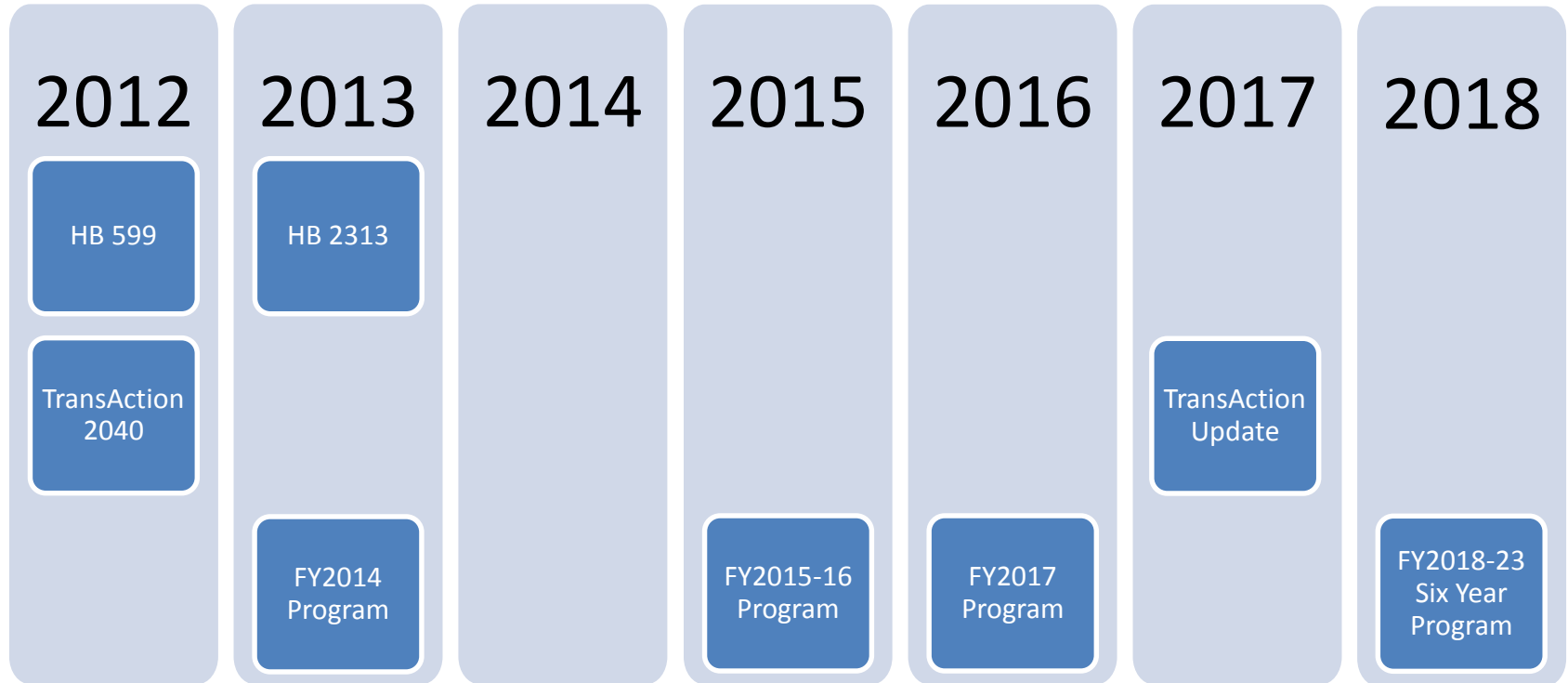
Advancing from Planning to Programming



Presentation to the
Technical Advisory Committee

Northern Virginia
Transportation Authority
The Authority for Transportation in Northern Virginia

