



COMMONWEALTH of VIRGINIA
Office of the
SECRETARY of TRANSPORTATION

Corridors of Statewide Significance Prioritization Process

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Deputy Secretary of Transportation



Corridors of Statewide Significance Legislation

§ 33.1-23.03 requires the CTB, through the Office of Intermodal Planning and Investment, to conduct a comprehensive review of statewide needs in a Statewide Transportation Plan setting forth assessment of capacity needs for all corridors of statewide significance.

The designation of the transportation corridor [CoSS] shall be in sufficient detail so that the local jurisdictions can place them on their comprehensive plans.

Execute Memorandums Of Understanding between localities within the CoSS, VDOT and DRPT to commit to preserve the corridors and to work together to accomplish this goal.

Corridors of Statewide Significance Legislation
















§ 2.2-229 requires the Office of Intermodal Planning and Investment to coordinate and oversee studies of potential highway, rail, transit, and other improvements and strategies, to help address mobility and accessibility within corridors of statewide significance and regional networks.

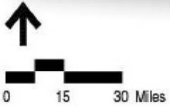
Projects identified as priorities in the CMP will be considered as priorities for funding by the CTB provided that the CMP has been adopted in the Comprehensive Plan of the locality in which the project is located.

CoSS Defined - VTrans2035

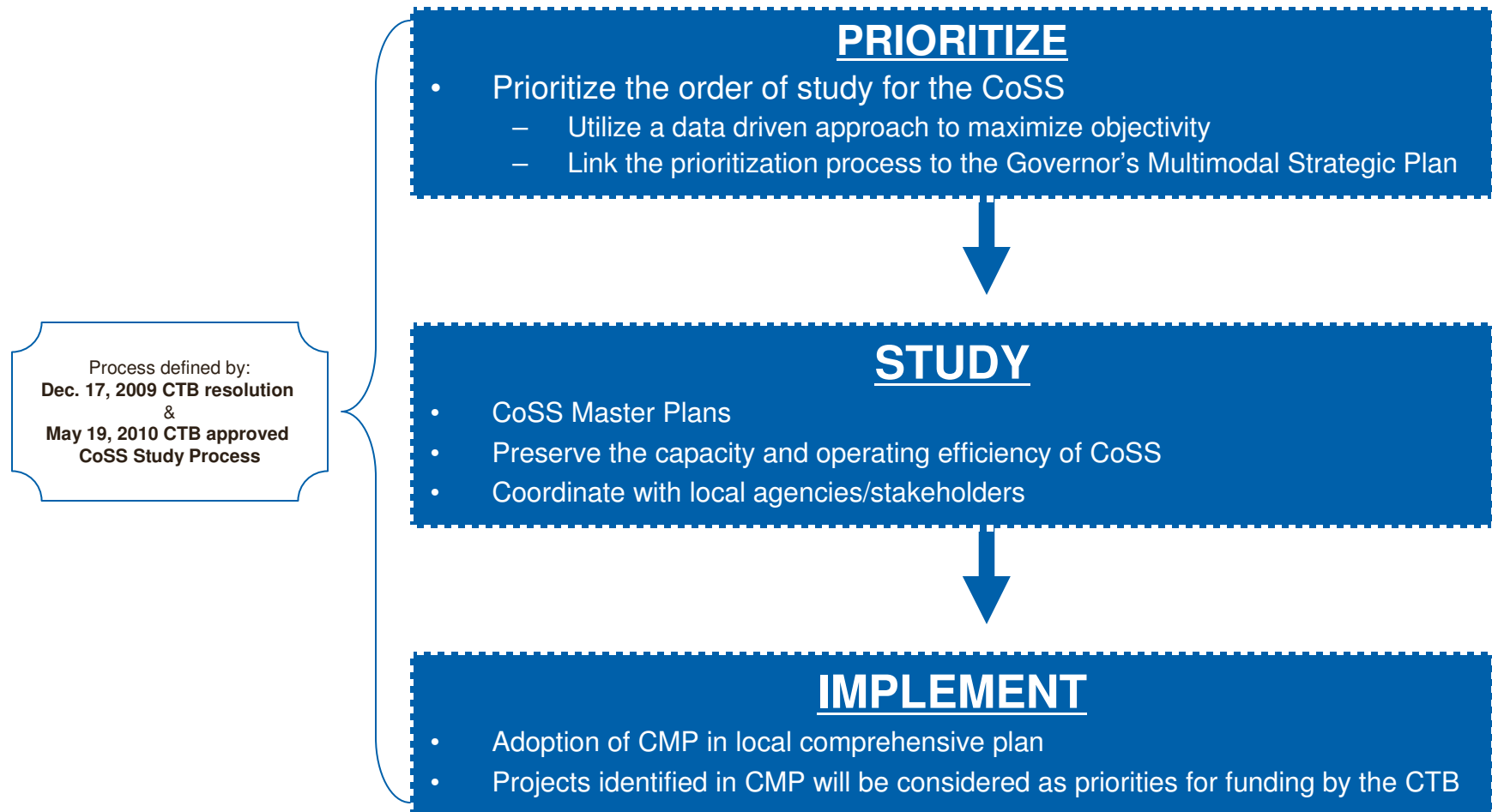
An integrated, multimodal system of transportation facilities that connect activity centers within and without the Commonwealth and promote the easy movement of people, services and goods vital to the economic prosperity of the state.

