2040 Long Range Transportation Plan

Adopted: April 15, 2013

APPENDIX C
LAND USE SCENARIO PLANNING SUMMARY

FAMPO
Fredericksburg Area Metropolitan Planning Organization

GEORGE WASHINGTON
REGIONAL COMMISSION

Your Vision, Our Future

- The George Washington Region Scenario Planning Study

Final Summary Document

August 7, 2012

In recent years, planners and community leaders across the country have observed increased public interest in reducing or reversing the trend of decentralized growth and its consequences. Their efforts are largely motivated by the impacts associated with suburban development patterns: consumption of sensitive land for development, costly expansion of public infrastructure, and increasing traffic congestion.

In the George Washington Region (shown on page 2), the physical distance between complementary land uses (e.g., between home and work, home and school, or home and shopping) and a lack of overall street connectivity leads to unintended consequences — increased vehicle miles traveled and energy consumption, longer commute times, increased air pollution, heightened infrastructure and public service costs, and decreased resource lands. Inadequate long-term transportation funding for the region worsens the problem as little can be done to keep up with existing and emerging decentralized growth patterns; estimated to be a $7.59 billion shortfall in the Fredericksburg Area Metropolitan Planning Organization (FAMPO) 2035 Constrained Long Range Transportation Plan (CLRTP).

Future year forecasts in the FAMPO Regional Travel Demand Model confirm these unintended consequences will continue if the region does not better integrate land use (demand), urban form (design), and transportation (supply) decision-making processes.

Your Vision, Our Future was an initiative started in 2009 to promote community-based regionalism, aimed at guiding growth and coordinating decision-making processes for a more sustainable future. It brought together residents, developers, business leaders, and elected officials in the region for the opportunity to explore and debate competing growth visions, their trade-offs, and alternative futures.

Central to *Your Vision, Our Future* was the notion that those in the region should guide its growth. Government at all levels, working with property owners and the private sector, should develop new ideas to change the direction current trends are taking the region.

Scenario planning was used throughout the process to identify regional goals and community values, as well as explore different alternatives for growth, development, and transportation investments in the region. Data, tools, and recommendations from the *Your Vision, Our Future* initiative are currently being used throughout the region, most notably for the development of FAMPO's 2040 Long Range Transportation Plan (LRTP).

The purpose of this scenario planning study summary document is to inform stakeholders about the planning process for *Your Vision, Our Future*, and describe five different growth scenarios contemplated for the George Washington Region. The document is organized around ten general headings:

- Study Area Description
- Growth Trends & Consequences
- Scenario Planning Overview
- Partnerships for Developing Scenarios
- General Themes for Guiding Scenarios
- Alternative Growth Scenarios
- Growth Scenario Report Card
- Stakeholder Awareness
- Preferred Growth Scenario
- Moving Forward

Documents prepared to support the regional scenario planning study summary document— regional scan document, place type summary document, regional growth principals, and growth scenario summary document —were published as separate documents for *Your*

