DRPT
Virginia Department of Rail and Public Transportation

Statewide Transit & Transportation Demand Management Plan Update

Stakeholders Meeting 1

April 30, 2012, Springfield

May 1, 2012, Roanoke

Agenda

1. Welcome, meeting objectives
2. Overview of Statewide Transit/TDM Plan Update
3. Study Approach / Methodology
4. Next Steps
5. Next stakeholder meetings

Meeting Objectives

- Establish a dialogue with the Stakeholders
- Provide an overview of the Plan Update
- Describe the study process & methodologies
- Gain input on study objectives & methodologies
- Provide status on work performed to date
- Identify next steps

DRPT
Virginia Department of Rail and Public Transportation

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 Statewide Surface Transportation Plan
- Provide guidance on fiscal requirements and strategies to maximize Virginia’s investment in public transportation.

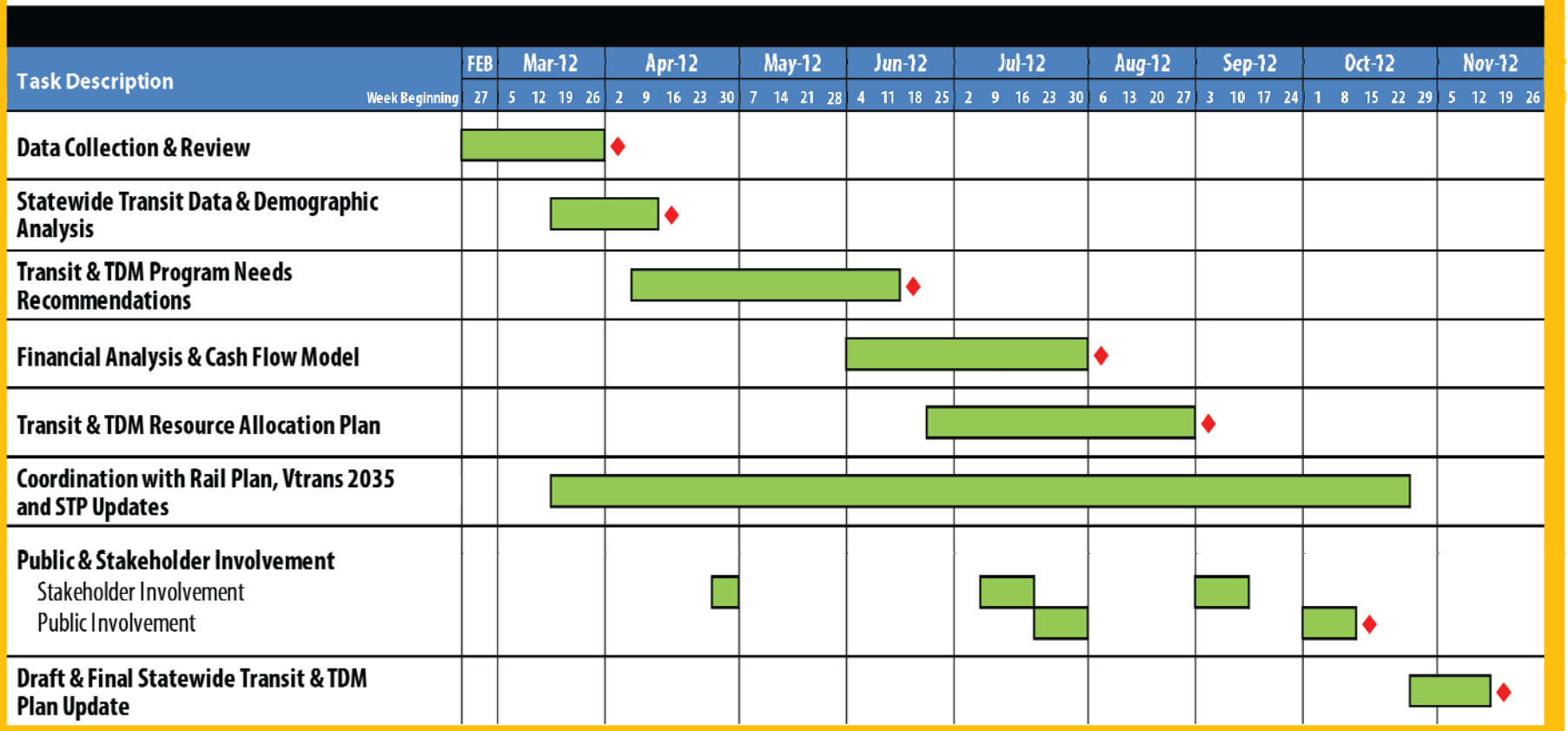
Study Scope of Work

- 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

Project Schedule

DRPT
Virginia Department of Rail and Public Transportation

STATEWIDE TRANSIT & TDM PLAN UPDATE
PROPOSED PROJECT SCHEDULE



Deliverable

Relationship to Other Studies

- Va Surface Transportation Plan (VSTP): VST/TP will provide input to next update of VSTP
- VTrans2035 Update:
  - VST/TP will provide input to next update
  - will use the ongoing VTrans2035 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

Public and Stakeholder Involvement

- Public input through VTrans2035 Update public meetings (Summer 2012)
- Focused coordination with statewide stakeholders group
  - MPOs
  - PDCs
  - Transit agencies
  - TDM organizations
  - Others (VPTA, VAPA, Municipal League, Association of Counties)
- Future stakeholder meetings:
  - Transit Needs Analysis – 2nd Stakeholders Meeting (Summer '12)
  - Financial Analysis – 3rd Stakeholders Meeting (Fall '12)
  - Development of Recommendations – 3rd Stakeholders Meeting

DRPT
Virginia Department of Rail and Public Transportation

Study Approach

Data Collection & Review

- Data Sources
  - Population, Employment & Demographic Data
  - Long Range Transportation Plans (LRTPs)
  - Rural LRTPs
  - Long Range TDM Plans
  - Coordinated Human Service Mobility Plans
  - Transit Development Plans (TDPs)
  - Surface Transportation Plan (STP)
  - VTrans2035 Plan
  - Vision Plans
  - Previous Studies
- Identified Deficient Data Sources, Data Needs & Gaps
- Determined Datasets to be Developed

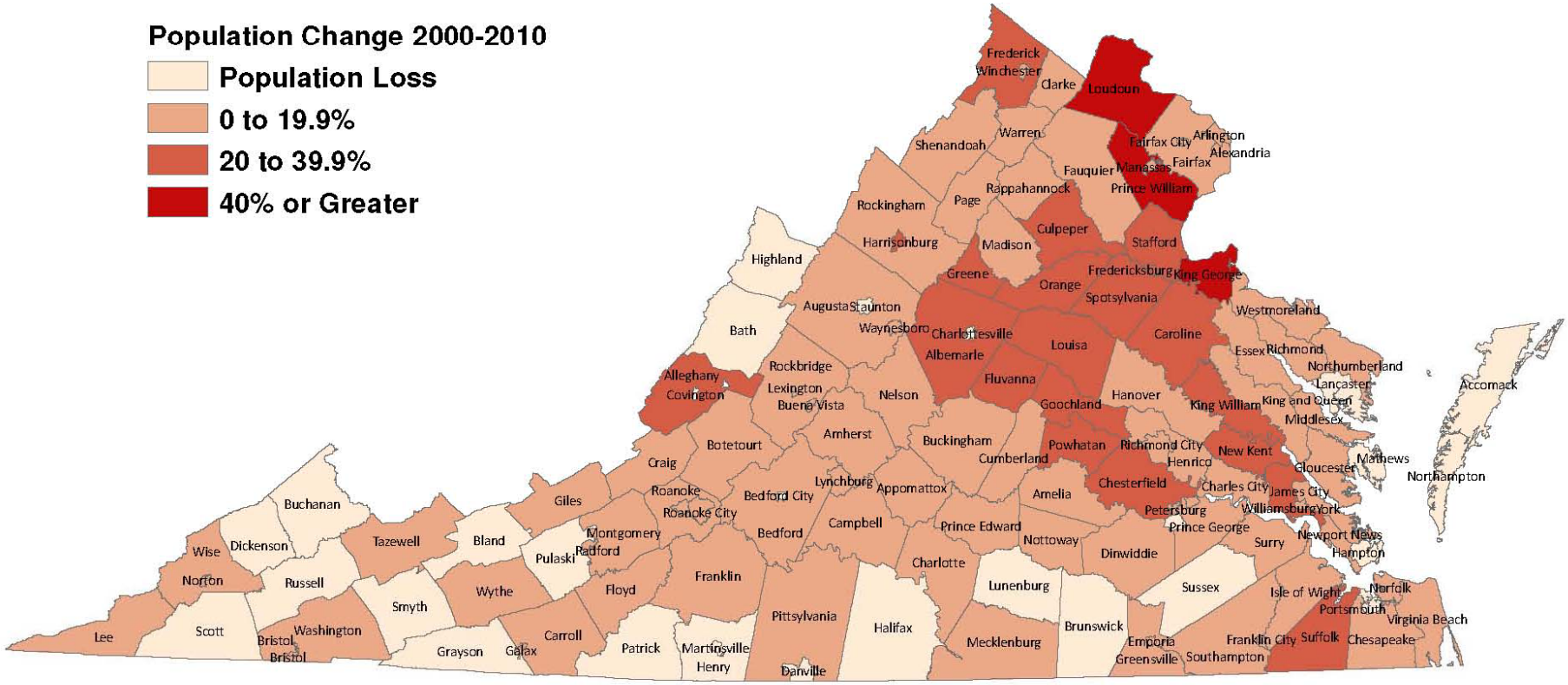
Data Collection & Review

- Datasets to be developed
  - Population projections
  - Existing transit database
  - Existing TDM database
  - Ridership trends
  - TDPs and LRTPs
  - Asset inventories