Significant Milestones

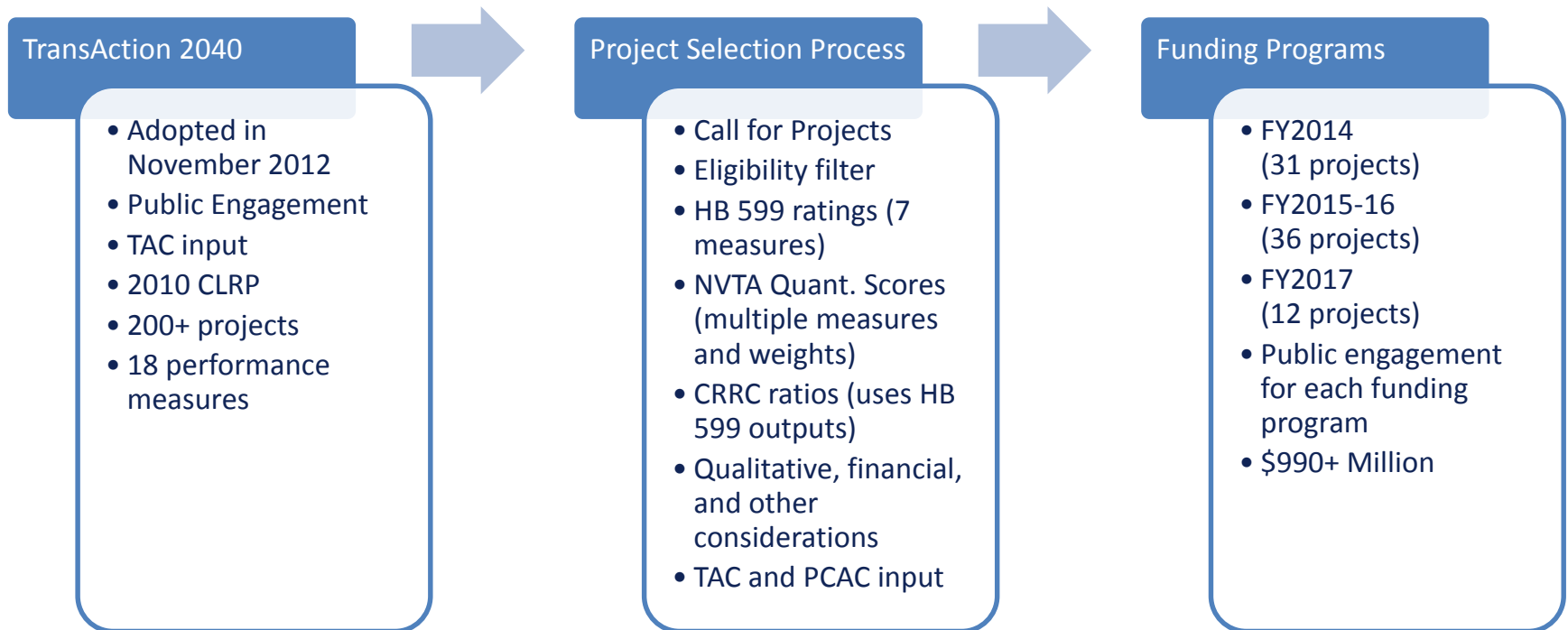


Notes:

- Milestones shown in Calendar Year in which event was/will be enacted or adopted
- Cyclical updates to the FY2018-23 Six Year Program may occur from 2019 onwards



'Former' Process



Note: Process shown for allocating NVTA's Regional Revenues



Key Lessons Learned

- Data-driven project selection process provides for robust analysis and decision-making, and...lots of data;
- Successfully applied HB 599 process to all projects in FY2017 Program, regardless of mode;
- HB 599 process must be repeated for each new candidate pool, and individual project ratings cannot be subsequently re-used;
- Projects evaluated independently; synergistic effects not addressed;
- No opportunity for project sponsors to refine projects when evaluation complete;
- TransAction 2040 and HB 599 measures developed and applied independently.



TransAction Update Opportunities

- Enhanced regional transportation planning:
 - Multi-modal corridor-based approach to addressing identified regional transportation needs;
 - Project groupings will enable synergistic effects to be better understood;
 - Project sponsors will be able to refine projects based on interim evaluations;
 - Potential use of targets for key measures.

