



Virginia Department of Rail and Public Transportation

Statewide Transit & Transportation Demand Management Plan Update

Stakeholders Meeting 3

October 9, 2012, Richmond
October 10, 2012, Springfield
October 11, 2012, Webinar

Agenda

1. Welcome, Meeting Objectives
2. Overview of Statewide Transit/TDM Plan Update
3. Summary of Second Stakeholder Meetings
 - Summary of Stakeholder Comments
 - Transit and TDM Investment Scenarios
4. Financial Analysis
 - Expense and Revenue Summary
 - Unconstrained Gap Analysis
 - Resource Allocation Plan
5. Preliminary Findings and Conclusions
6. Next Steps

Meeting Objectives

- To show how stakeholder comments have been incorporated
- To present financial analysis and resource allocation plan
- To consider preliminary transit and TDM program recommendations and funding requirements
- To explain opportunities for stakeholders to review and comment on the draft plan



Project Overview

Study Objectives

Study objectives for the Statewide Transit and TDM Plan (VST/TP):

- Identify existing public transportation conditions
- Define guidelines for Transit and TDM levels of service
- Provide a blueprint for addressing needs for the future, with a focus on key investment priorities and maintaining a “state of good repair”
- Make recommendations to the Virginia Surface Transportation Plan Update
- Provide guidance on fiscal requirements and strategies to maximize Virginia’s investment in public transportation

Study Scope of Work

- Data Collection & Review
- Transit Data & Demographic Analysis
- Transit & TDM Program Needs Recommendations
- Financial Analysis & Cash Flow Model
- Transit & TDM Resource Allocation Plan
- Coordination with VTrans2035 and Virginia Surface Transportation Plan Updates
- Public & Stakeholder Involvement
- Draft & Final Statewide Transit & TDM Plan Update

Relationship to Other Studies

- 2035 VA Surface Transportation Plan Update (VSTP):
 - VST/TP will provide input to ongoing update of 2035 VSTP Update
 - Using the VSTP public involvement process
- SuperNoVa Transit/TDM Vision Plan:
 - VST/TP uses consistent approach and methods
 - VST/TP uses SuperNoVa analyses to refine VST/TP analysis for Northern VA
- DRPT Multimodal & Public Space Guidelines and Transit Service Design Guidelines: VST/TP intent is to ensure consistency with DRPT Guidelines



Summary of 2nd Round of Stakeholder Meetings

Stakeholder Meeting 2 Summary

- Described overall study approach
- Reviewed service standards/parameters used to define transit and TDM needs
- Presented needs analysis results for transit and TDM
 - By investment strategies
 - By investment scenarios
- Discussed draft transit and TDM needs recommendations
 - Service levels
 - Cost estimates

Stakeholder Comments

- Concern that TDM services were increased to keep up with population growth only in the high investment scenario, rather than the moderate investment scenario
 - Moderate scenario has been updated to include population growth and area type changes while closing geographic gaps based on existing service levels
- Expressed need for Park and Ride lots and Education/Outreach in non-urban work markets
 - These strategies were added as recommended strategies in non-urban work markets
- Several recommendations for items that should be included under Major Capital Investments
 - Used information provided by stakeholders in updating MCI costs

Transit and TDM Investment Strategies

Four cost categories for evaluating investment scenarios

- Transit State of Good Repair (SGR)
- Transit Capacity Enhancements
- TDM Capacity Enhancements
- Transit Major Capital Projects

Transit Investment Scenarios

- **Low Investment**
 - Addresses SGR for existing vehicles
 - Maintains existing service levels plus TDP commitments, escalates costs for inflation (3%)
 - Assumes Major Capital Projects currently under development
- **Moderate Investment**
 - Addresses SGR for existing and future growth vehicles
 - Increases service levels
 - TDPs through 2018
 - Service level growth consistent with area population growth 2019 through 2040
 - Assumes Lower Level of Major Capital Project Investment
- **High Investment**
 - Addresses SGR for existing and future growth vehicles
 - Increases service levels: Moderate Growth plus
 - 3% service hour growth / year – Top quartile performers
 - 2% service hour growth / year – 2nd quartile performers
 - Assumes High Level of Major Capital Project Investment

Transit Investment Scenario Results

Transit Needs (2013-2040)