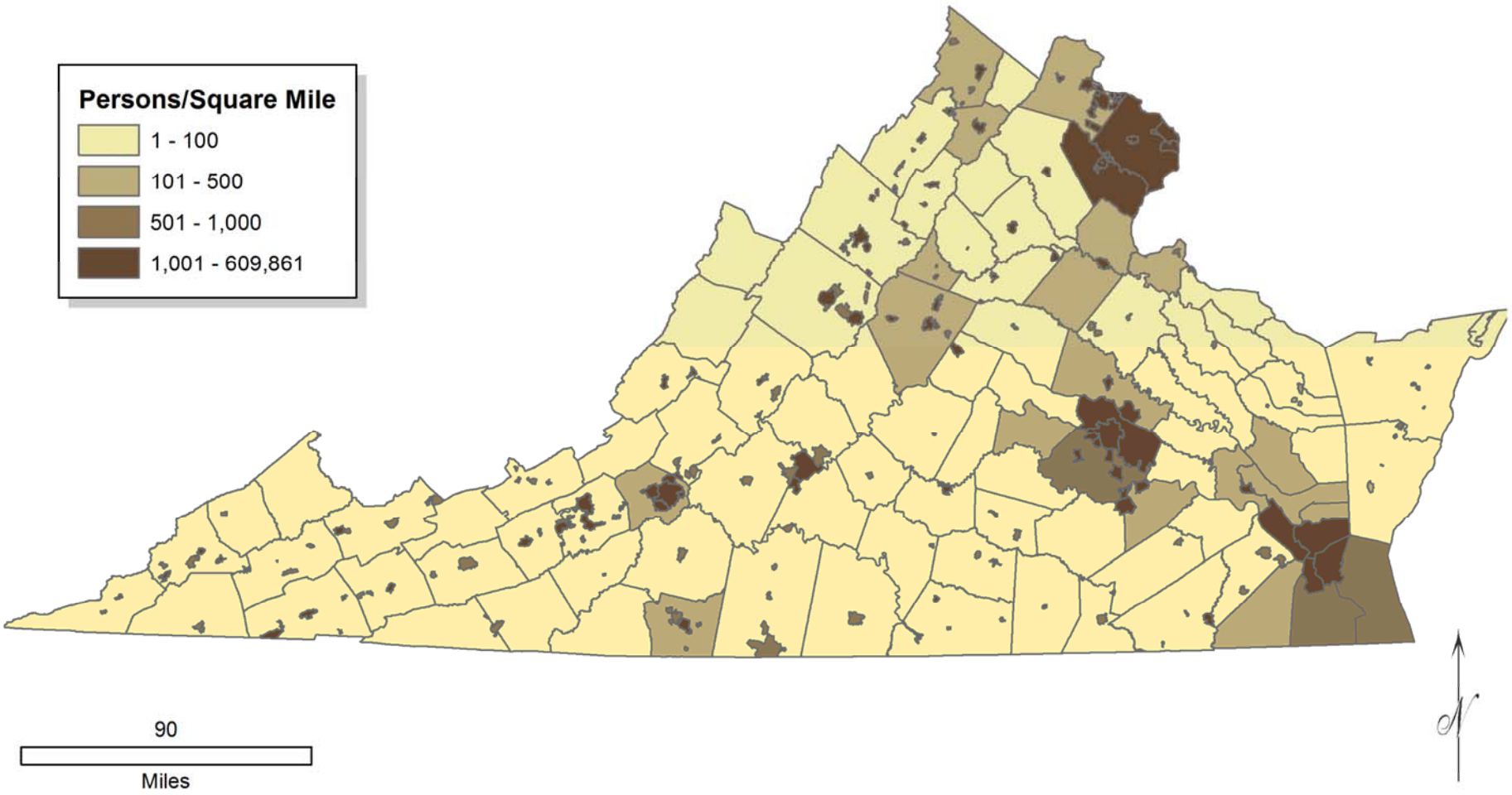
Transit Data & Demographics Analysis (for Service Gap Analysis)

- Statewide Population & Demographic Analysis
  - Update using 2010 Census & VTrans2035 forecasts for PDCs
  - Update Projections to Year 2040
- Statewide Transit & TDM Gap Analysis
  - Service Capacity Expansion Methodology (described later)
- Statewide Ridership Trend Analysis
  - Ridership Trends
  - Forecast Growth
- Statewide Title VI Analysis
  - Environmental Justice Analysis
  - “Four-Factor” Analysis

Population Growth 2000-2010



Existing 2010 Population Density



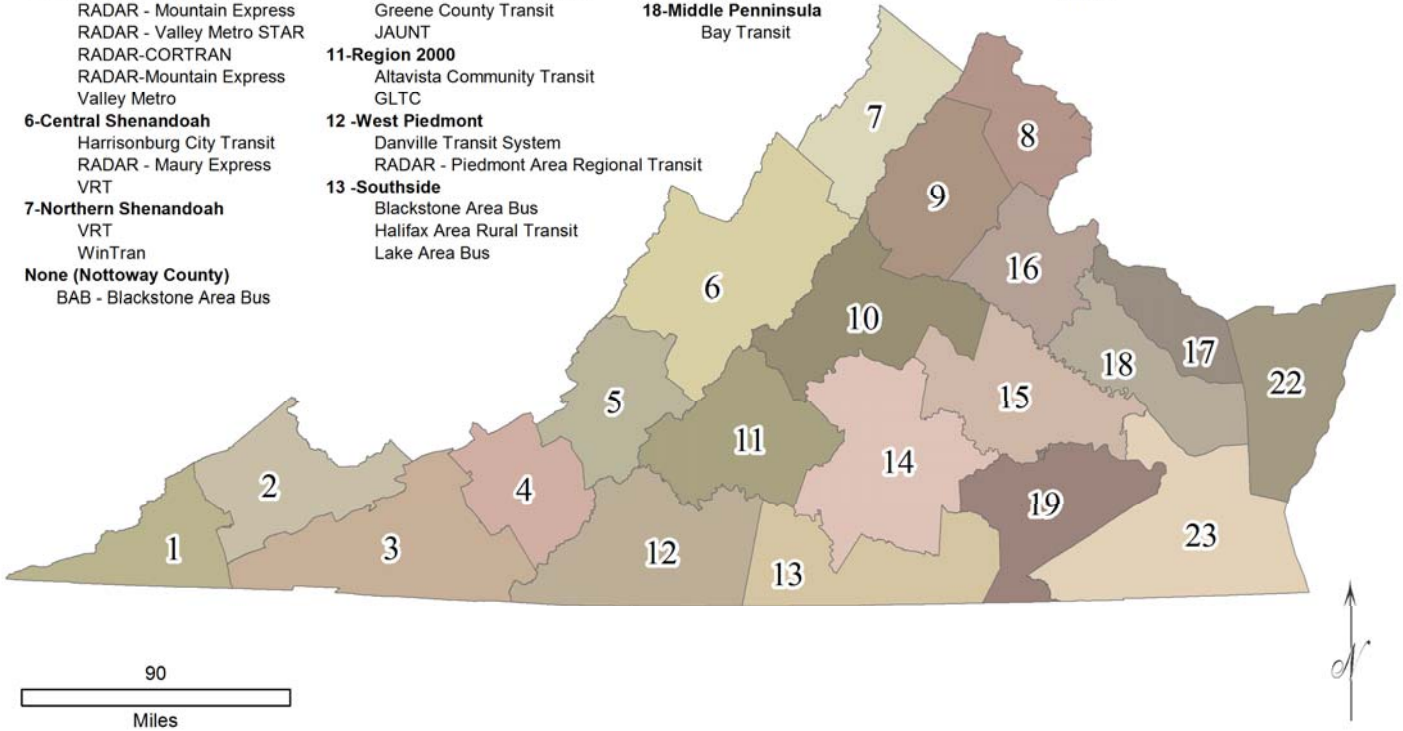
Study Base Map with PDCs

1 - Lenowisco
MEOC
2 - Cumberland Plateau
Four County Transit
Graham Transit
MEOC
3 - Mount Rogers
Bristol Transit
District Three Public Transit
4 -New River Valley
Blacksburg Transit
Pulaski Area Transit
Radford Transit
5 -Roanoke Valley-Alleghany
RADAR - Mountain Express
RADAR - Valley Metro STAR
RADAR-CORTRAN
RADAR-Mountain Express
Valley Metro
6-Central Shenandoah
Harrisonburg City Transit
RADAR - Maury Express
VRT
7-Northern Shenandoah
VRT
WinTran
None (Nottoway County)
BAB - Blackstone Area Bus