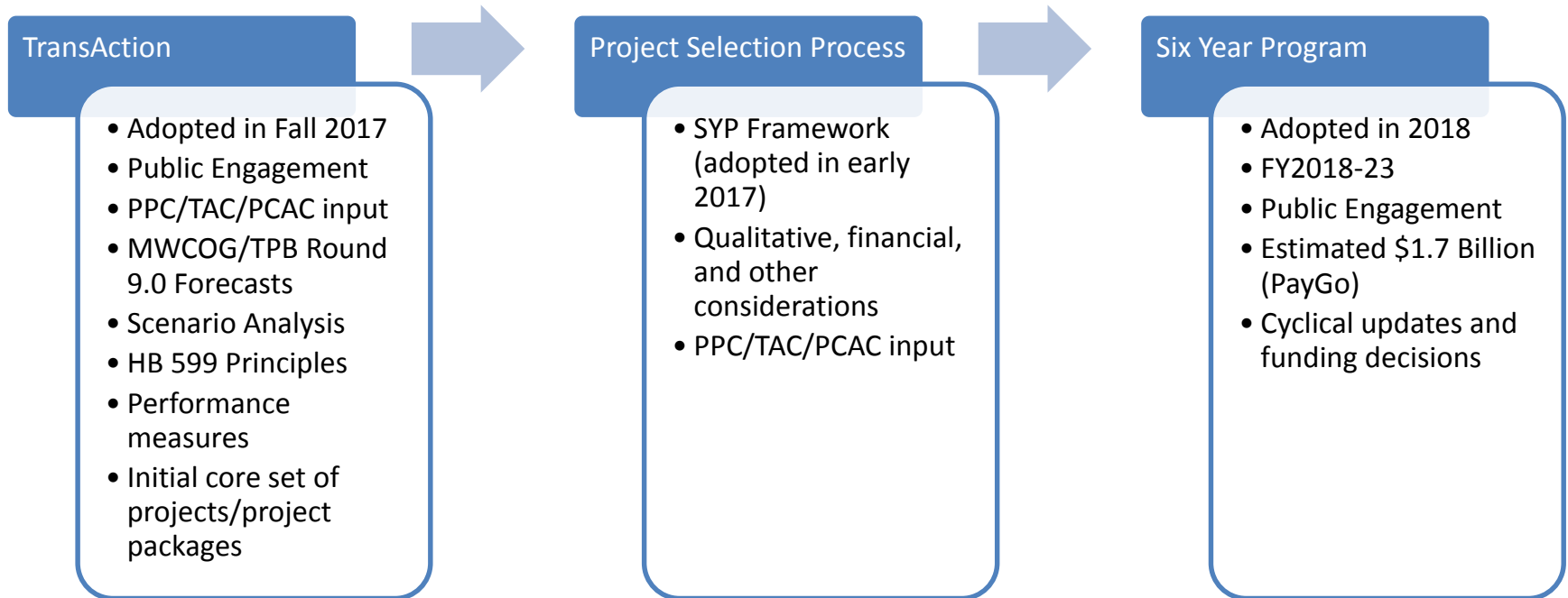


TransAction Update Opportunities

- Scenario Analysis will enhance overall robustness of TransAction:
 - Evaluation and recommendations will be based on MWCOG/TPB Round 9.0 forecasts for 2040;
 - Analysis of multiple scenarios ('alternate' futures) will provide an understanding of the sensitivity of recommendations.
- Principles of HB 599 will be integrated:
 - Consistent use of measures;
 - All projects/project groupings will be evaluated.



'Integrated' Process



Note: Process shown for allocating NVTA's Regional Revenues



Development of Initial Core Set of Projects/Project Packages

- Collaborative
 - Identifies best performing corridor packages (per the TransAction analysis) relative to regional transportation needs and costs;
 - Reflects jurisdictional priorities
 - Logical phasing and sequencing, with an emphasis on regional multimodal solutions;
 - Consistent with estimated available funds/opportunity for financing
- Geographic and Modal Balance
- Starting point for the development of the FY2018-23 Six Year Program.