Legend

-  Airport
-  Railroad
-  Port
-  County Line
-  Southside Corridor (U.S. 58)
-  Seminole Corridor (U.S. 29)
-  Western Mountain Corridor (I-77)
-  Crescent Corridor (I-81)
-  Heartland Corridor (U.S. 460)
-  Coastal Corridor (U.S. 17)
-  Eastern Shore Corridor (U.S. 13)
-  East-West Corridor (I-64)
-  Washington to North Carolina Corridor (I-95)
-  Northern Virginia Connector (I-66)
-  North Carolina to West Virginia Corridor (U.S. 220)



CoSS Study Process



Corridor Master Plans

The purpose of the Corridor Master Plan (CMP) is to identify ways to preserve the capacity and ensure the safety of Commonwealth's major transportation corridors. Access to new sites along the CoSS must be planned in order to minimize congestion.

The location, spacing and design of entrances, intersections, median openings, traffic signals as well as transit options must be addressed in the CMP to preserve the facility for through travel and to serve future developments.

A primary function of the CoSS is to carry long distance traffic. The goal of the CMP is to preserve the capacity and operating efficiency of the CoSS.

Prioritization Methodology

CoSS Prioritization Process

- **Methodology**

- Divide CoSS by PDC boundary lines (49 sections)
- Collect data on transportation assets, socioeconomics, and related inputs
- Organize data by Governor's Multimodal Strategic Plan goals
- Attribute spatial data to each CoSS segment
 - Within 5 miles of roadway centerline
 - Calculate data on a per mile basis
- Weight data to equalize influence of each Strategic Plan goal
 - Goal of economic vitality weighted double
- Aggregate data, including weight, to rank each corridor segment