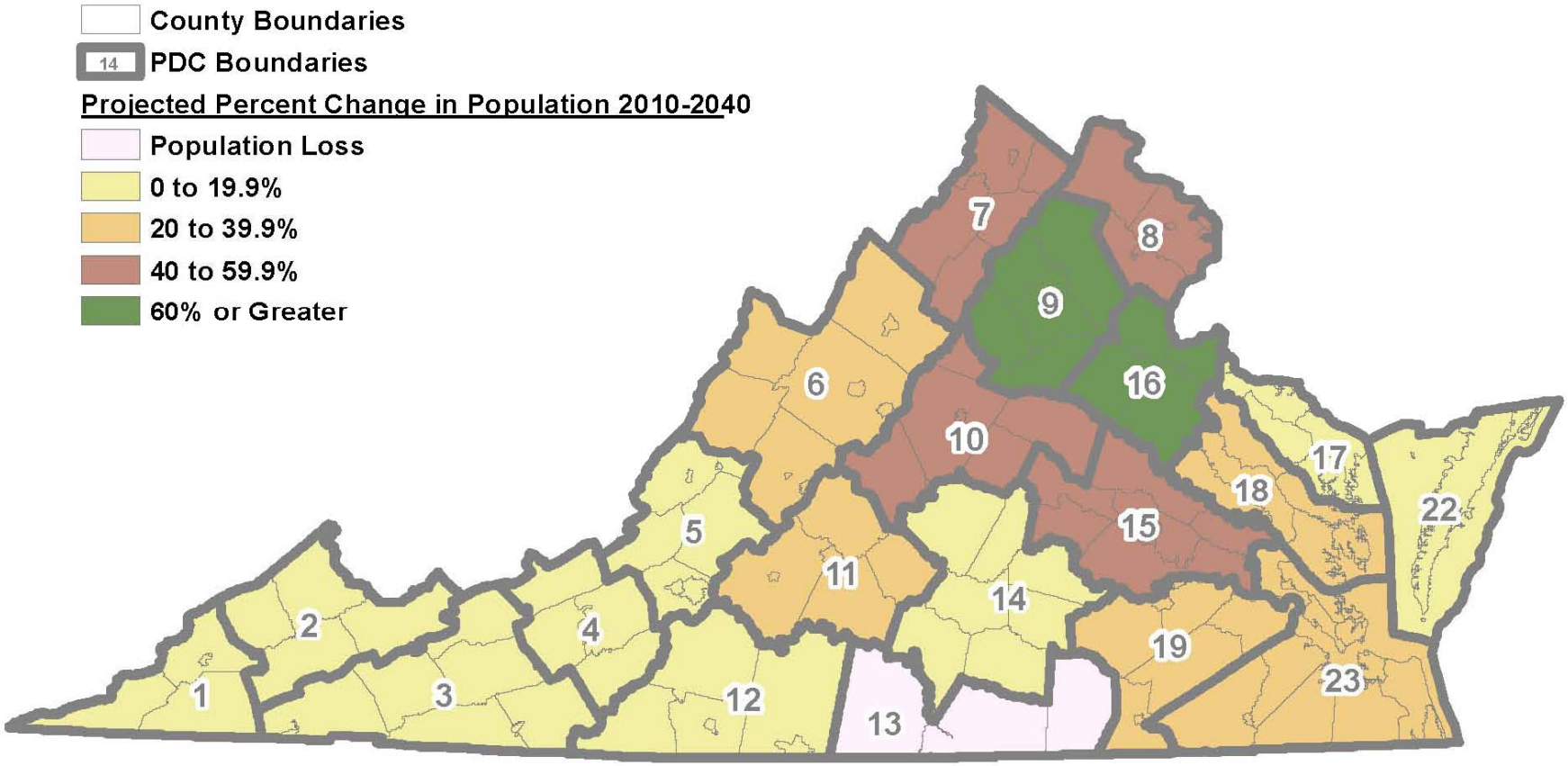
8 -Northern Virginia
ART
CUE
DASH, DOT, King Street Trolley
Fairfax Connector
Loudoun County Transit
PRTC
VRT
WMATA
9-Pappahannock-Rapidan
JAUNT
VRT
10 -Thomas Jefferson
Charlottesville Area Transit
Greene County Transit
JAUNT
11-Region 2000
Altavista Community Transit
GLTC
12 -West Piedmont
Danville Transit System
RADAR - Piedmont Area Regional Transit
13 -Southside
Blackstone Area Bus
Halifax Area Rural Transit
Lake Area Bus

14- Commonwealth Regional Council
BAB - Blackstone Area Bus
Farmville Area Bus
JAUNT
PERT
Piedmont Area Transit (BAB)
VRT
15 - Richmond Regional
Bay Transit
GRTC
16-George Washington Regional
FRED
17-Northern Neck
Bay Transit
18-Middle Penninsula
Bay Transit

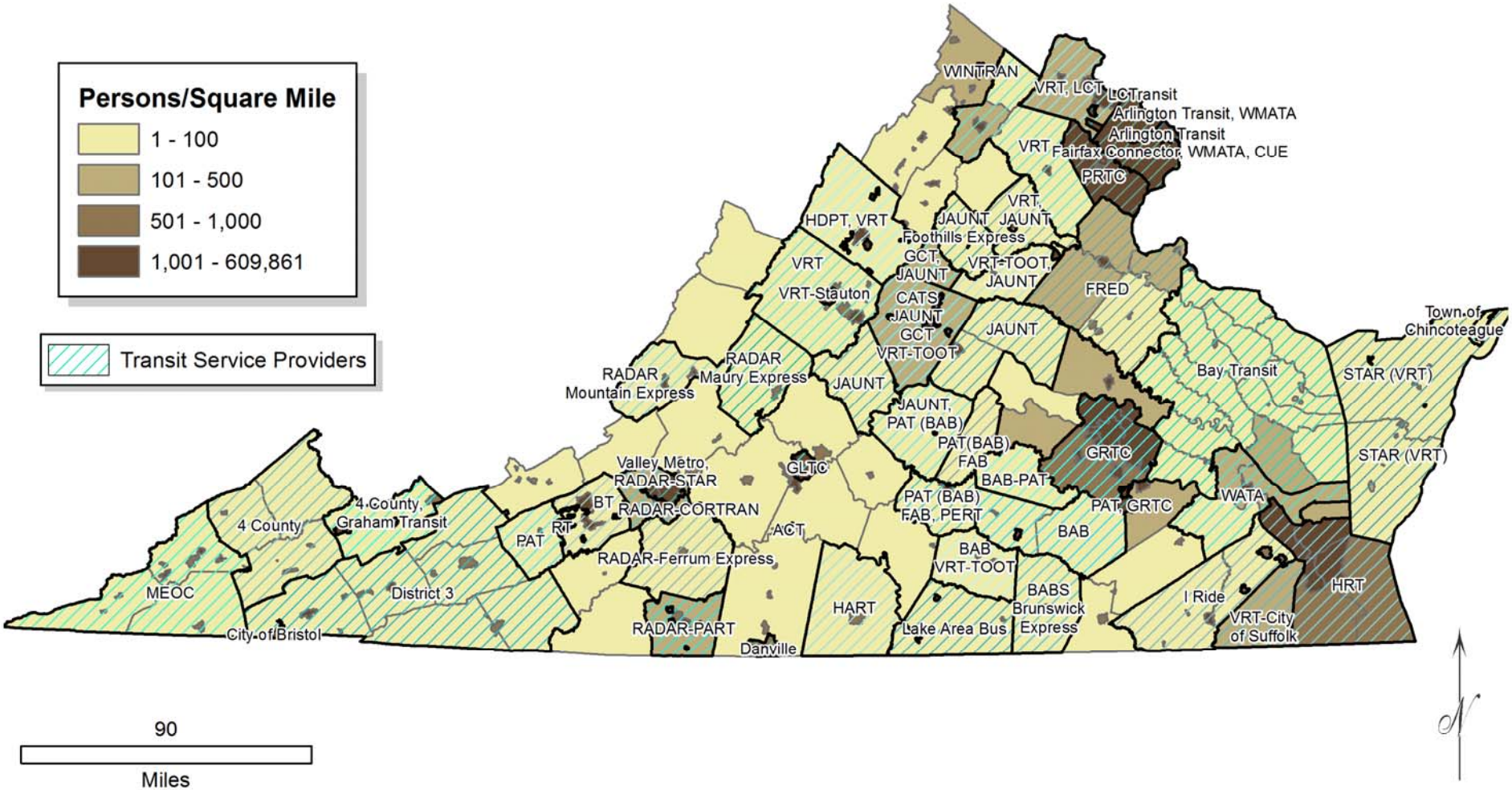
19 -Crater
BAB -Blackstone Area Bus
Bay Transit
GRTC
Petersburg Area Transit
22-Accomack-North Hampton
Pony Express (Town of Chincoteague)
Star Transit (VRT)
23-Hampton Roads
Bay Transit
HRT
I-RIDE
VRT
WATA



Population Forecast



Existing Population Density / Service Providers



Methodology for Needs Assessment

Needs Assessment will consist of three elements:

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

State of Good Repair (SGR)
1st Element

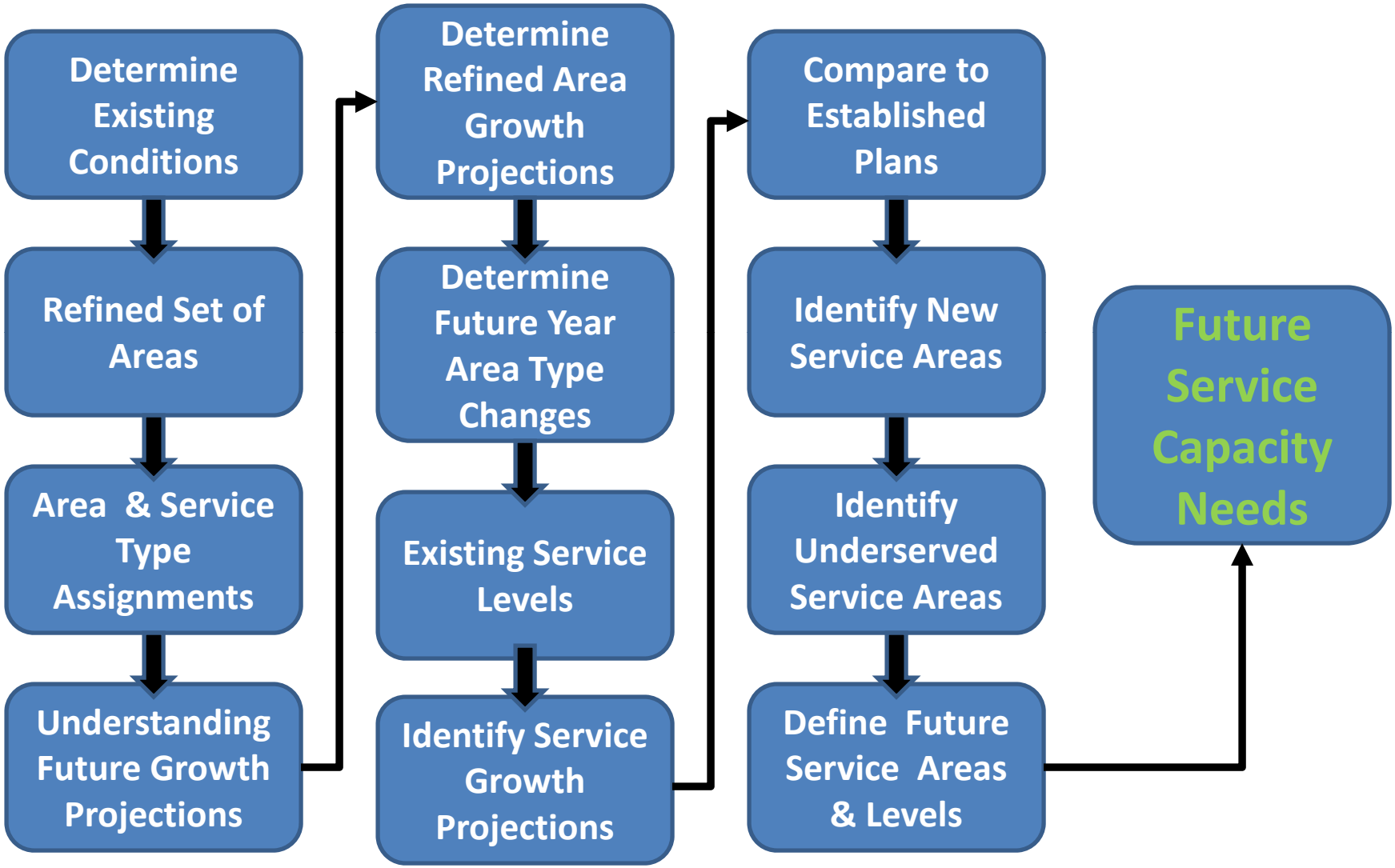
- Goal: Achieve and Maintain SGR on existing and future transit assets (capital and operating) – Function & Safety
- Capital investments in vehicles, supporting facilities and infrastructure used in service
- Commitment to continue operation of current service
- Use up-to-date DRPT Asset Inventory database
- Establish capital resource life cycles and replacement requirements through Year 2040 = capital costs
- Determine operating requirements to maintain existing level of service through Year 2040 = operating costs