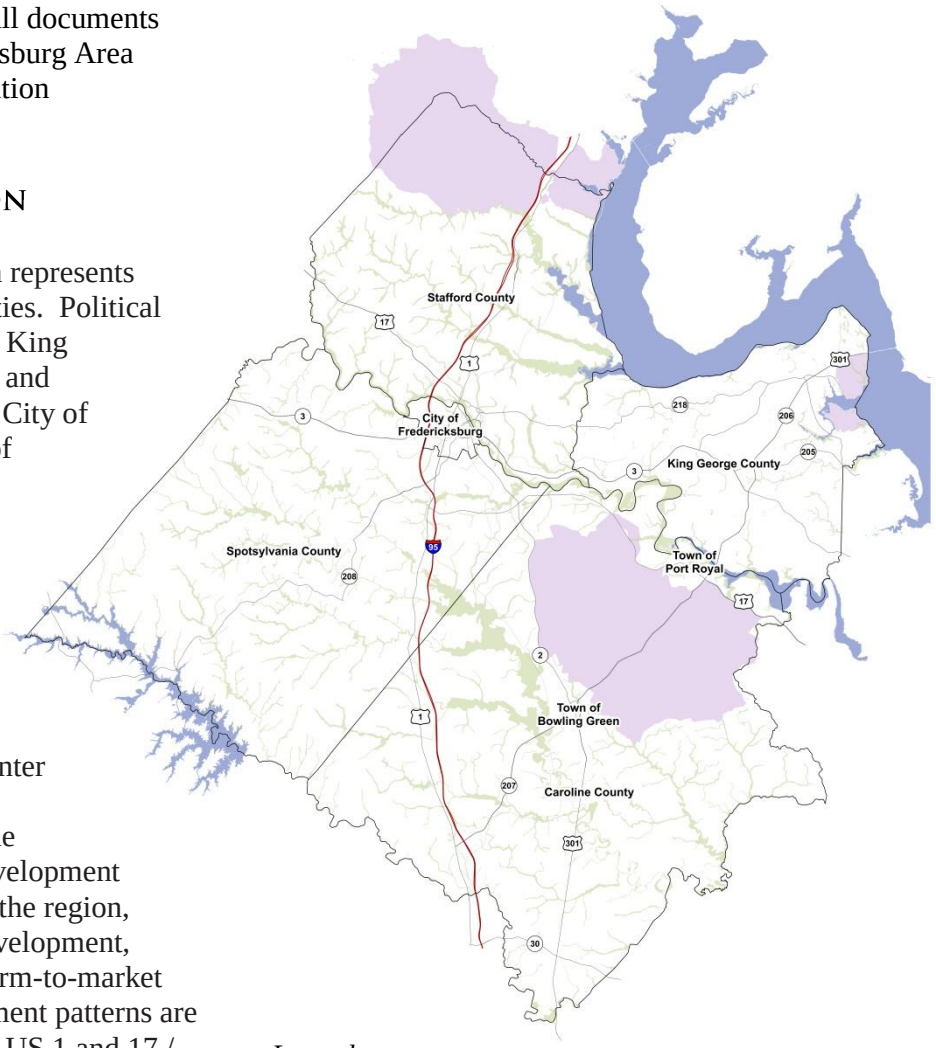
Vision, Our Future. Copies of all documents are available from the Fredericksburg Area Metropolitan Planning Organization (FAMPO).

Study Area Description

The George Washington Region represents 1,429 square miles in four counties. Political jurisdictions in the area include: King George, Caroline, Spotsylvania, and Stafford Counties as well as the City of Fredericksburg and the Towns of Bowling Green and Port Royal.

The region shares a rich history, environmental assets, military presence, and geography within the super region extending between Washington, D.C. and Richmond, VA. The historic center for the area is Old Downtown Fredericksburg, located along the Rappahannock River. Rural development patterns still prevail throughout the region, characterized by low density development, working farms, and two-lane, farm-to-market roads. More suburban development patterns are focused along the Interstate 95 / US 1 and 17 / VA Highway 3 corridors in Stafford and Spotsylvania Counties or around NSWC Dahlgren in King George County.

Several other areas in the region are protected as permanent open space; safeguarding historic battlefields, national parks, or environmentally-sensitive lands along the Rappahannock and Potomac Rivers. These areas help define the region, and make it unique within the Commonwealth of Virginia.



Legend

- City & County Boundaries
- Interstate 95
- Major Roads
- Military Installation
- Conservation Area
- Water Bodies

Growth Trends & Consequences

The George Washington Region's population and land development activities grew rapidly between 2000 and 2010. Total population increased by 36%; adding 86,729 new residents to the region. Employment increased by 78%; adding 65,706 new employees. The development footprint in the region (including urban, suburban, and rural areas combined minus land reserved for military bases) grew to nearly 56% of total land area for 2010.

Growth is expected to accelerate through the long-term planning horizon because of the region's affordable housing, proximity to jobs in Washington, D.C. and Richmond, VA, and emerging business centers fueled by military spending and the decentralization of federal government agencies and services.