Prioritization Methodology: Corridor Segments

Corridor Route	Corridor Name	Planning District
13	Eastern Shore Corridor	Accomack-Northampton
13	Eastern Shore Corridor	Hampton Roads
17	Coastal Corridor	George Washington
17	Coastal Corridor	Hampton Roads
17	Coastal Corridor	Middle Peninsula
17	Coastal Corridor	Northern Shenandoah
17	Coastal Corridor	Northern Virginia
17	Coastal Corridor	Rappahannock-Rapidan
29	Seminole Corridor	Northern Virginia
29	Seminole Corridor	Rappahannock-Rapidan
29	Seminole Corridor	Region 2000
29	Seminole Corridor	Thomas Jefferson
29	Seminole Corridor	West Piedmont
58	Southside Corridor	Crater
58	Southside Corridor	Cumberland Plateau
58	Southside Corridor	Hampton Roads
58	Southside Corridor	Lenowisco
58	Southside Corridor	Mount Rogers
58	Southside Corridor	New River Valley
58	Southside Corridor	Southside
58	Southside Corridor	West Piedmont
64	East-West Corridor	Central Shenandoah
64	East-West Corridor	Hampton Roads
64	East-West Corridor	Richmond Regional
64	East-West Corridor	Roanoke Valley-Alleghany
64	East-West Corridor	Thomas Jefferson

Corridor Route	Corridor Name	Planning District
66	Northern Virginia Connector	Northern Shenandoah
66	Northern Virginia Connector	Northern Virginia
66	Northern Virginia Connector	Rappahannock-Rapidan
77	Western Mountain Corridor	Mount Rogers
81	Crecent Corridor	Central Shenandoah
81	Crecent Corridor	Mount Rogers
81	Crecent Corridor	New River Valley
81	Crecent Corridor	Northern Shenandoah
81	Crecent Corridor	Roanoke Valley-Alleghany
95	Washington to North Carolina Corridor	Crater
95	Washington to North Carolina Corridor	George Washington
95	Washington to North Carolina Corridor	Northern Virginia
95	Washington to North Carolina Corridor	Richmond Regional
220	North Carolina to West Virginia Corridor	Central Shenandoah
220	North Carolina to West Virginia Corridor	Roanoke Valley-Alleghany
220	North Carolina to West Virginia Corridor	West Piedmont
460	Heartland Corridor	Commonwealth
460	Heartland Corridor	Crater
460	Heartland Corridor	Cumberland Plateau
460	Heartland Corridor	Hampton Roads
460	Heartland Corridor	New River Valley
460	Heartland Corridor	Region 2000
460	Heartland Corridor	Roanoke Valley-Alleghany

Data by Strategic Plan Goals

GOAL 1: Establish a seamless multimodal system that moves people and freight

- **Data Utilized:**

- **Bus Service**

- Local Transit Service Areas
 - Greyhound Stations

- **Rail Service**

- Amtrak Stations
 - VRE Station
 - Access to Regional Rail Lines

- **Ports**

- Intermodal Facilities
 - Distribution Center

- **Highway**

- Park and Ride Lots

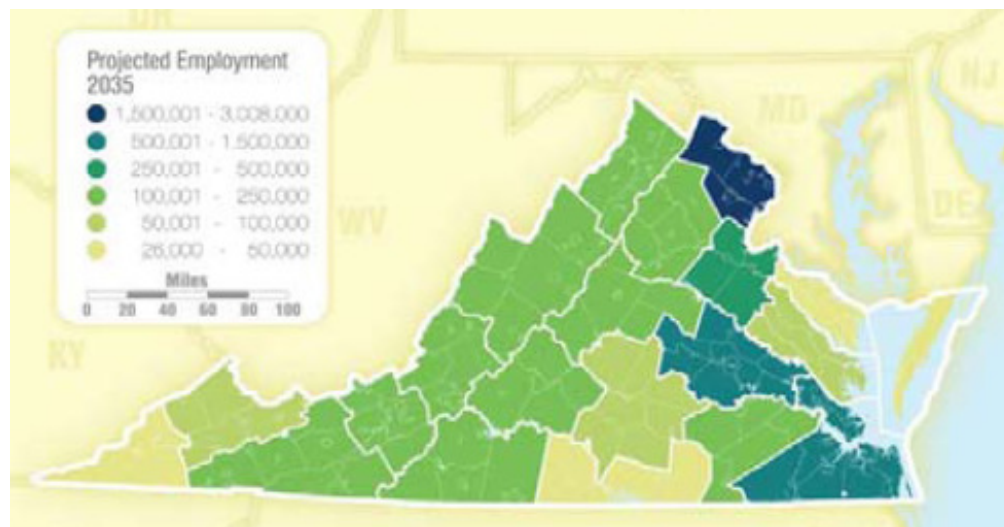
- **Airports**

- 45-Minute Drive Time to Commercial Airports
 - 30-Minute Drive Time to General Aviation Airports