Transit & TDM Capacity Enhancements
2nd Element

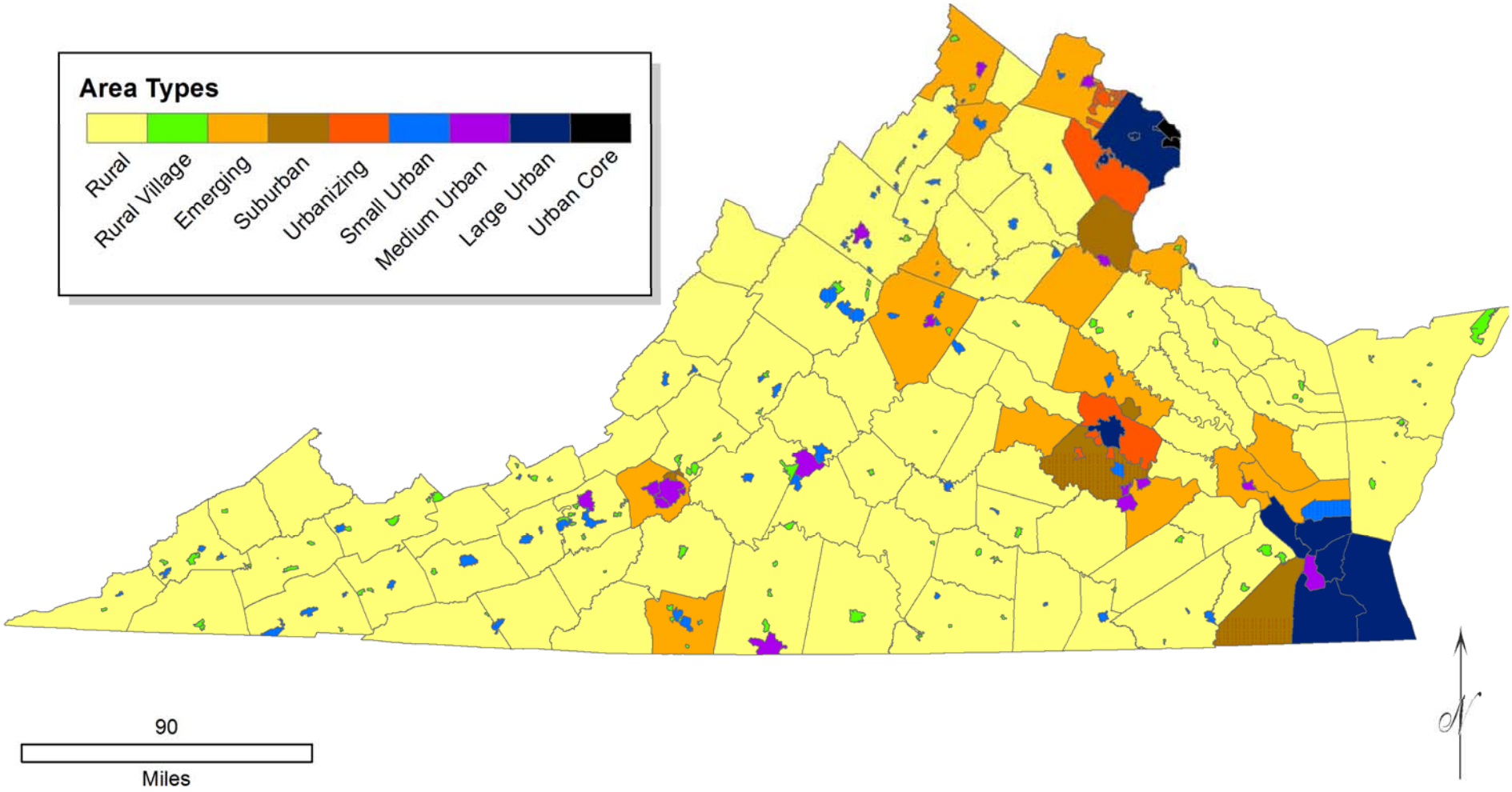
- Expand statewide capacity to meet needs of growing economy and population
- Identify un-served areas that exhibit characteristics supportive of transit / TDM services – determine service needs
- Identify under-served areas that exhibit characteristics supportive of higher levels and increased types of transit / TDM services – determine service needs