Forecasters anticipate 617,330 people will call the George Washington Region home by 2040; an increase of 88% from 2010. Employment is expected to increase to 252,350, an increase of 75% from 2010.

Nearly doubling population and employment in the region will significantly increase the development footprint, assuming similar decentralized growth patterns and densities continue. Other challenges associated with anticipated growth and current development patterns favored in the region include: lower density development, accelerated land consumption, lost working farms, expensive utility expansion, lost environmental and historical resources, and longer commutes / increased traffic congestion.

For these reasons, continuing decentralized growth patterns in the region would not be sustainable and could easily overtax supporting infrastructure, leading to stress and shortfalls similar to those already experienced in many parts of the George Washington Region. Leaders in the region agree other growth scenario alternatives should be considered that promote a higher quality-of-life, continued economic vitality, and greater fiscal responsibility for providing the public facilities and services necessary to support new development.

Scenario Planning Overview

Scenario planning represents the next generation of analytical processes created to evaluate the influence of development intensities and land use patterns on the efficiency of a proposed transportation system. Visualization of the interaction between land use, urban form, and transportation decisions, as well as the causational factors that explain the push-pull relationship between them, provides community leaders with the information they need to evaluate the consequences of potential actions. Building on this momentum, the Federal Highway Administration (FHWA), Environmental Protection Agency (EPA), and other federal agencies are actively promoting the use of scenario planning by state departments of transportation, metropolitan planning organizations, and local governments to better integrate transportation and land use decisions in the Long Range Transportation Plan (LRTP).

The Fredericksburg Area Metropolitan Planning Organization (FAMPO) is leading the movement in Virginia to incorporate scenario planning in the process of developing

its Long Range Transportation Plan (LRTP). A spatial data planning model using CommunityViz software was developed to evaluate the impacts of land use decisions on surrounding public facilities and services (including the influence of land use and urban form decision-making on regional travel behavior).

Evaluating the relationship between land use, urban form, and regional travel behavior in a scenario planning analysis produces several benefits. When considered together, decisions and investments regarding all three elements can have a significant impact on the George Washington Region:

- The impacts to sensitive land uses may be minimized when facilities identified for transportation investments are located *after* considering appropriate land use patterns and development intensities for the area.

- Prime locations for development may be stimulated if transportation investments consider available capacity or appropriate mobility options.

- Complementary activities may be placed next to existing or planned transportation infrastructure, making the most of land use opportunities and dedicated transportation investments.

- The quantity and location of travel demand may be influenced by land use decisions, making the possibility of real choices for various modes of travel both accessible and attractive.

Partnerships for Developing the Scenarios

It was important for *Your Vision, Our Future* that the growth scenarios prepared for study reflected the region's rich history, environmental assets, military presence, and geography within the super region extending between Washington, D.C. and Richmond, VA. The project team worked with several stakeholder groups to understand the challenges and opportunities facing the region and create viable alternative growth scenarios.

Four primary activities were used by the project team to collect information for preparing the four alternative growth scenarios, as follows:

Focus Group Meetings

On August 3 – 4, 2010, the project team met with members of two focus groups created for *Your Vision, Our Future*. The first meeting with business and development interests was used to generate a list of factors that make land more attractive to develop in the region and answer general questions about hot spots for future growth. The second meeting with chief planners and public works officials was used to capture the effect of local land development policies and available infrastructure on future development patterns and intensities in the region. The project team collected workbooks used to record comments in both meetings for building the four growth scenarios.

Citizen Workshops

The project team for *Your Vision, Our Future* facilitated three citizen workshops from September 21 – 28, 2010, to capture community values and attitudes toward growth in the region. Twenty-nine people attended

the three workshops, which were held in the Town of Bowling Green, Spotsylvania County, and Stafford County. At each event, a brief presentation by the project team was followed by a hands-on, table top exercise (i.e., development chip game) used to idealize the most livable region. Small groups worked together to identify general development themes supportive of their vision, and to place new growth anticipated in areas of the region most suited for new development or redevelopment. The project team collected the development chip game maps at the end of each event for building the four alternative growth scenarios.