GOAL 2: Ensure the transportation system promotes and supports economic opportunity

- **Data Utilized:**
 - **Employment Density per Square Mile**
 - **Business Incubators**
 - **College/University**
 - **Tourism Site**
 - **Military Installation**



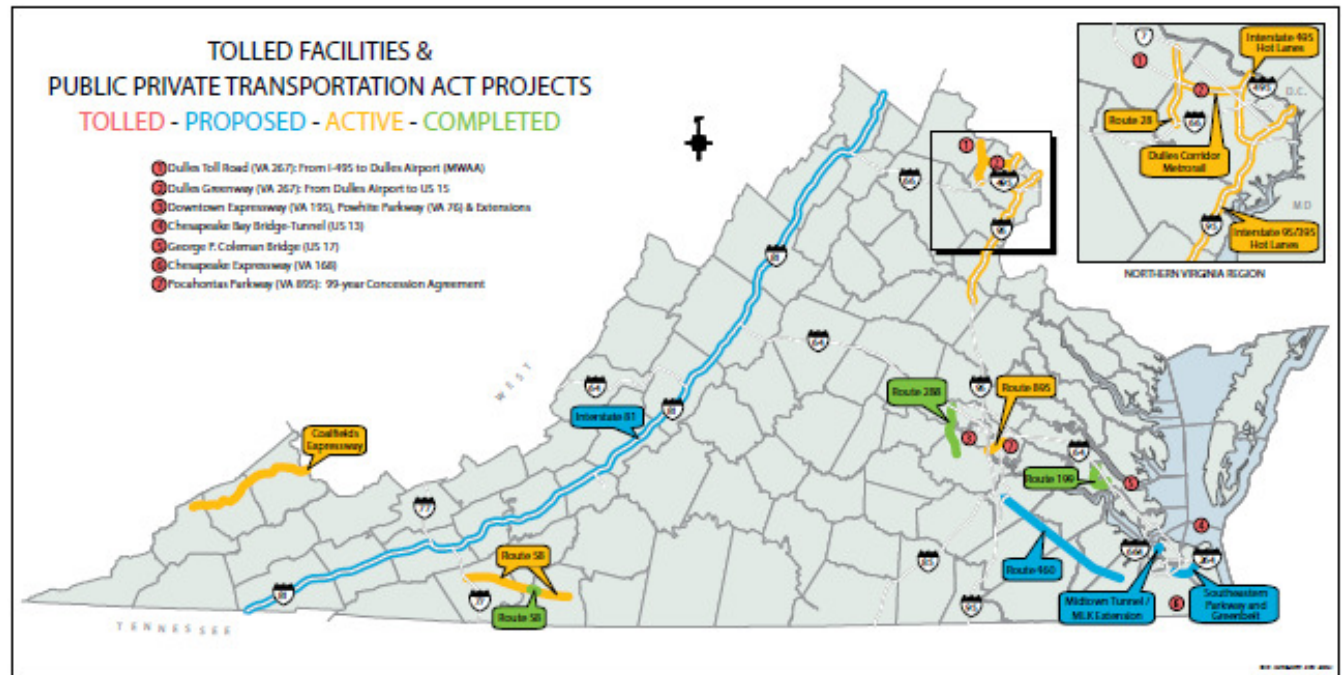
GOAL 3: Develop unified and collaborative transportation planning and implementation processes