Capacity Enhancement Methodology described on next slide

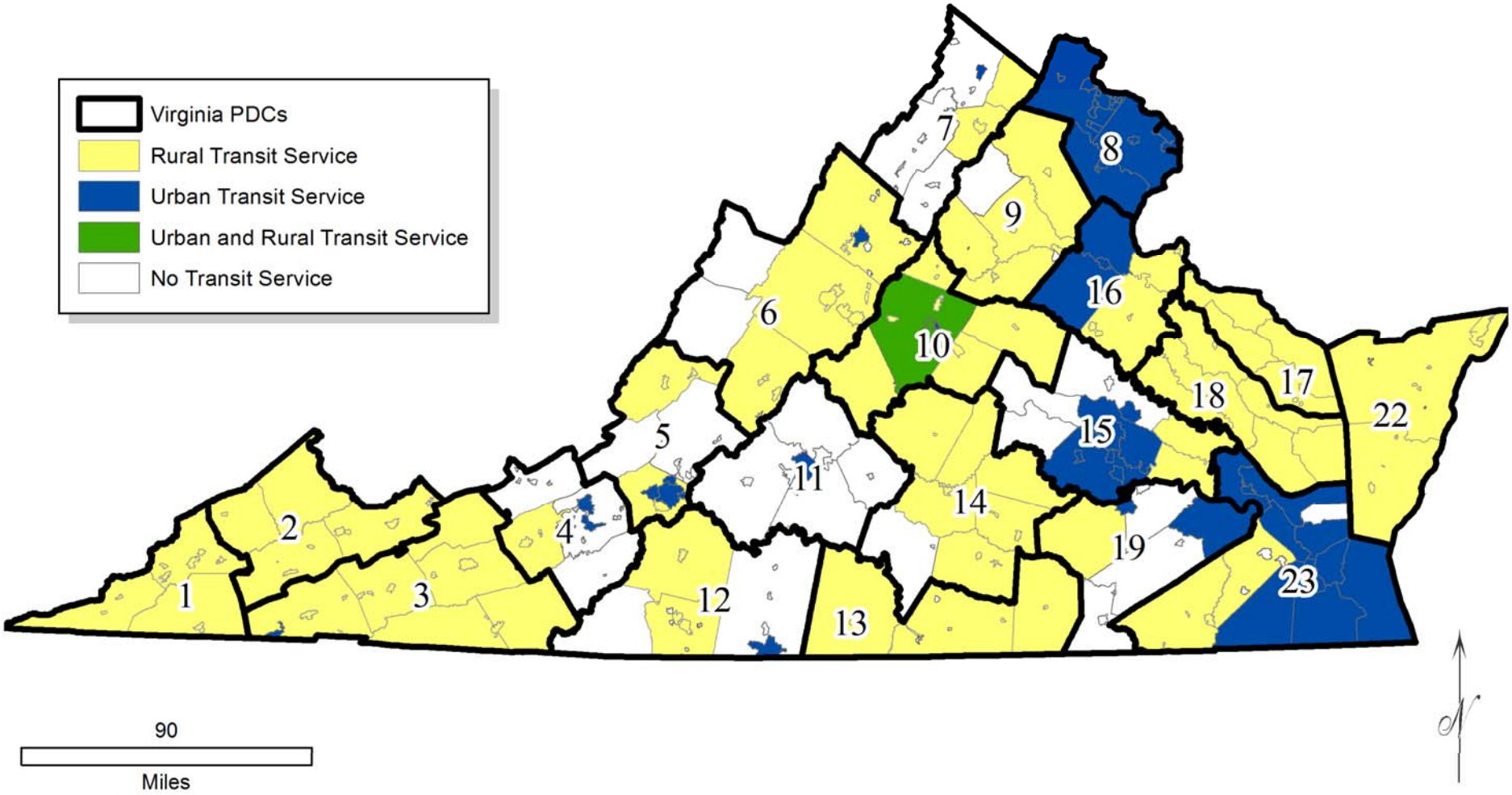
Capacity Expansion Methodology



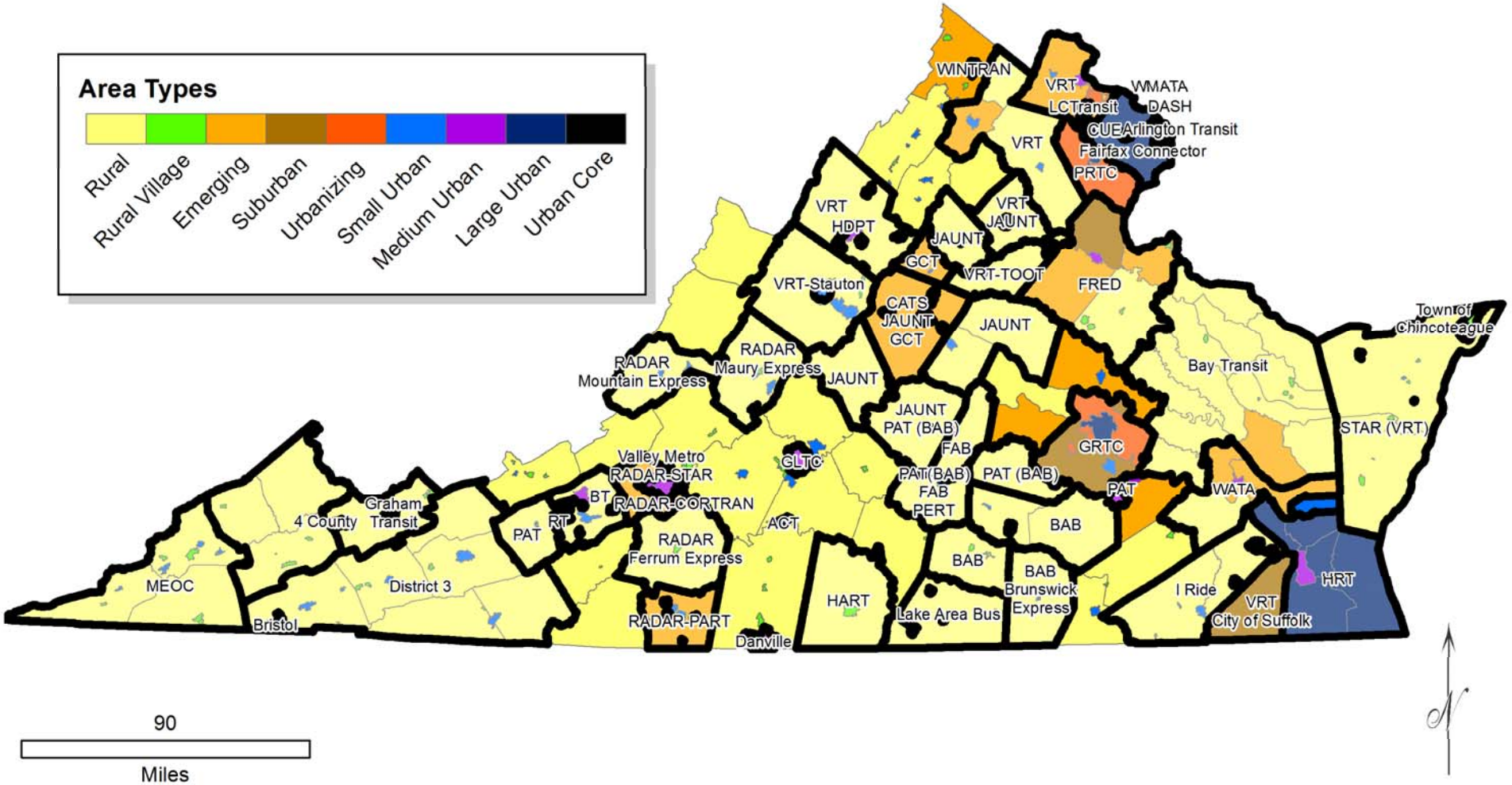
Existing Area Designation



Existing Service Provided



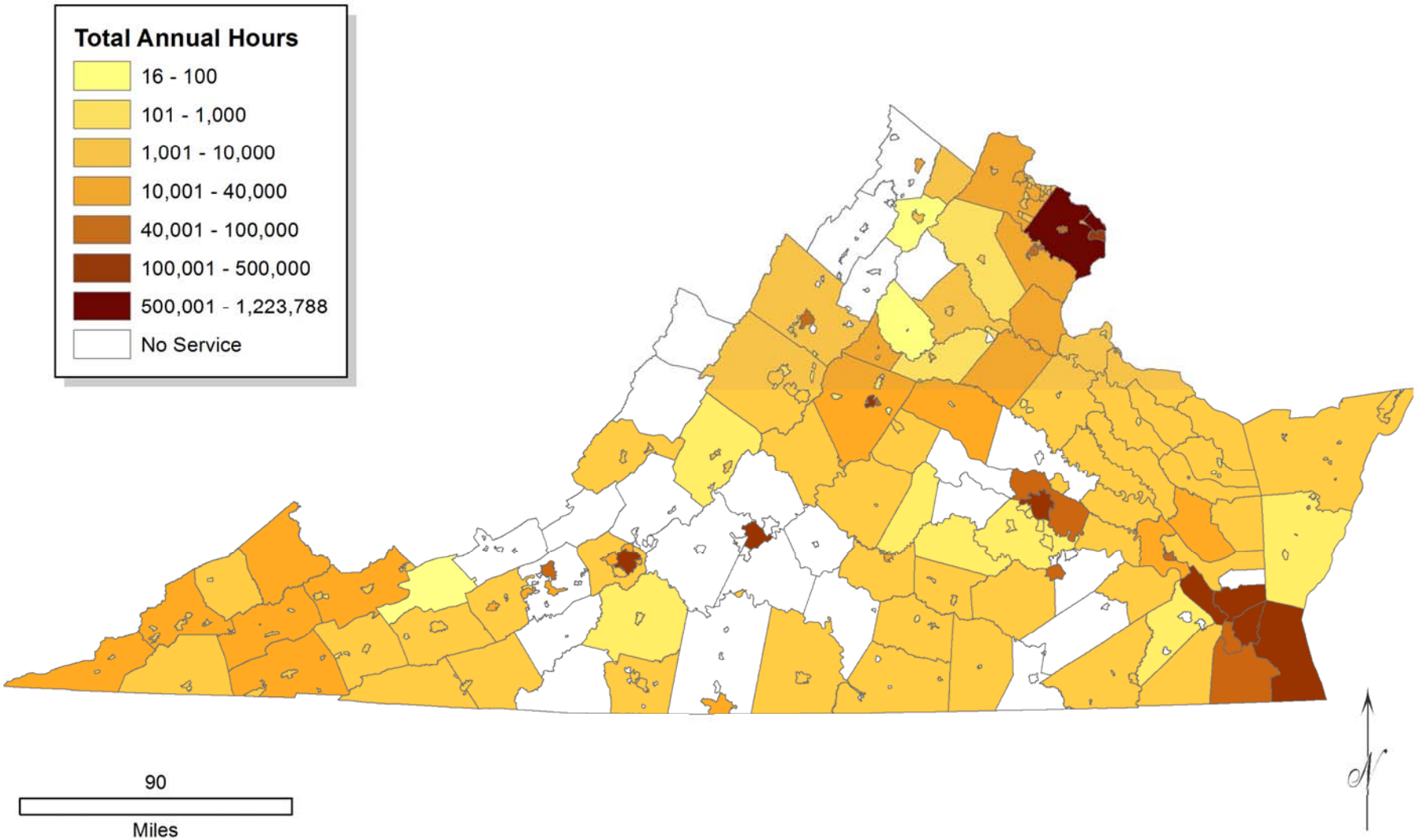
Existing Service Providers by Area Designation