On-Line Citizen Survey

An on-line citizen survey for *Your Vision, Our Future* was prepared to capture residents' perceptions toward growth and long range planning in the George Washington Region. A link to the survey was distributed to organizations and interests groups routinely involved in growth and development issues facing the region. Each organization or interest group was asked to distribute the survey link to its membership or distribution lists.

The survey was open from September 14 – October 31, 2010. Two hundred and forty respondents participated in the survey. The project team referred to findings from the citizen survey when building the four alternative growth scenarios.

Project Steering Committee

A project steering committee for *Your Vision, Our Future* was selected to provide direct oversight and counsel in the planning process. Those on the steering committee represented a broad base of local interests, viewpoints, and concerns in the region. Membership on the committee included local planning directors,

the National Park Service (NPS), military interest groups, environmental interest groups, and the Virginia Department of Transportation (VDOT).

Two meetings with the project steering committee were used to prepare the alternative growth scenarios for *Your Vision, Our Future*. The first meeting focused on big ideas and regional initiatives that should be considered in one or more of the growth scenarios. The second meeting was used to review draft growth scenarios prepared by the project team. Comments from the steering committee were used to refine the growth scenarios for testing in the CommunityViz scenario planning model.

General Themes for Guiding the Scenarios

Meetings with stakeholder groups and other public outreach activities throughout the planning process for *Your Vision, Our Future* led to a list of general themes important to guiding preparation of the alternative growth scenarios, as follows:

- Increasing the jobs to housing balance is one concern residents shared — they want to ensure that the region does not continue to be a bedroom community for metropolitan areas to the north and south. Residents believe that travel to these areas throughout the region contributes significantly to existing problems with transportation congestion.

- Spirited debate was had over the best ways to enhance transportation mobility in the region — park and ride lots, regional and inter-regional transit, High Occupancy Toll (HOT) lanes on I-95 — but general consensus was that a comprehensive and regional approach needs to be taken for solving transportation problems.

- Environmental stewardship, preserving open space, and protecting the region's rich history (especially Civil War battlefields) should be important considerations when building the growth scenarios. All are reasons why residents think the George Washington Region is a great place to live.

- Housing options should be available for those choosing both more intense and less intense development options. Affordable housing should be an important consideration for one or more of the growth scenarios.

- Be aware of military needs (i.e., mission footprint and force protection areas) as well as the immediate impact of military base activities on surrounding areas when preparing the growth scenarios.

- Preserving the rural character of parts of the region is important to stakeholders in the planning process, both for historical and recreational purposes.

- One or more of the growth scenarios should consider the work of the George Washington Region Commission's (GWRC) Green Infrastructure Report completed in 2011.

- Growth scenarios for *Your Vision, Our Future* should consider the individuality of cities and counties in the region, and also recognize existing growth patterns and development intensities prevalent in the region if contemplating change.

- At least one growth scenario should consider the impacts of Virginia House Bill 1071 – Urban Development Areas on future growth patterns and development intensities in the region.

- Residents believe that current growth patterns and development intensities in the region are causing unintended consequences — traffic congestion, environment degradation, cost of expanding infrastructure, travel time between home and work — but the new approaches to growth and development could improve conditions.

Alternative Growth Scenarios

The project team prepared four alternative growth scenarios for *Your Vision, Our Future* using the general themes stated in this document and other information volunteered by the partnering groups. Each scenario was different enough to pose real choices for how the region could develop under one or more planning initiatives. The four alternative growth scenarios include:

- Decentralized Growth
- Compact Centers & Growth Corridors
- Green Print Initiative
- Greater Jobs-Housing Balance

A brief summary of the growth scenarios follows. Trade-offs among the alternative growth scenarios are summarized in the next section of the document, entitled the growth scenario report card.