- **Data Utilized:**
 - **Number of Current Multimodal Projects/Studies**



GOAL 4: Establish sustainable and stable financial support

- Data Utilized:
 - Toll Facilities
 - Public/Private facilities



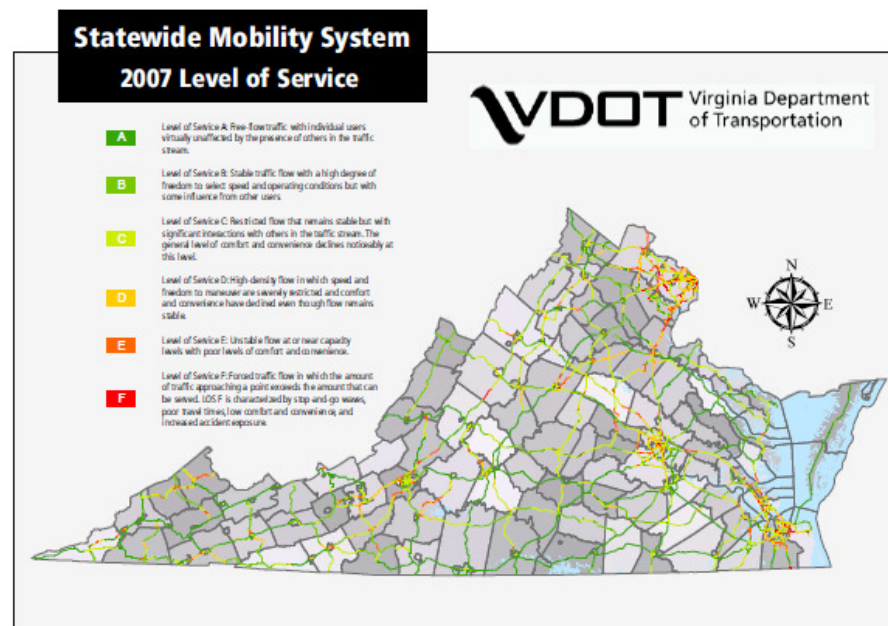
GOAL 5: Be an innovative pacesetter in technology, environmental protection and system management

- **Data Utilized:**
 - **Environmental Constraints**
 - Wetland Square Footage per Mile
 - **ITS**
 - Shoulder Lane Control System
 - Closed Circuit Traffic Camera
 - Variable Message Signs



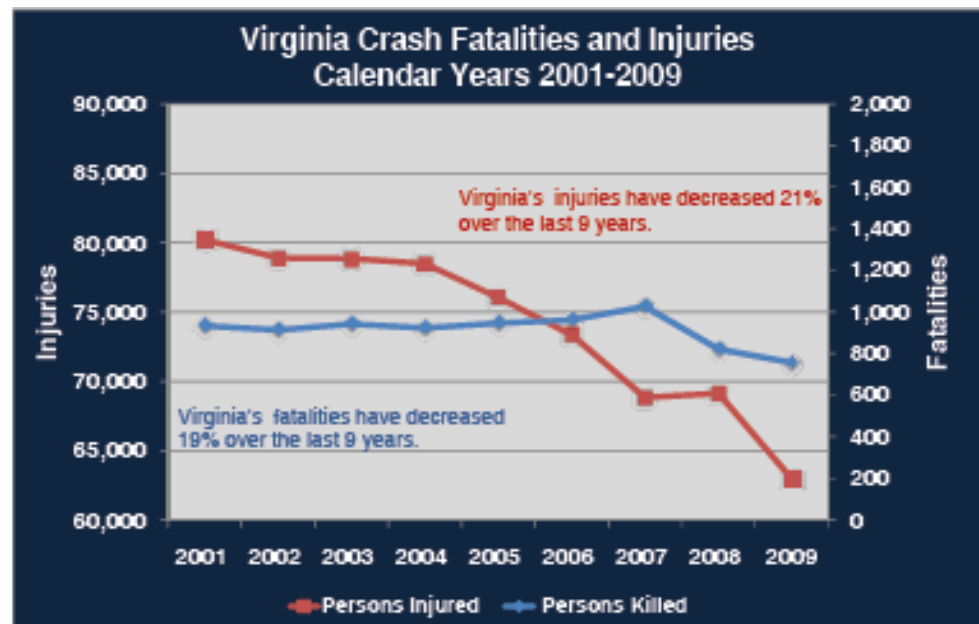
GOAL 6: Maintain a strong customer focus to address travel and business needs