	Low Investment	Moderate Investment	High Investment
State of Good Repair	28,786 vehicles; facilities and fixed assets	34,485 vehicles; facilities and fixed assets	37,825 vehicles; facilities and fixed assets
Transit Capacity Enhancement	192,443,501 revenue hours	290,666,930 revenue hours	316,401,118 revenue hours
Major Capital Projects	Committed projects	Low technology of identified projects	High technology of identified projects

TDM Investment Scenarios

- **Low Investment**

- Maintains existing service levels for existing TDM programs with no growth
- Costs escalate for inflation at 3% per year

- **Moderate Investment**

- Closes geographic gaps to expand to a statewide TDM program while maintaining existing service levels
- TDM services increase with population growth and area type changes
- Costs escalate for inflation at 3% per year

- **High Investment**

- Closes geographic gaps to provide statewide TDM service and increases service levels to recommended levels based on area type
- TDM services increase with population growth and area type changes
- Costs escalate for inflation at 3% per year



Financial Analysis

Expense Summary

Investment Scenarios

- Operating Expenses
 - Transit Capacity Enhancements - Transit
 - Transportation Demand Management - TDM
 - Major Capital Investments
- Capital Expenses
 - State of Good Repair – Transit and Human Services
 - Transit Capacity Enhancements (additional vehicles and fixed assets)
 - Major Capital Investments

Expense Estimate Assumptions

- Operating Expenses
 - Transit agency cost per hour, escalated 3% per year
 - 2013-2040 period operating improvement costs based on agency TDP projections
- Capital Expenses
 - State of Good Repair (SGR)
 - Vehicles – standard vehicle pricing based on statewide historical database, inflated to YOE \$ at 3% per year
 - Equipment – percentage of overall program
 - Transit Capacity Enhancements (TCE)
 - Vehicles – same as SGR
 - Fixed Assets – cost estimates identified in existing planning documents (e.g., TDPs) plus estimated future average needs
 - Major Capital Investments (MCI)
 - Committed projects plus projects identified through planning documents, studies and vision plans

Operating Expense Summary (millions YOE \$)

Investment Scenario	Transit Capacity Enhancements	TDM Capacity Enhancements	Major Transit Capital Projects	Total
Low Investment	\$38,358	\$739	\$5,310	\$44,406
Moderate Investment	\$54,735	\$897	\$6,558	\$62,190
High Investment	\$60,965	\$1,638	\$6,640	\$69,243

Capital Expense Summary (millions YOE \$)

Investment Scenario	State of Good Repair	Transit Capacity Enhancements	Major Transit Capital Projects	Total
Low Investment	\$10,617	\$1,057	\$4,218	\$15,892
Moderate Investment	\$11,398	\$1,997	\$29,120	\$42,515
High Investment	\$11,599	\$2,135	\$41,294	\$55,028

Revenue Projection Assumptions

- Federal Revenue Projections
 - Operating and capital funding program consolidation and restructuring associated with MAP-21
 - 2-year program as funded through MAP-21
 - Carry-over of remaining funding from year 2012
 - Existing commitments (e.g., Dulles)
- State Revenue Projections
 - Six Year Improvement Program (SYIP)
 - Termination of CPR Bonds after year 2018
 - Minimal carry-over funding from year 2012
- Local Revenue Projections
 - Continue historical match to Federal and State funding
 - Maintain fare revenue productivity
 - Projects: Local match to Federal and State funding

Revenue Summary

- **Federal Funding**

- Capital sources (formula, major project and other) - \$6,441 million
- Operating sources (urbanized and rural formula and other federal funding) - \$2,477 million