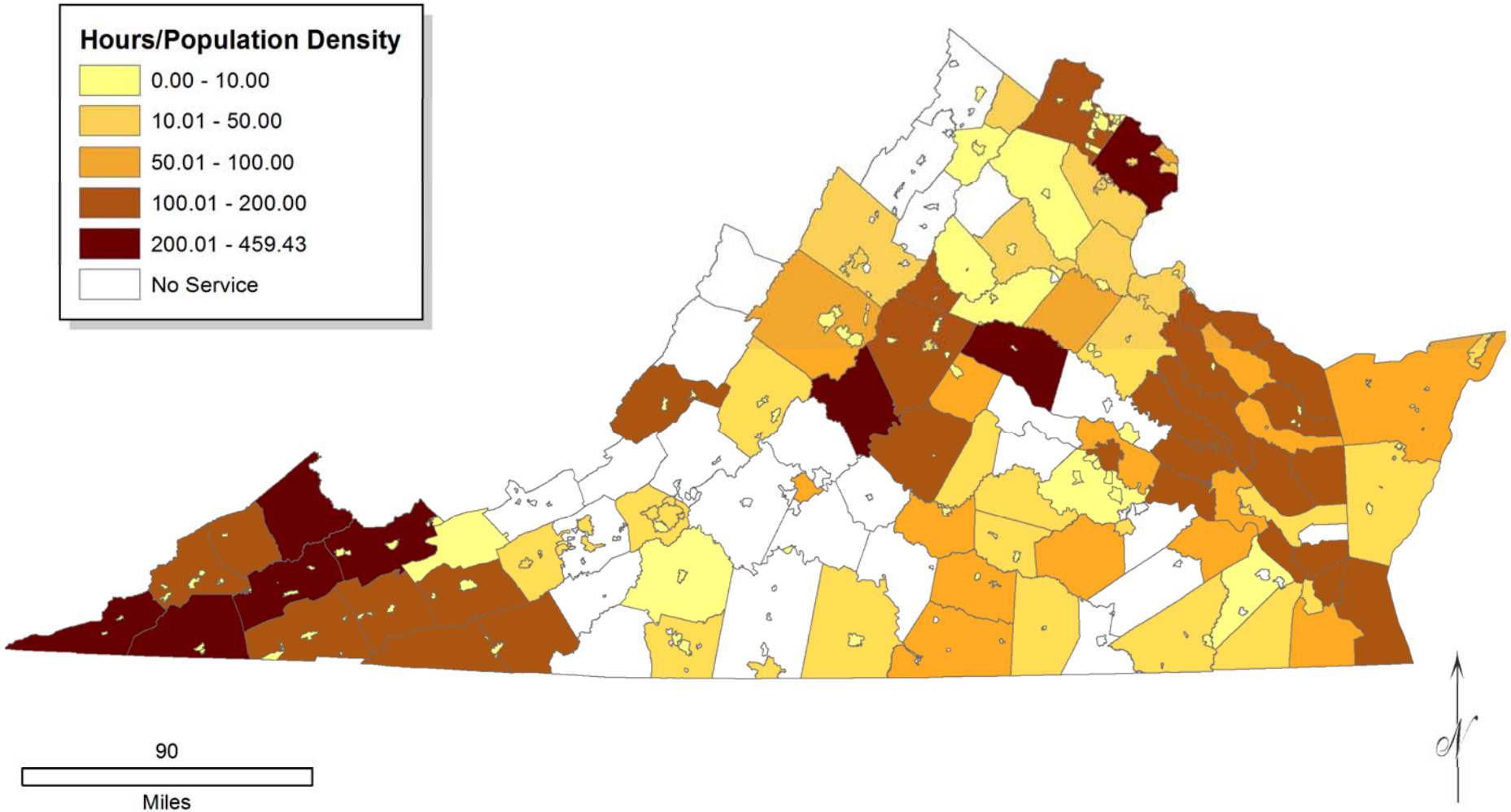
Transit Service by Area Type

Service Category	Service Type / Area Type	Urban Core			Urban / Suburban				Small Urban	Non-Urban	
		Urban Core	Large Urban	Medium Urban	Urban County	Urbanizing	Suburban	Emerging	Small Urban	Rural Village	Rural
Demand Response	Urban	✔	✔	✔	✔	✔	✔	✔	✔	✔	
	Rural							✔	✔	✔	✔
Local Route Services	Fixed Route	✔	✔	✔	✔	✔	✔	✔	✔		
	Deviated Fixed Route				✔	✔	✔	✔	✔	✔	
	Circulators	✔	✔	✔	✔	✔	✔		✔		
	Urban BRT	✔	✔	✔	✔						
Regional Bus	Commuter/Express Bus	✔	✔	✔	✔	✔	✔	✔	✔	✔	
	Rural Regional								✔	✔	
	Regional BRT	✔	✔	✔	✔		✔	✔			
Rail Services	Streetcar	✔	✔								
	Light Rail	✔	✔		✔						
	Heavy Rail	✔	✔		✔						
	Commuter Rail	✔	✔	✔	✔	✔	✔	✔			
	Inter City Pass. Rail	✔	✔		✔						

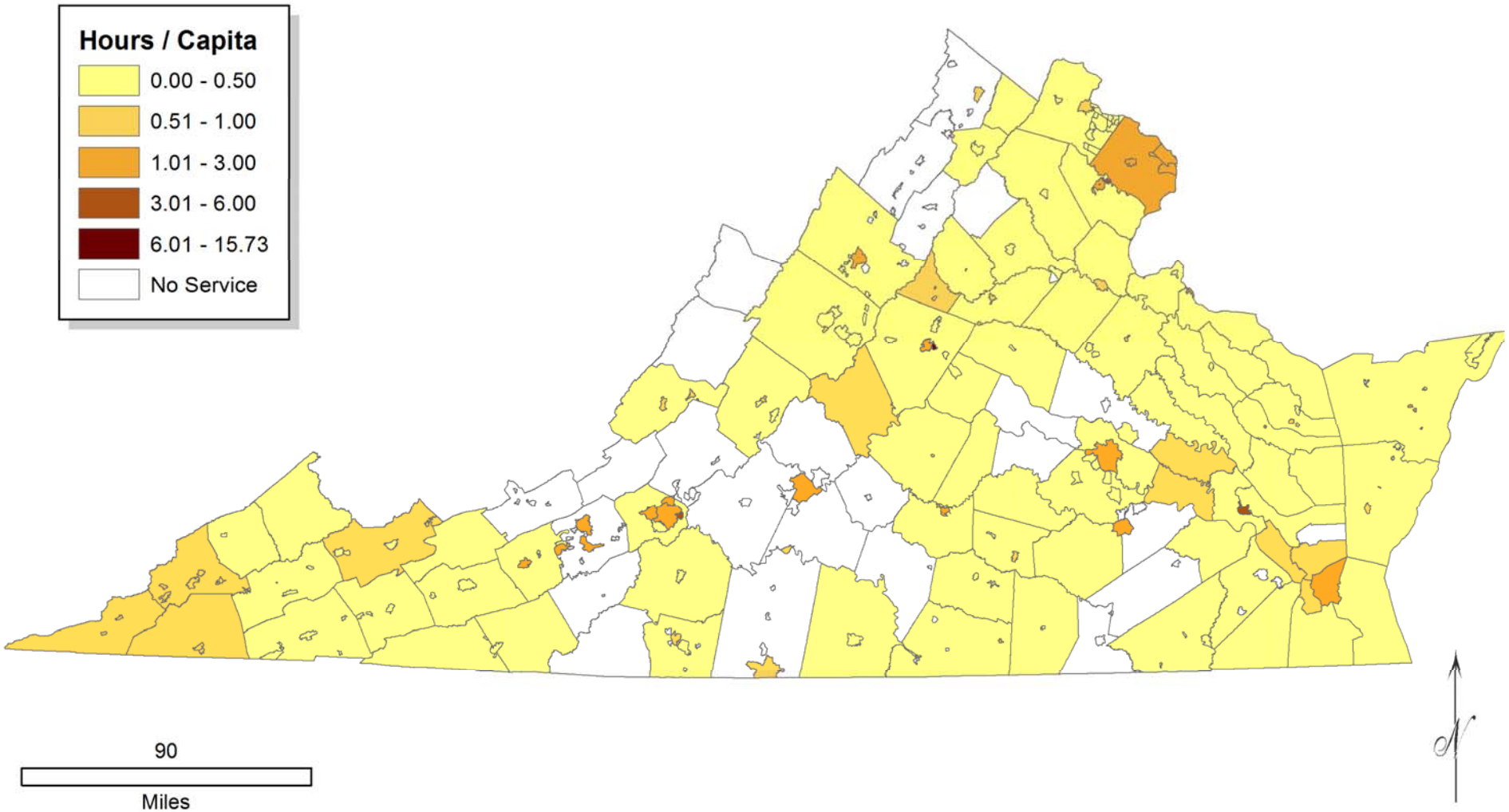
Existing Service Hours



Existing Service Hours / Population Density



Existing Service Hours / Capita



Transportation Demand Management

- In Virginia, TDM is accomplished through a unique partnership between DRPT, VDOT, MPOs, PDCs, Transportation Management Associations (TMAs), and city and county local governments.
- The goals for TDM strategies outlined in Vtrans2035 are:
  - Mobility, Connectivity and Accessibility
  - Economic Vitality
  - Environmental Stewardship
  - Coordination of Transportation and Land Use

TDM Service Gap Methodology

- Classify study geographies into 4 aggregated area types
- Identify optimal TDM service levels, categories, and strategies by area type
- Document existing TDM services provided by each TDM agency
- Identify gaps in TDM services by area type based on:
  - Difference between optimal and existing services
  - Projected population growth
  - Enhancements outlined in Long-Range TDM Plans

This information will feed into the TDM needs assessment and implementation strategy

TDM Service Levels from STP

Urban Core	Small Urban	Suburban / Feeder	Non-Urban
·Build on existing transit options and bike/walk options	·Expand employer outreach, especially in suburban centers	·Expand non-SOV use for non-work trips in suburban centers	·Primarily residence-based programs for commuting within and outside the area
·Develop suburban transit links for inbound / reverse commute	·Primary focus on resident / commute travel	·Strong focus on employment outreach in suburban centers	·Promote telework to residents
·Address short-trip lengths	·Promote carpool and vanpool for long-distance commutes to areas outside region	·Promote feeder area ridesharing for long-distance commutes	·Establish modest commute outreach in areas with no current program
·Strong focus on employment end outreach	·Promote telework to residents	·Promote telework to employers and residents	·Support long-distance commute markets
·Target both commute trips and non-work travel of residents	·Develop transit links to urban and suburban employment	·Expand transit options; develop transit links to urban and suburban employment	·Coordinate with neighboring employment areas for outbound commuting
·Integrate TDM into local planning, MTPs, LRTPs	·Integrate TDM into the land development processes; encourage mixed-use	·Integrate TDM into the land development process; encourage mixed-use	·Integrate TDM into local planning, MTPs, LRTPs
·Increase parking management	·Integrate TDM into local planning, MTPs, LRTPs	·Integrate TDM into local planning, MTPs, LRTPs	
·Promote alternative work hours and telework at employment	·Enhance cross-jurisdictional coordination for TDM	·Enhance cross-jurisdictional coordination for TDM	
·Enhance cross-jurisdictional coordination for TDM			

TDM Service Categories by Area

Aggregated Areas	Urban	Small Urban	Suburban/Feeder		Non-Urban
Primary Market for Service Categories	Work & Non-Work	Work & Non-Work	Work	Non-Work	Non-Work
Transportation Information	✓	✓	✓	✓	✓
Employer Services	✓	✓	✓		
Education & Outreach	✓	✓	✓	✓	✓
Ridesharing	✓	✓	✓		
Infrastructure	✓	✓	✓	✓	
Financial Incentives	✓	✓	✓	✓	
Support Services	✓	✓	✓	✓	✓
Land Use & Zoning	✓	✓	✓	✓	