- **Data Utilized:**
 - **Congestion**
 - Current (2007) Highway Level of Service
 - Future (2035) Highway Level of Service
 - Linear Feet of Rail Bottleneck
 - Linear Feet of Freight Bottleneck
 - **State of Good Repair**
 - Pavement Condition
 - Structure Condition
 - **Customers**
 - Population Density per Square Mile



GOAL 7: Improve safety across all modes of transportation by reducing transportation related injuries, fatalities and crashes

- **Data Utilized**
 - Number of Crashes
 - Highway Advisory Radio
 - Road Weather Information System



Data Weighting

Weight Distribution

- **Seamless Multimodal System – Goal Weight = 11**

- » Local Transit Services x 1
- » Greyhound Stations x 1
- » Amtrak Stations x 1
- » VRE Stations x 1
- » Existing Airports x 1
- » Commercial Airport Drive Time x 1
- » General Airport Drive Time x 1
- » Ports x 1
- » Regional Rail Corridors x 1
- » Distribution Centers x 1
- » Park and Ride Lots x 1

- **Sustainable Financial Support – Goal Weight = 11**

- » Toll Facilities x 5.5
- » Public/Private Projects x 5.5

- **Safety – Goal Weight = 11**

- » Highway Advisory Radio x 3.667
- » Crash Rate x 3.667
- » Road Weather Information System x 3.667

Weight Distribution

- **Customer Focus - Goal Weight = 11**

- » Average 2008 LOS x 1.571
- » Average 2035 LOS x 1.571
- » Rail Bottleneck x 1.571
- » Freight Bottleneck x 1.571
- » Pavement Conditions x 1.571
- » Bridge/Structure Condition x 1.571
- » Population Density x 1.571

- **Technology & Environmental Protection - Goal Weight = 11**

- » Shoulder Lane Control System x 2.75
- » Closed Circuit Television Camera x 2.75
- » Changeable Message Sign x 2.75
- » Square Feet of Wetlands x 2.75

- **Collaborative Planning - Goal Weight = 11**

- » Number of Multimodal Projects x 11

- **Support and Promote Economy - Goal Weight = 22**

Weighted Double

- » Business Incubators x 4.4
- » College or University x 4.4
- » Tourism Site x 4.4
- » Military Installation x 4.4
- » Employment Density x 4.4

Prioritization Methodology: Example Matrix

Each goal weighted the same although each data point may be weighted differently.

Governor's Multimodal Strategic Plan Goals			Goal 1				Goal 2		Goal 3			Prioritization Score	Rank
Corridor Route	Corridor Segment	Planning District	Data Point	Data Point	Data Point	Data Point	Data Point	Data Point	Data Point	Data Point			
Criteria Weighting			1.0	1.0	1.0	1.0	2.0	2.0	1.3	1.3	1.3	n/a	n/a
13	Eastern Shore Corridor	Accomack-Northampton											
13	Eastern Shore Corridor	Hampton Roads											
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29	Seminole Corridor	Thomas Jefferson											
29	Seminole Corridor	West Piedmont											

Data attributed to each segment of the CoSS.

Data aggregated (including weights) and ranked based on aggregate totals.