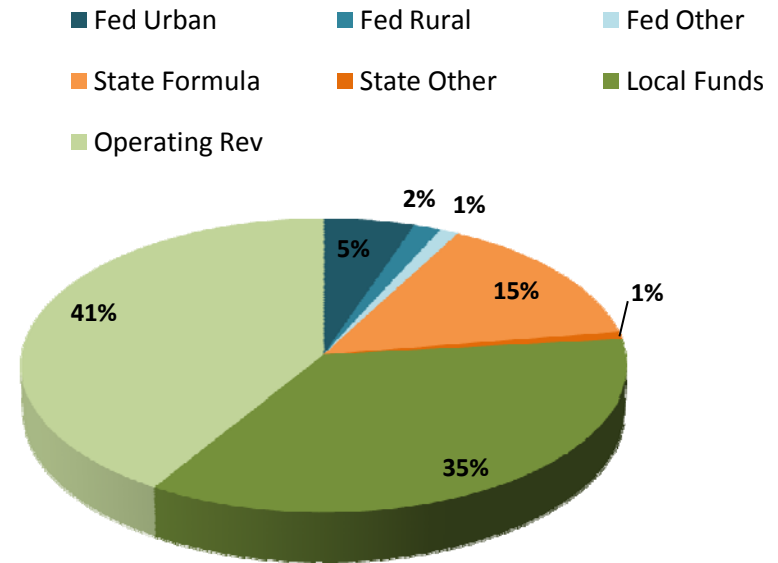
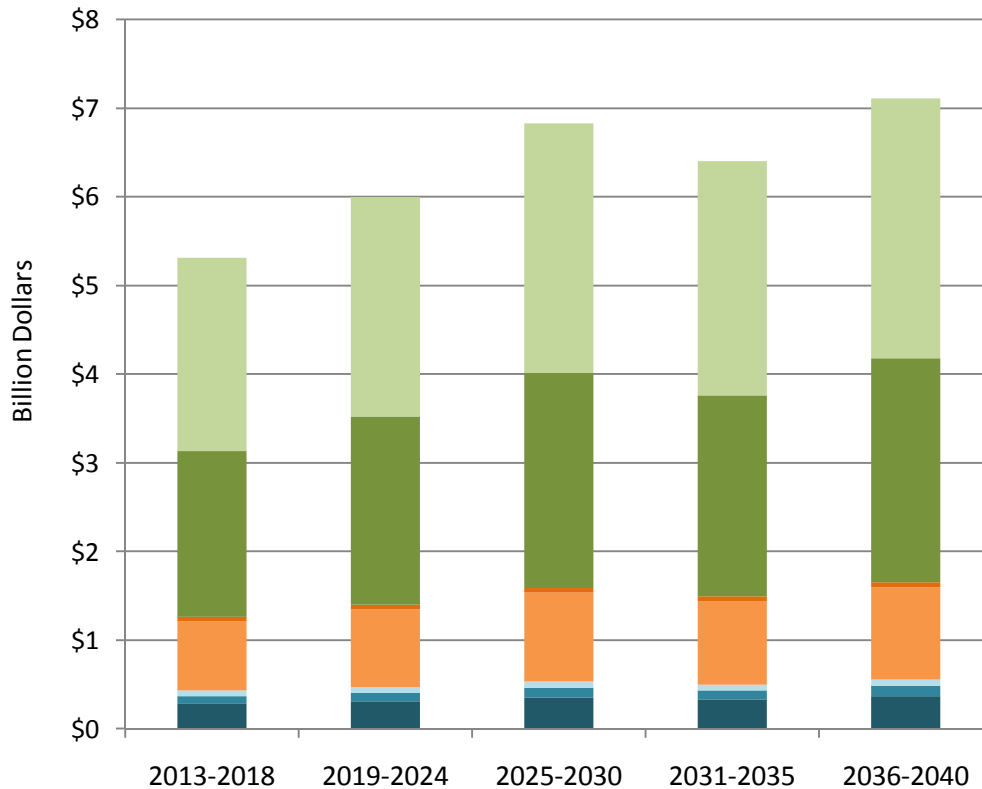
- **State Funding**

- Capital sources (formula and CPR Bonds) - \$2,045 million
- Operating sources (formula and other) - \$4,909 million

- **Local Funding**

- Capital sources (local and Project-Dulles) - \$4,954 million
- Operating sources (local funds and operating revenue) - \$24,253 million