Decentralized Growth

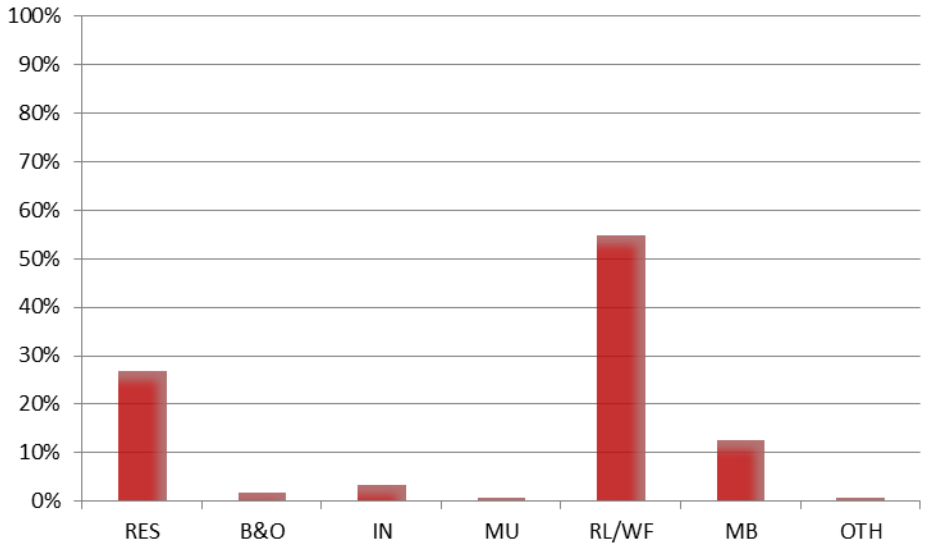
The decentralized growth scenario contemplates how the region could develop if the dispersed pattern of development occurring in some areas of the George Washington Region were to continue. New growth would take the form of single use, low-density development that is generally isolated, or not-well connected. Common features of the scenario include: green field development patterns, outward expansion of public utilities, and transportation investments that favor convenience for automobile users.

Development types and locations assigned in the scenario follow closely existing zoning maps and ordinances administered by cities, towns, and counties in the region and/or past trends to rezone rural areas in high-growth areas for new residential neighborhoods. (Note: A large-scale, printable version of the map is available upon request from the Fredericksburg Area Metropolitan Planning Organization.)

Anticipated growth assumed for the region recognizes the George Washington Region as a bedroom community to nearby large metropolitan centers, namely Washington, D.C. and Richmond, VA. The growth scenario best represents development patterns and intensities assumed for FAMPO's 2035 Constrained Long Range Transportation Plan (CLRP).

Land Use Profile

This scenario favored suburban-scale development (meaning lost rural areas and working farms) to meet the target population and employment growth.



Notes:

RES = Large-Lot, Residential Neighborhood, Small-Lot Residential Neighborhood, Mobile Home Community, Multifamily Residential Neighborhood, Urban Neighborhood

B&O = Rural Cross Roads, Suburban Commercial Center, Suburban Office Center

IN = Light Industrial, Heavy Industrial

MU = Mixed-Use Neighborhood, Town Center, Metropolitan Center, Transit-Oriented Development, Urban Development Area

RL/WF = Preserved Open Space, Working Farm, Rural Living

MB = Military Installation

OTH = Civic & Institutional, Regional Airport

Growth Forecast (2040)