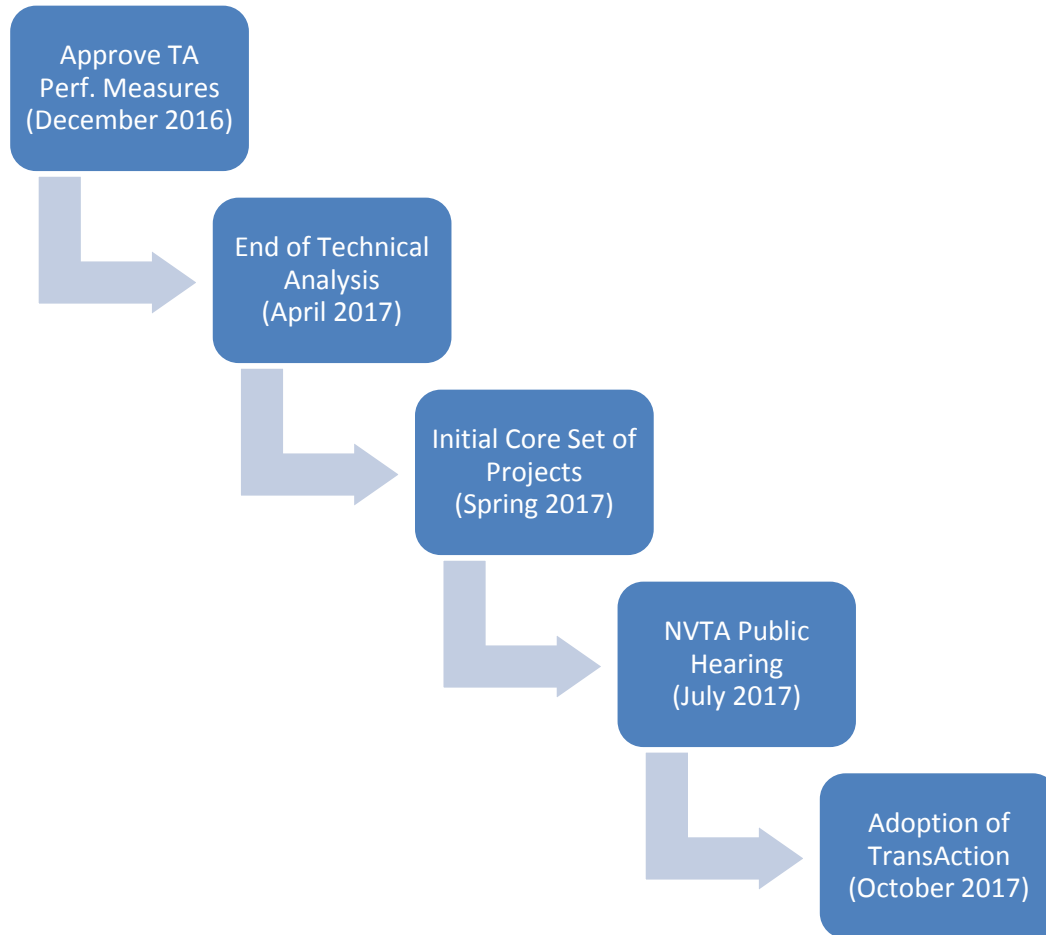


What is the SYP Framework?