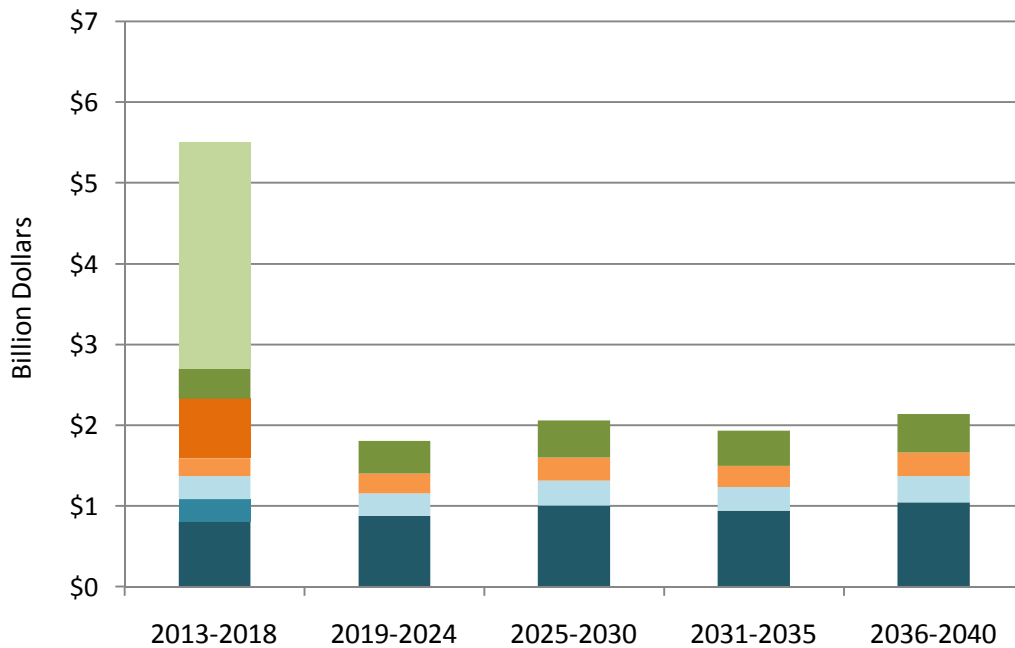
Operating Revenues



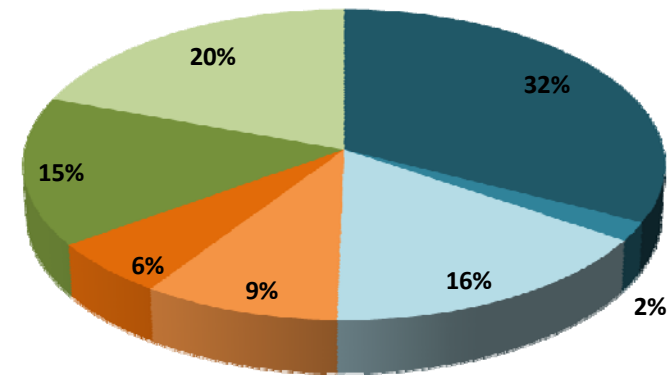
Operating Revenues

Federal Revenues (7.8%)	\$2.5B
State Revenues (15.5%)	\$4.9B
<u>Local Revenues (76.7%)</u>	<u>\$24.3B</u>
Total Revenues:	\$31.6B

Capital Revenues



- Fed Formula
- Fed Major Project
- Fed Other
- State Formula
- State CPR Bonds
- Local Funds
- Local Project Funds (Dulles)



Capital Revenues

Federal Revenues (50.3%)	\$6.4B
State Revenues (14.8%)	\$2.0B
<u>Local Revenues (34.9%)</u>	<u>\$5.0B</u>
Total Revenues:	\$13.4B