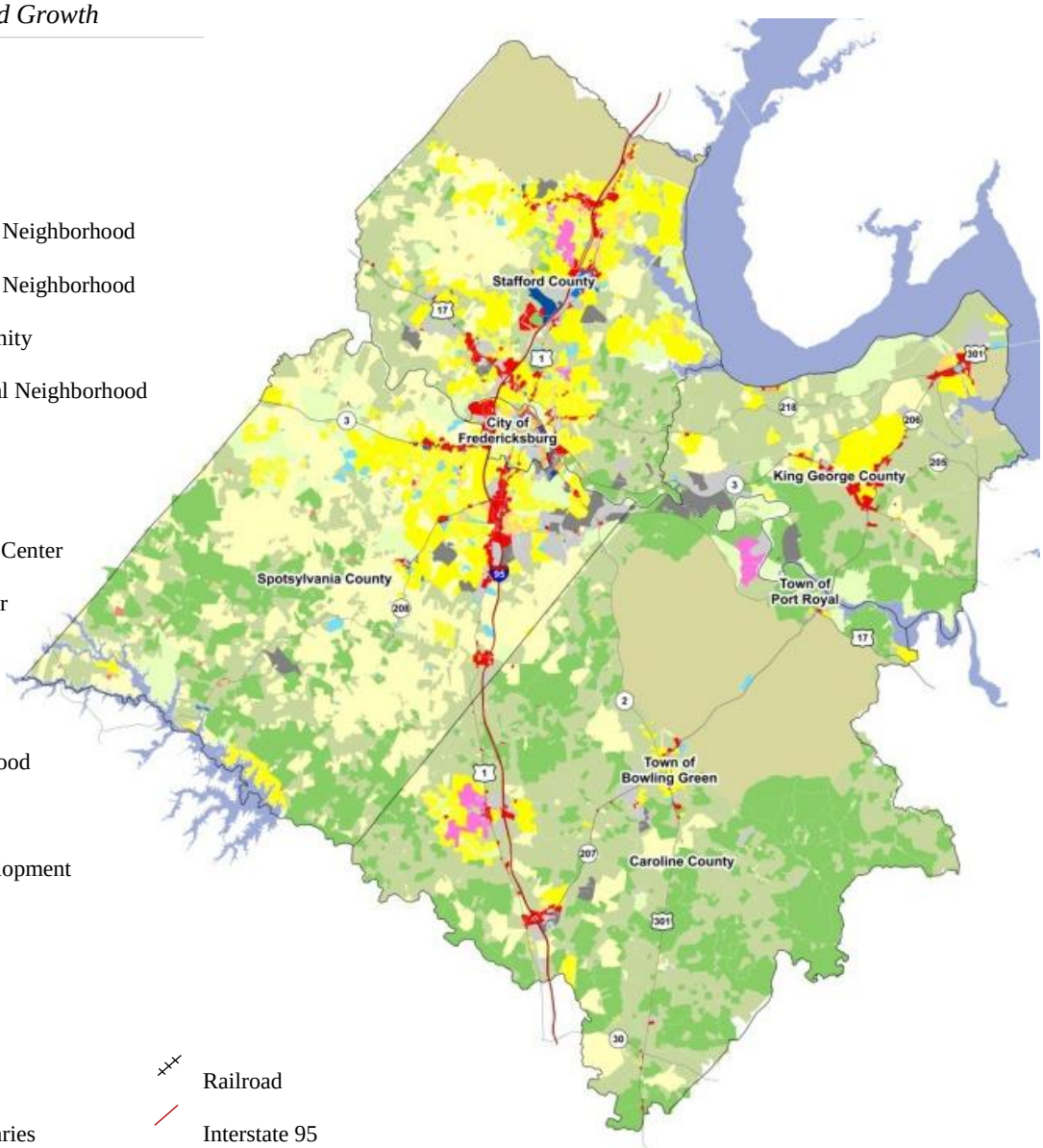
Population	617,330
Employment	253,180

Primary Growth Drivers

Growth patterns and development intensities assigned in the scenario follow closely existing zoning maps and ordinances administered by cities, towns, and counties in the region and/or past trends to rezone rural areas in high-growth portions for new residential development.