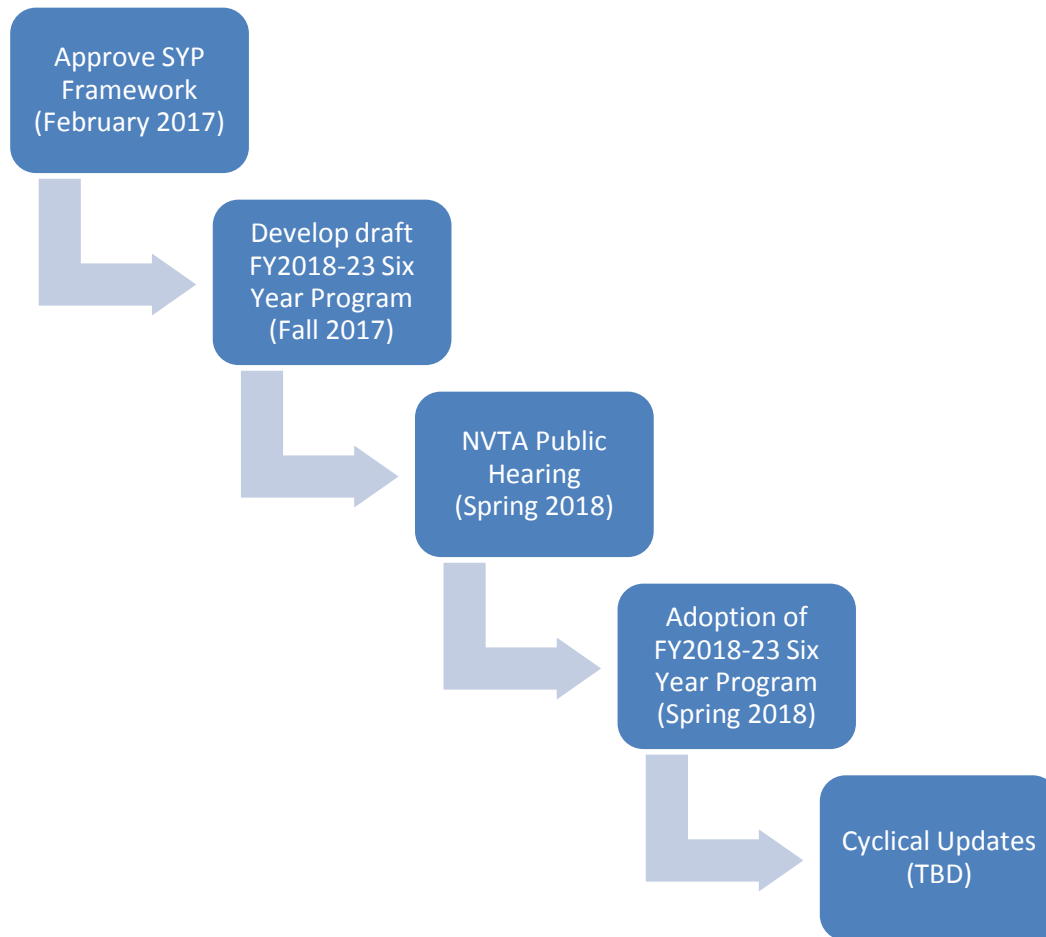
- Describes how TransAction and the FY2018-23 Six Year Program will be integrated;
- Describes how the FY2018-23 Six Year Program will be developed;
- Identifies roles, responsibilities, schedule, and other ‘structural’ aspects of the FY2018-23 Six Year Program;
- Incorporates Financial Principles;
- Will not include list of projects or funding allocations;
- Intent is for Authority approval of the SYP Framework by February 2017.



Key Milestones – TransAction



Key Milestones – Six Year Program



Desired SYP Features

- Transparent and Accountable
 - No secrets or surprises;
 - Leverages cost and time efficiencies wherever possible.
- Flexible
 - Adapts to changing circumstances, e.g. financial, transportation;
 - Allows for proactive cash flow management and investment to maximize Regional Revenue Fund.
- Predictable
 - Provides multi-year funding stream;
 - Matches expected project expenditure profile or funding verification requirements.



Proposed SYP Features – 1

- The Six Year Program will be formally updated every two years, to accommodate:
 - Project/project phase completions;
 - Project schedule and budget adjustments (limits may apply);
 - Fluctuations in regional revenues;
 - Refined program funding allocations in the ‘out-years’;
 - Updated NVRTA regional priorities.
- Ad-hoc updates may occur under exceptional circumstances.
- Future consideration will be given to the optimal scheduling of updates with respect to:
 - Jurisdiction/agency capital planning/programming cycles;
 - Smart Scale and other statewide funding programs.



Proposed SYP Features – 2

- Much like jurisdictional Capital Improvement Plans (CIPs) NVRTA's Six Year Program will set an expectation for future funding of the identified projects – details will be developed;
- A Public Hearing will be held prior to adoption, and for subsequent cyclical updates.



Proposed SYP Features – 3

- Studies:
 - NVRTA staff preference is for jurisdictions and agencies to fund studies, rather than use regional revenues;
 - Regional studies funded with regional revenues will only be funded through completion of the study phase, and cannot include any other project phases, e.g. preliminary engineering;
 - NVRTA may combine/expand study scopes to increase their regional significance and utility while saving costs;
 - For the purposes of HB 599, studies are not considered significant projects and are therefore exempt from evaluation and rating requirements.



Proposed SYP Features – 4

- Geographic/modal balance:
 - Geographic/modal balance will be addressed as a qualitative consideration in the FY2018-23 SYP.