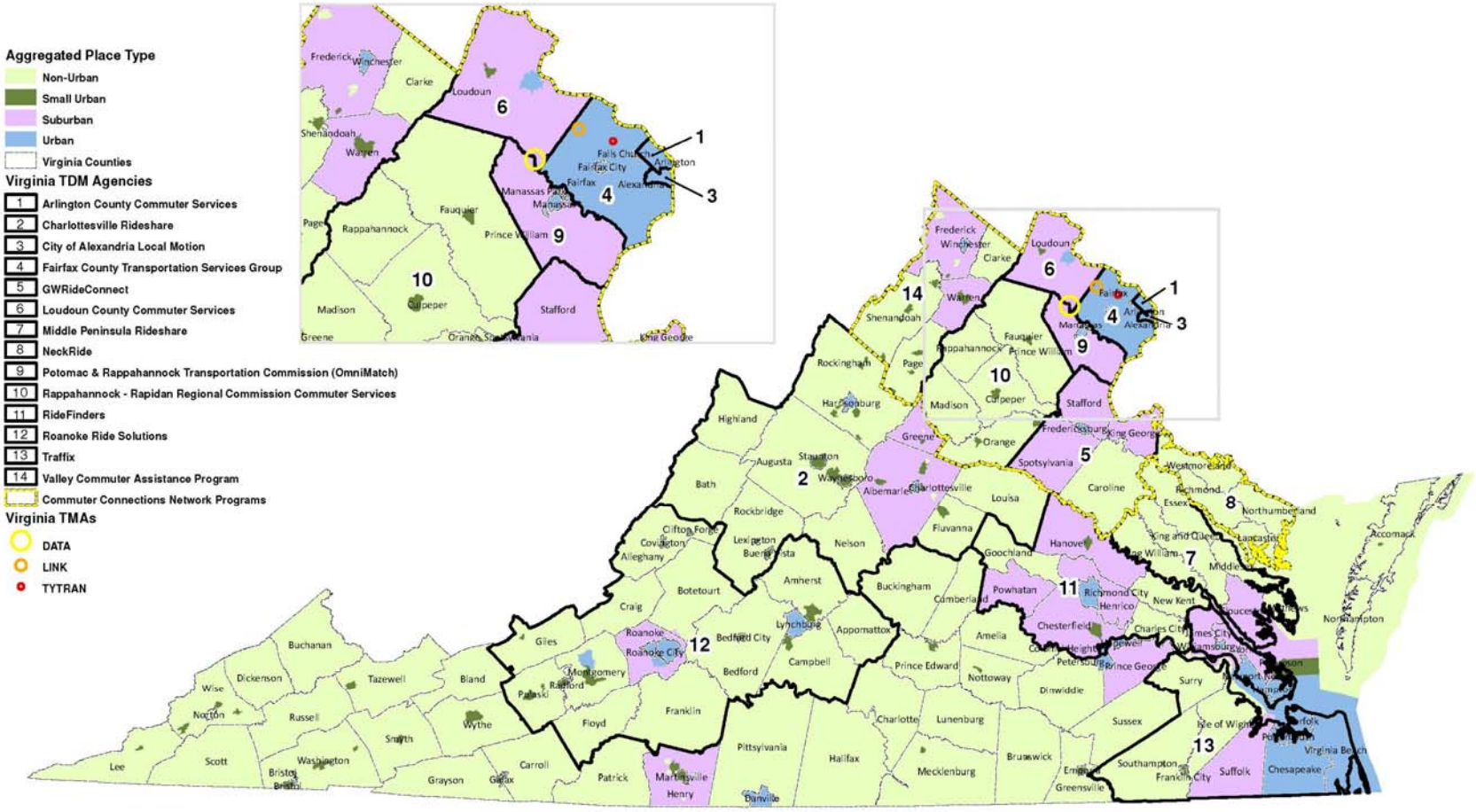
Optimal TDM Strategies by Area

Service Category	Aggregated Areas	Urban	Small Urban	Suburban/Feeder		Non-Urban
	Area Types	Urban Core/ Large Urban/ Medium Urban	Small Urban	Urbanizing County/ Suburban County/ Emerging County		Rural Village/ Rural
	Primary Market for TDM Strategies	Work & Non-Work	Work & Non-Work	Work	Non-Work	Non-Work
Transportation Information	Retail/Mobile Store	✓				
	Call Center/Help Line	✓	✓	✓	✓	✓
	Radio/TV/Paper	✓	✓	✓	✓	✓
	Websites/Social Media	✓	✓	✓	✓	✓
	Realtime Travel Information	✓	✓	✓	✓	✓
Employer Services	Commute Planning	✓	✓	✓		
	Telework Support	✓	✓	✓		
	Commuter Benefit Programs	✓	✓	✓		
Education & Outreach	Corridor-level Programs	✓	✓	✓	✓	✓
	Bike	✓	✓		✓	
	Walk	✓	✓	✓	✓	
	New Resident Kits	✓	✓		✓	
Ridesharing	Ridematching	✓	✓	✓	✓	✓
	Vanpool Subsidy	✓	✓	✓		
	Slug Lines	✓	✓	✓		
Infrastructure	Park & Ride Lots		✓	✓		
	Carshare	✓		✓		
	Bikeshare	✓				
Financial Incentives	Goal-based programs	✓	✓	✓	✓	
Support Services	Guaranteed Ride Home	✓	✓	✓	✓	✓
Land Use & Zoning	TDM conditions	✓	✓	✓	✓	
	Parking management	✓		✓		

Sample TDM Gap Analysis

Service Category	TDM Strategies	Urban	TDM Agency	
		Work & Non-Work	Existing	Gap
Transportation Information	Retail/Mobile Store	✓	✓	
	Call Center/Help Line	✓	✓	
	Radio/TV/Paper	✓	✓	
	Websites/Social Media	✓	✓	
	Realtime Travel Information	✓	✓	Enhance
Employer Services	Commute Planning	✓	✓	
	Telework Support	✓	✓	
	Commuter Benefit Programs	✓	✓	
Education & Outreach	Corridor-level Programs	✓		New
	Bike	✓	✓	
	Walk	✓	✓	
	New Resident Kits	✓	✓	
Ridesharing	Ridematching	✓	✓	Enhance
	Vanpool Subsidy	✓		New
	Slug Lines	✓	✓	
Infrastructure	Park & Ride Lots			
	Carshare	✓	✓	Enhance
	Bikeshare	✓	✓	Enhance
Financial Incentives	Goal-based programs	✓		New
Support Services	Guaranteed Ride Home	✓	✓	
Land Use & Zoning	TDM conditions	✓	✓	
	Parking management	✓	✓	