Next Steps

Next Steps

Establish CTB Approved CoSS Prioritization Process



Rank CoSS Segments Utilizing Prioritization Process

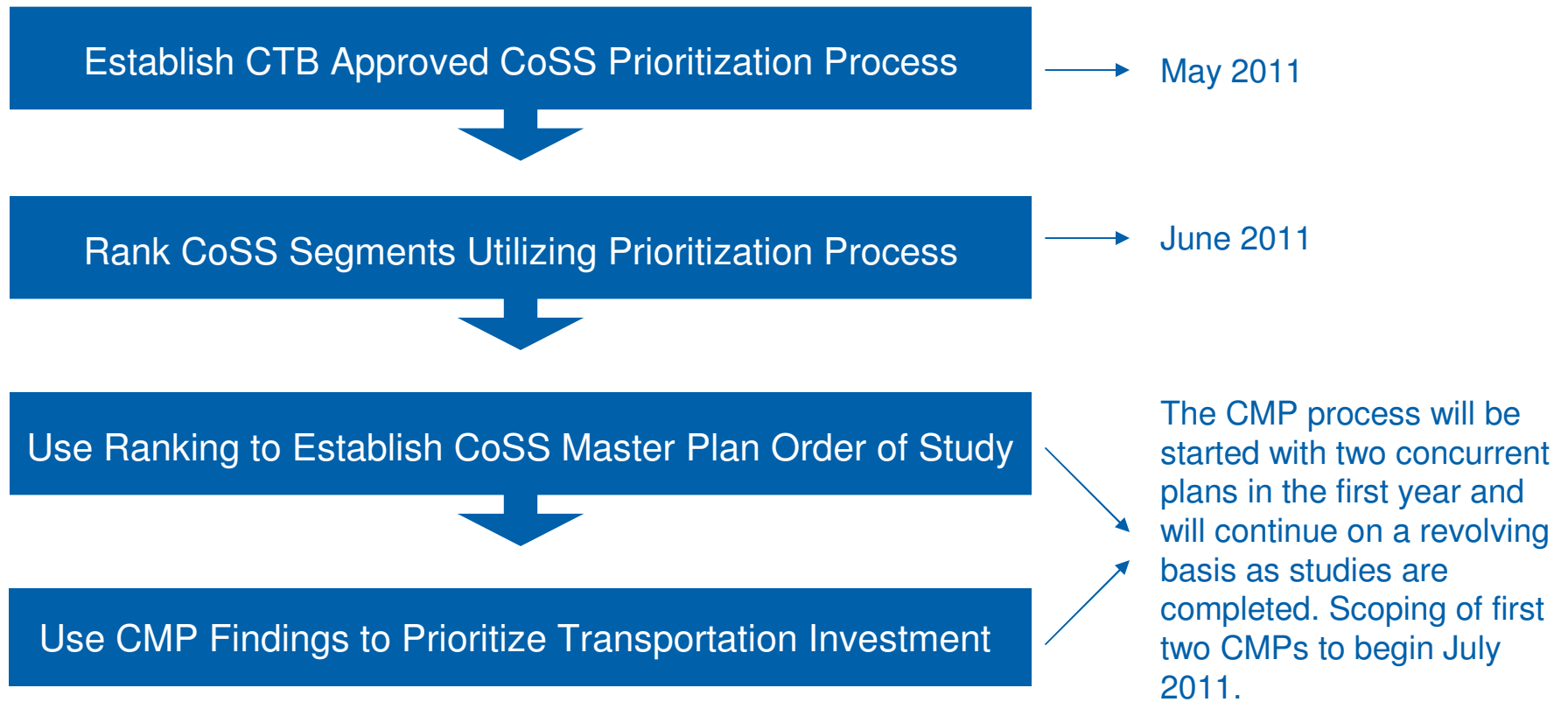