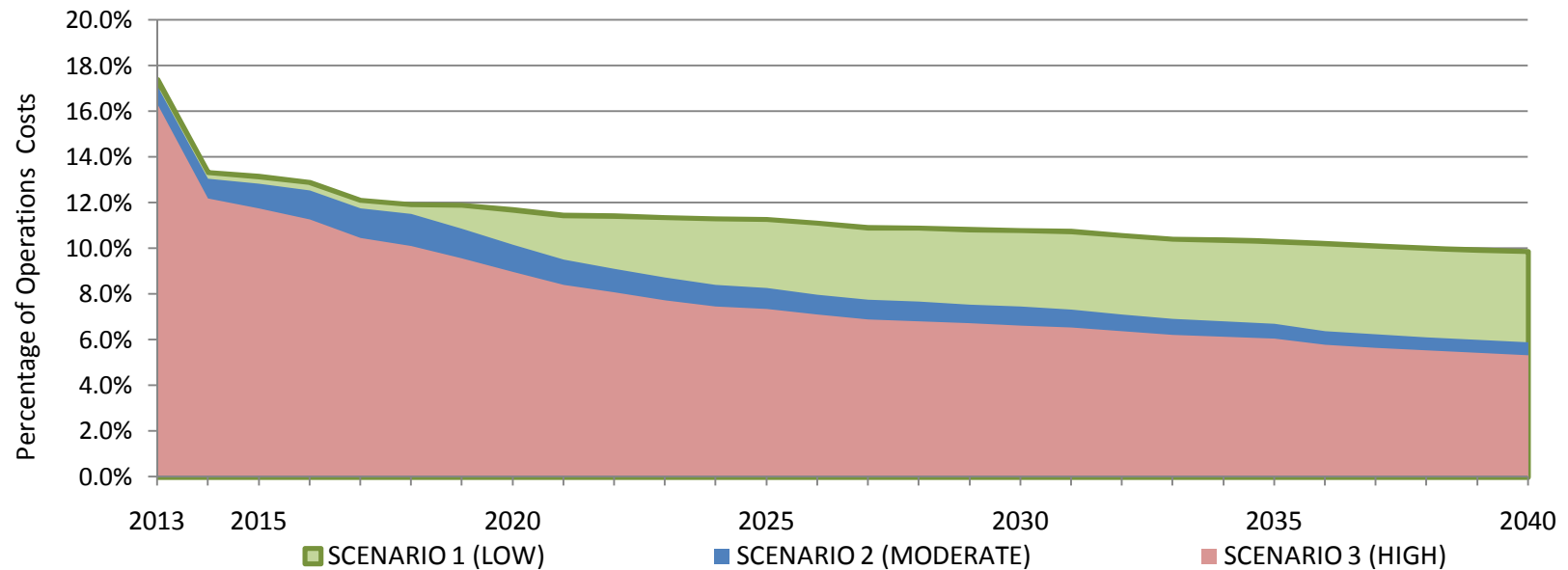
Unconstrained Gap Analysis

Operating – Low Investment Scenario (YOE \$Million)

Funding Source	2013-2018	2019-2024	2025-2030	2031-2035	2036-2040	Total	Annual Avg.
Federal	\$ 429	\$ 466	\$ 531	\$ 498	\$ 553	\$ 2,477	\$ 88
State	\$ 829	\$ 929	\$ 1,058	\$ 992	\$ 1,101	\$ 4,909	\$ 175
Local	\$ 4,053	\$ 4,599	\$ 5,239	\$ 4,910	\$ 5,452	\$ 24,253	\$ 866
Total Funding	\$ 5,311	\$ 5,995	\$ 6,828	\$ 6,399	\$ 7,106	\$ 31,639	\$ 1,130
Total Expenses	\$ 6,234	\$ 8,070	\$ 9,653	\$ 9,465	\$ 10,984	\$ 44,406	\$ 1,586
Period Surplus/ (Deficit)	\$ (923)	\$ (2,076)	\$ (2,825)	\$ (3,065)	\$ (3,878)	\$ (12,767)	\$ (456)
Rolling Balance	\$ (923)	\$ (2,999)	\$ (5,824)	\$ (8,889)	\$ (12,767)		

State Operating Match

Investment Scenario	2013-2018	2019-2024	2025-2030	2031-2035	2036-2040	Period Average
Low	13.3%	11.5%	11.0%	10.5%	10.0%	11.1%
Moderate	12.9%	9.4%	7.8%	7.0%	6.1%	7.9%
High	11.8%	8.3%	6.9%	6.3%	5.5%	7.1%



Capital Resource Allocation Needs Plan

Low Investment Scenario

Investment Strategy	2013-2018*	2019-2024	2025-2030	2031-2035	2036-2040	Total	Percent
State of Good Repair	\$ 1,633	\$ 1,982	\$ 2,234	\$ 2,097	\$ 2,672	\$ 10,617	
Federal Share	\$ 974	\$ 1,198	\$ 1,340	\$ 1,247	\$ 1,577	\$ 6,336	59.7%
State Share	\$ 417	\$ 498	\$ 566	\$ 536	\$ 689	\$ 2,706	25.5%
Local Share	\$ 243	\$ 286	\$ 328	\$ 313	\$ 406	\$ 1,576	14.8%
Transit Capacity Enhancements	\$ 633	\$ 87	\$ 108	\$ 106	\$ 123	\$ 1,057	
Federal Share	\$ 367	\$ 43	\$ 54	\$ 53	\$ 61	\$ 579	54.8%
State Share	\$ 166	\$ 26	\$ 32	\$ 32	\$ 37	\$ 293	27.8%
Local Share	\$ 100	\$ 17	\$ 22	\$ 21	\$ 25	\$ 184	17.5%
Major Capital Improvements	\$ 4,054	\$ 164	\$ -	\$ -	\$ -	\$ 4,218	
Federal Share	\$ 765	\$ 82	\$ -	\$ -	\$ -	\$ 847	20.1%
State Share	\$ 215	\$ 41	\$ -	\$ -	\$ -	\$ 256	6.1%
Local Share	\$ 3,074	\$ 41	\$ -	\$ -	\$ -	\$ 3,115	73.9%
Total Low Investment Scenario	\$ 6,320	\$ 2,233	\$ 2,342	\$ 2,202	\$ 2,794	\$ 15,892	
Federal Share	\$ 2,106	\$ 1,324	\$ 1,393	\$ 1,300	\$ 1,639	\$ 7,761	48.8%
State Share	\$ 798	\$ 565	\$ 599	\$ 568	\$ 726	\$ 3,255	20.5%
Local Share	\$ 3,417	\$ 344	\$ 350	\$ 335	\$ 430	\$ 4,876	30.7%