Proposed SYP Features – 5

- Future versions of the Six Year Program will undergo major revision following future TransAction updates or mid-cycle amendments:
 - Future consideration will be given to integration of the TransAction and Six Year Program update cycles;
 - Mid-cycle TransAction amendments may be appropriate in some circumstances
 - subject to NVRTA approval and the identification of an acceptable funding source.



Proposed SYP Features – 6

- Schedule:
 - Development of the draft Six Year Program immediately following adoption of TransAction (Fall 2017);
 - Formal review of draft Six Year Program (Winter 2017);
 - Board/Council/Agency resolutions submitted to NVTVA (early 2018);
 - Authority approves date of Public Hearing (Jan. 2018);
 - Authority approves release of draft Six Year Program (Feb. 2018);
 - NVTVA Public Hearing (March 2018);
 - Adoption of Six Year Program (April 2018).



Proposed SYP Features – 7

- Subject to C of C review, NVRTA will develop a ‘template’ for Board/Council resolution that will serve dual purposes:
 - Confirmation of jurisdiction/agency support for candidate projects;
 - Meets NVRTA Standard Project Agreement requirements.



Other SYP Considerations

- Finance Committee to recommend Financial Principles addressing:
 - Proportion of estimated available PayGo funding that should be allocated in each update;
 - Factors that influence the extent to which available debt capacity should be used, and when;
 - Provision for NVRTA to provide matching funds, e.g. for federal grant programs.



Inputs Requested

- Proposed SYP framework (Authority approval by February 2017);
- Performance measures and weightings (Authority approval by December 2016).



**From Planning to Programming
Questions for TAC (2/15/2017) and PCAC (2/22/2017)**

1. TransAction will identify the best performing multimodal packages at the corridor segment level, not individual projects on a standalone basis. Programming will consider projects/smaller groups of projects for funding in the 2018-2023 Six Year Program (SYP). In the past, programming has been preceded by a Call for Projects.

Is there an appropriate role for a Call for Projects for the SYP, perhaps with an emphasis on project readiness? If a Call for Projects approach is used, how frequently should it be made? Alternatively, would a collaborative approach to identify candidate regional projects for inclusion in the SYP based on the corridor-based analysis in TransAction be preferable? If a collaborative approach is utilized instead of a Call for Projects, how will jurisdictional and agency buy-in be ensured?

2. Future travel conditions on corridors and corridor segments will vary across the region.

To what extent should programming focus be on the corridors and corridor segments with the worst forecasted congestion, versus the highest performing projects? How will geographic and modal balance be ensured?

3. Targets can be used as a policy tool to set an expectation of how the regional transportation system will perform in the future. Such a policy may require the Authority to set targets. Alternatively, targets can be used as an internal mechanism to prioritize and/or help to manage expectations of what can be achieved. NVTA's recent Tracking Survey has indicated that a Travel Time Index¹ of 1.5 is the maximum level for commuting that is acceptable to Northern Virginians who drive to work.

Should TransAction incorporate targets and, if so, how should they be used? What are appropriate targets for the region? What happens when targets are not met?

4. NVTA has funded studies in the past using regional revenues, although NVTA staff preference is to only fund studies with a regional scope.

Under what circumstances should TransAction include studies and how should they be evaluated given studies alone do not result in congestion reduction? Connected/Automated Vehicle technologies offer the potential to reduce non-recurrent congestion caused by crashes. Should TransAction include pilot CAV deployments and how should they be evaluated?

5. NVTA has previously taken non-NVTA funding sources into account in its project selection process. External funding sources increase the likelihood that such projects will be allocated regional revenues. However, NVTA has never applied for federal grants using regional revenues as matching funds.

¹ Travel Time Index is the ratio of typical commute travel time divided the free flow travel time

Is this an opportunity worth exploring? How would projects be identified for federal grant applications?

6. NVTAs Finance Committee will make a recommendation on a not to exceed amount for the SYP and if/when the Authority should use debt capacity.

What planning and programming considerations should be factored into the recommendation for use of debt capacity?

7. The next Smart Scale cycle will likely commence in Fall 2018.

Should the SYP update cycle be synchronized with Smart Scale? What is the optimal update cycle for the SYP? What is the best time of the year for the SYP to be implemented and updated?