Use Ranking to Establish CoSS Master Plan Order of Study

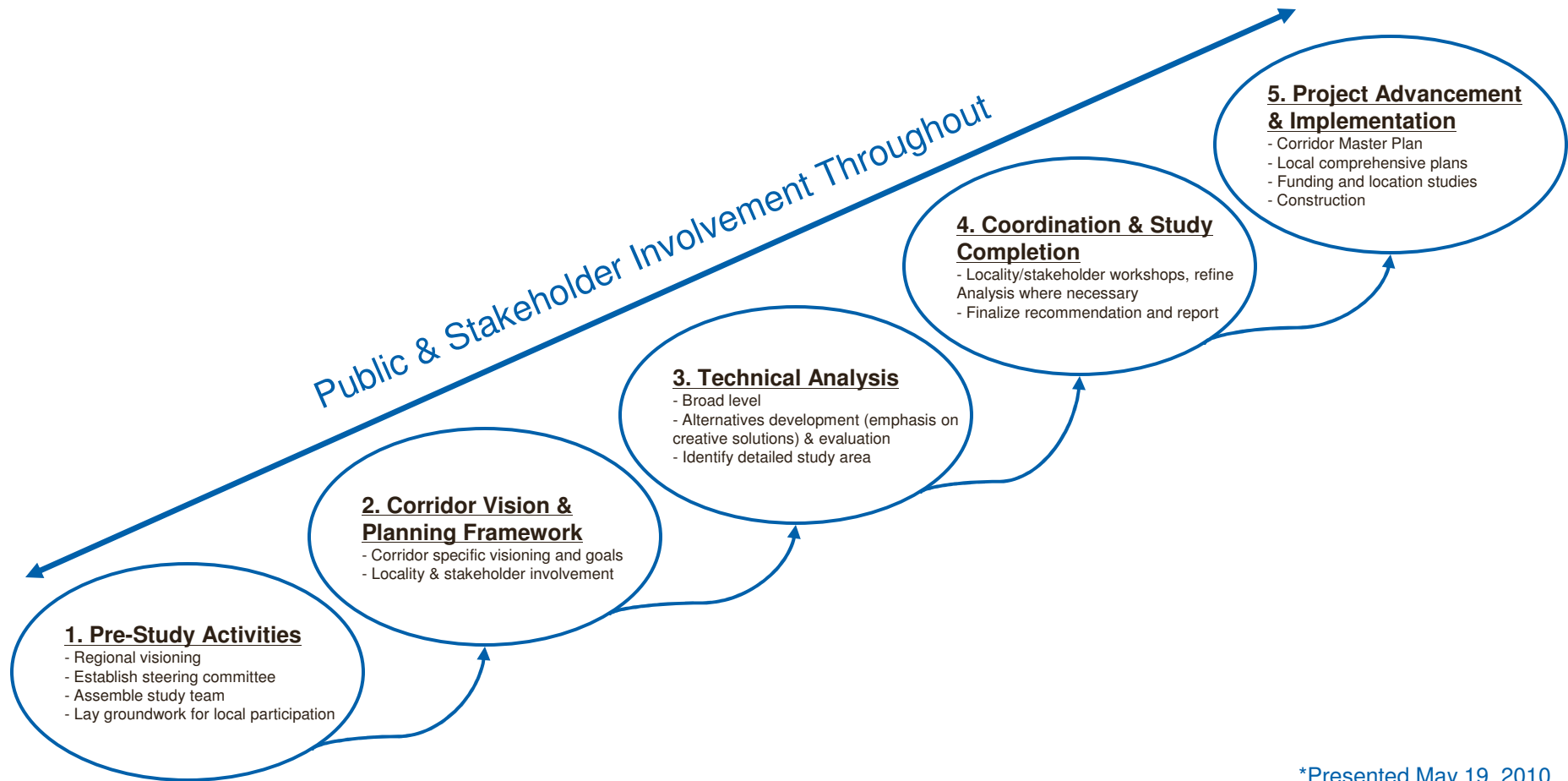


Use CMP Findings to Prioritize Transportation Investment

Next Steps



Next Steps: Study Process



*Presented May 19, 2010