Legend — Decentralized Growth

- Preserved Open Space
- Rural Living
- Working Farm
- Large-Lot, Residential Neighborhood
- Small-Lot, Residential Neighborhood
- Mobile Home Community
- Multifamily Residential Neighborhood
- Urban Neighborhood
- Rural Cross Roads
- Suburban Commercial Center
- Suburban Office Center
- Light Industrial
- Heavy Industrial
- Mixed-Use Neighborhood
- Town Center
- Transit-Oriented Development
- Metropolitan Center
- Civic & Institutional
- Regional Airport
- Military Installation
- City & County Boundaries
- Water Bodies
- Railroad
- Interstate 95
- Major Roads



Compact Centers & Growth Corridors

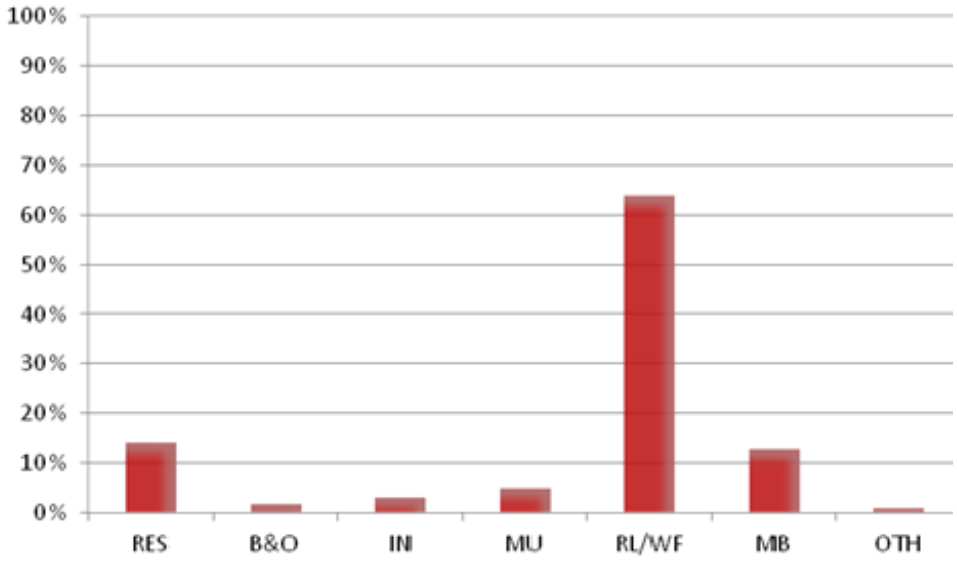
The compact centers and growth corridors scenario contemplated how the region could develop if new growth was focused into compact, walkable communities with nearby opportunities to live, work, shop, and be entertained. Development in each center could vary in scale, use, and intensity; represented by rural hamlets, community centers, employment centers, or town centers.

Communities would accommodate a portion of new growth in existing urban areas (i.e., infill development or redevelopment); leaving more undeveloped land for open space and agriculture uses. Common features of the growth scenario include: concentrated development areas, land preservation outside developed centers, a variety of development types and intensities, and more travel options (i.e., walking, bicycle, transit, and automobile). (Note: A large-scale, printable version of the map on the following page is available upon request from the Fredericksburg Area Metropolitan Planning Organization.) Growth patterns and development intensities assigned for the scenario follow idealized growth centers and/or urban development areas being considered pursuant to Virginia House Bill 1071 – Urban Development Areas. Environmentally-sensitive lands identified in the George Washington Region Commission's Green Infrastructure Report and/or identified battlefield protection areas also influenced the selection of designated growth centers.

Anticipated growth contemplated for the region recognizes the George Washington Region as a bedroom community to nearby large metropolitan centers, namely Washington, D.C. and Richmond, VA. Most future growth was concentrated in designated compact centers, while acknowledging some development will occur in outlying suburban or rural areas (i.e., an 80/20 split for allocating new growth between compact centers and outlying areas).

Land Use Profile

This scenario used mixed-use development and higher densities / intensities to reduce the amount of land needed to meet the same amount of population and employment growth for the region, which leaves significantly more land in rural or farm conditions.