Transit and TDM Investment Scenarios

Investment Scenario	Funding Needs/Revenues	Capital Funds (Millions YOES)	O&M Funds (Millions YOES)	
			Transit	TDM
Low Investment	Total Funding Needs	\$15,892	\$43,668	\$739
	Total Projected Revenue	\$12,439	\$31,157	\$482
	Total Funding Gap	\$2,453	\$12,511	\$257
	State Funding Gap (maintaining state share)	\$1,210	\$3,963 (20%)	\$177 (80%)
Moderate Investment	Total Funding Needs	\$42,515	\$61,293	\$897
	Total Projected Revenue	\$13,439	\$31,157	\$482
	Total Funding Gap	\$29,076	\$30,136	\$415
	State Funding Gap (maintaining state share)	\$7,717	\$7,489 (20%)	\$304 (80%)
High Investment	Total Funding Needs	\$55,028	\$67,606	\$1,637
	Total Projected Revenue	\$13,439	\$31,157	\$482
	Total Funding Gap	\$41,589	\$36,449	\$1,155
	State Funding Gap (maintaining state share)	\$10,815	\$8,751 (20%)	\$896M (80%)



Virginia Department of Rail and Public Transportation

Preliminary Findings and Recommendations



Virginia Department of Rail and Public Transportation

Statewide Transit & Transportation
Demand Management Plan Update

Preliminary Study Findings

- Expected increases in state population and increasing urbanization will increase transit demand
- Expanding Gen-Y segment of workforce will increase transit demand in urban transit-oriented communities
- Expanding elderly population will increase transit demand for mobility challenges

Virginia Demographic Projections

Area	2010 Population	% of Total	2040 Population	% of Total	% Change
Rural	1,653,912	21%	1,565,861	14%	-5%
Suburban	2,246,660	28%	3,107,959	28%	38%
Urban	4,100,452	51%	6,280,567	57%	53%
Total	8,001,024	100%	10,954,387	100%	37%

Preliminary Study Findings

- Growing backlog of vehicle replacements and continuing fleet aging threatens State of Good Repair
- Transit operators challenged to keep pace with growing demand, especially in rapidly growing areas
- Regional transit vision plans call for broad expansion of transit to support goals of economic opportunity and livability ...
MCIs
- Revenue streams are uncertain and without change are not expected to keep pace with inflation or to meet demand and address funding gaps
- Operational efficiencies need to be achieved and rewarded in allocation of funds

Preliminary Study Recommendations

- State of Good Repair:
 - Highest priority to providing safe, reliable, efficient service by bringing and maintaining assets in a State of Good Repair
- Transit/TDM Capacity:
 - Expand capacity statewide to meet the needs of a growing economy and population
 - In funding allocation, promote programs that improve system efficiency and reward agencies for efficiency and service excellence
 - Expand tools to better manage demand (TDM, ITS, land use planning)

Preliminary Study Recommendations

- Major Capital Investments:
 - Invest in major rapid transit capital projects to assist in managing congestion
- Funding:
 - To establish a reliable funding stream, create a dedicated state funding source
 - At minimum, increase funding to achieve SGR, sustain current capacity, and complete committed major capital investments



Next Steps

Next Steps

- Finalize study findings and recommendations
- Stakeholder review of draft plan
- Prepare final plan

Stakeholder Review of Draft Plan

- Draft plan will be made available to stakeholders via email or FTP site
- 14-day comment period
- Comments may be submitted via email to project team

Study Team Contact Information

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Thank you!