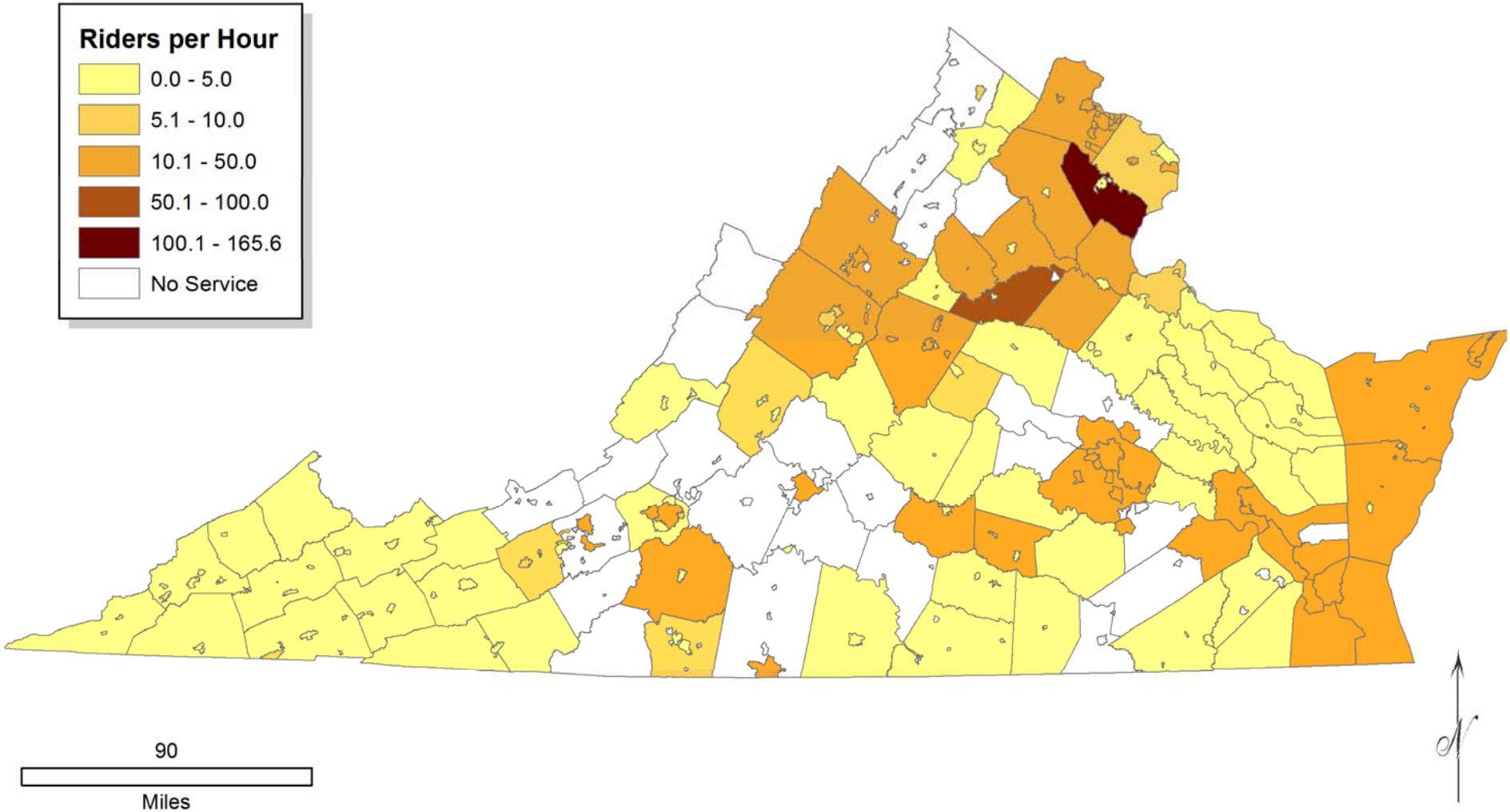
TDM Agencies and Place Types



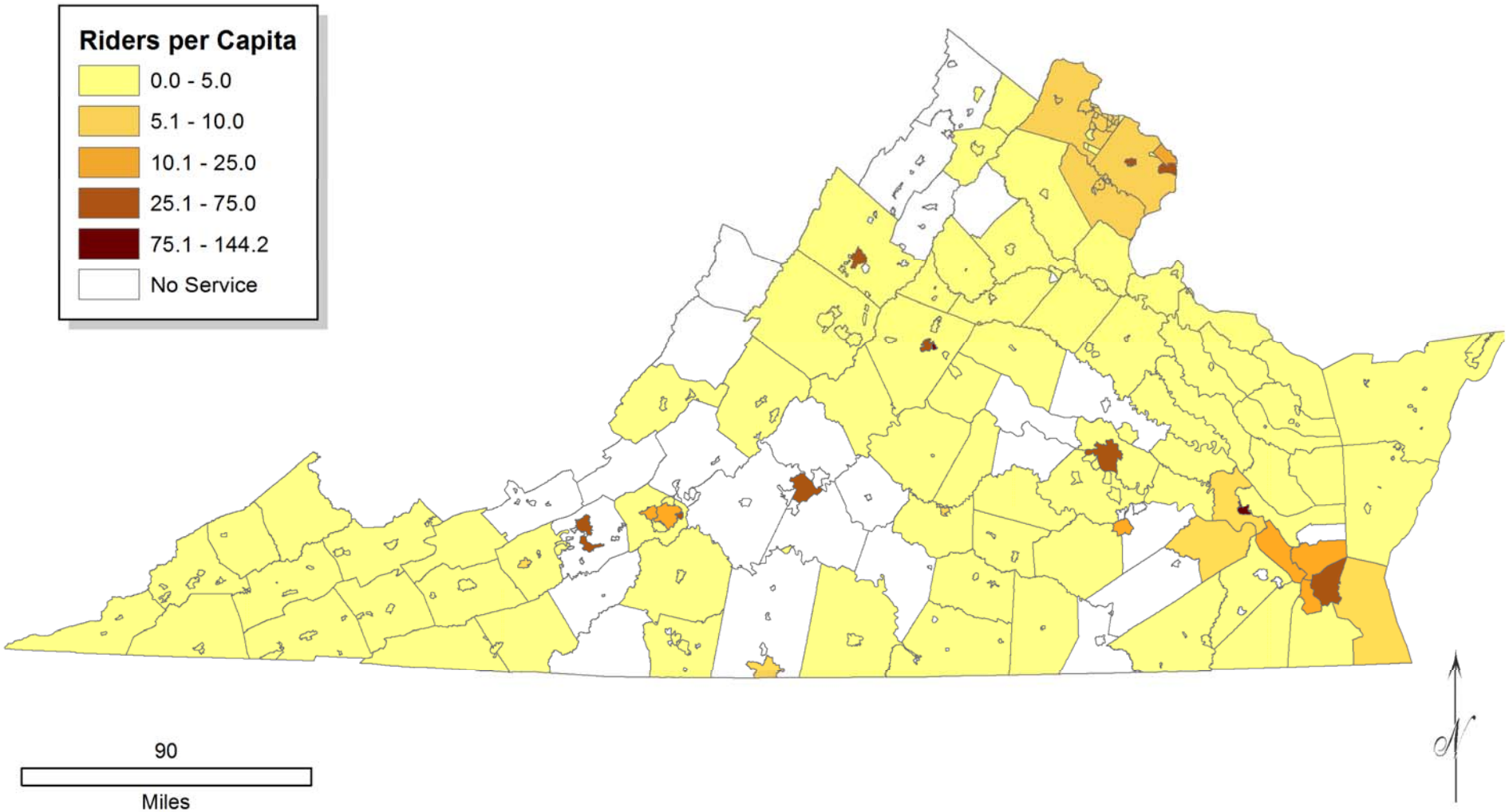
Major Capital Projects
3rd Element

- Identify potential Major Capital Projects focused on managing congestion and increasing transit mode share
- Typical modes include Metrorail, bus rapid transit (BRT), light rail transit, streetcar and commuter rail
- Projects likely to rise out of rapid transit projects planning in various urban regions
- Projects likely to be identified in Long Range Transportation Plans (LRTPs)

Statewide Ridership Analysis
Existing Transit Riders per Service Hour

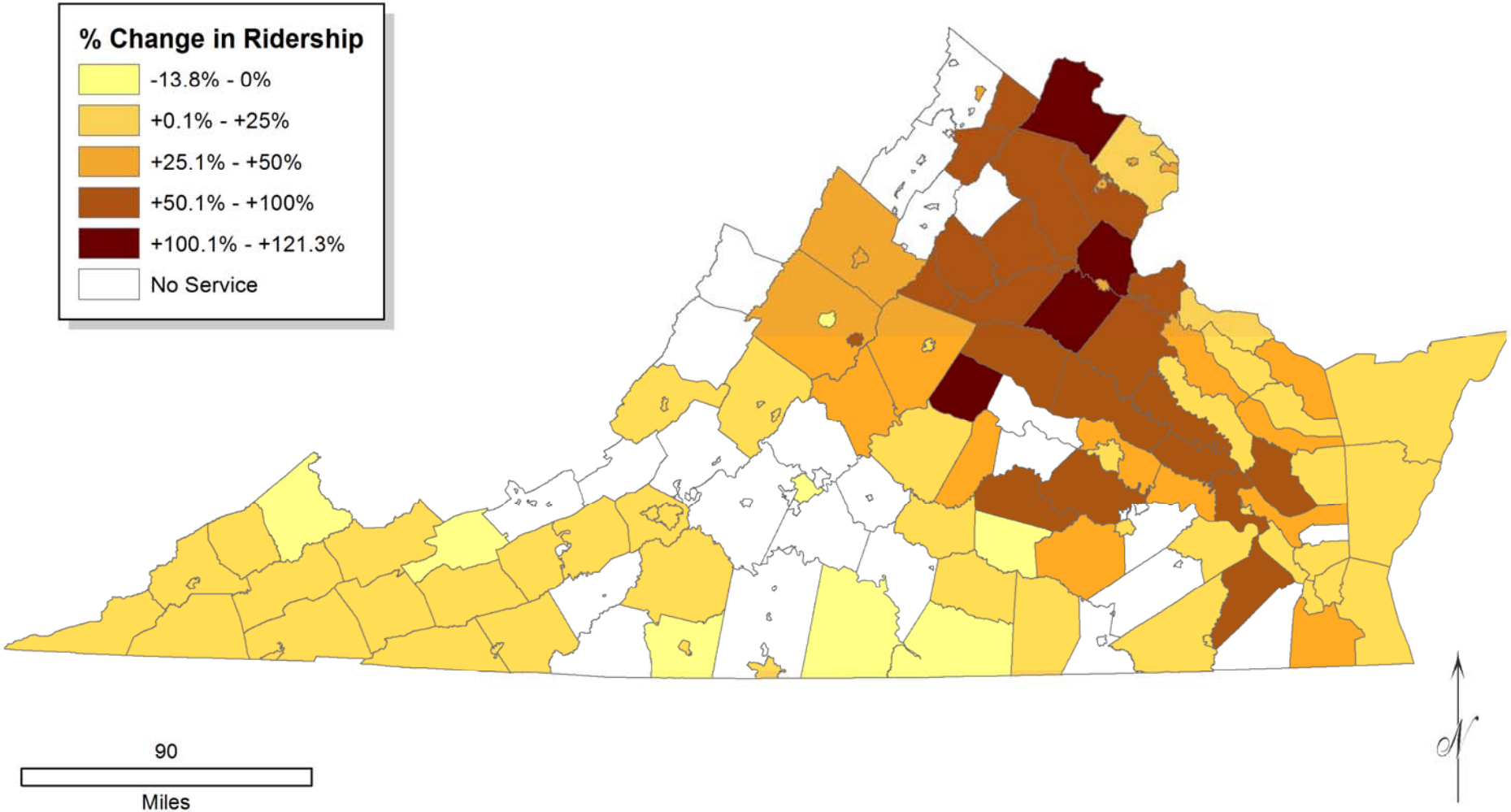


Statewide Ridership Analysis
Existing Transit Riders per Capita



Projected Future Ridership Growth

Existing Ridership Productivity applied to 2040 Population



Title VI Analysis

- Conduct an Environmental Justice analysis to identify concentrations of minority and low-income populations that may be impacted by proposed projects or policies
- Also conduct a Limited English Proficiency (LEP) analysis to identify LEP populations
- Use a “four factor” analysis to determine if written translations into other languages may be necessary for LEP individuals to have meaningful access to information and programs

DRPT
Virginia Department of Rail and Public Transportation

Next Steps

Next Steps

Technical Analysis

- Transit Needs Analysis
  - State of Good Repair
  - Transit & TDM Capacity Enhancements
  - Major Capital Projects
- Financial Analysis
- Development of Recommendations

Next Stakeholder Meetings

- Summer 2012

Study Team Contact Information

VDRPT

- Amy Inman, Project Manager
  - Email: amy.inman@drpt.virginia.gov
  - Phone: (804) 225-3207

Consultant Team

- Mark Boggs, Atkins
  - Email: mark.boggs@atkinsglobal.com
  - Phone: (919) 437-5263
- Tim Crobons, CTG
  - Email: tcrobons@ctgconsult.com
  - Phone: (407) 302-5131