Growth Forecast (2040)

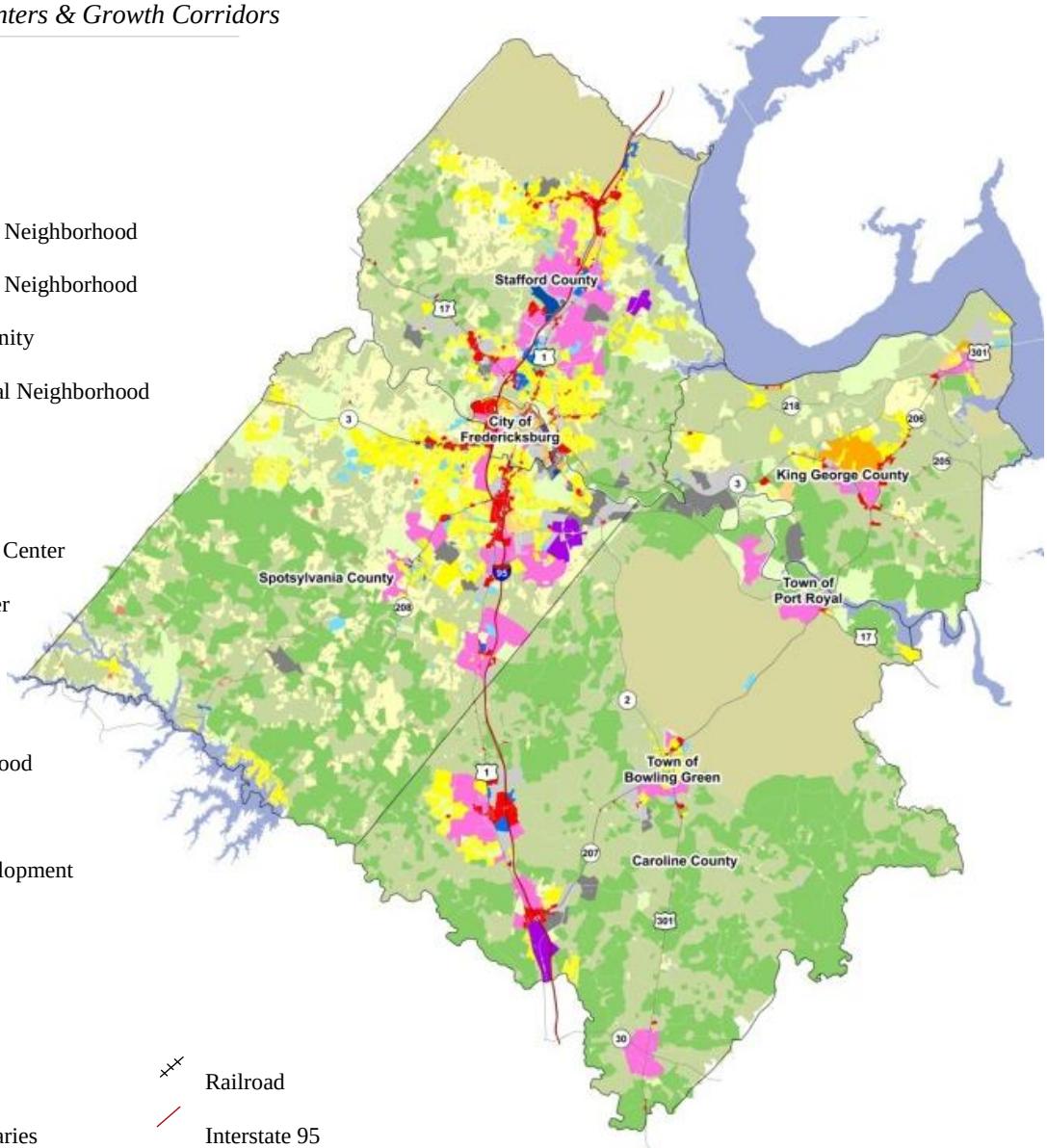
Population	617,330
Employment	253,180

Primary Growth Drivers

Growth patterns and development intensities assigned for the scenario follow idealized growth centers and/or urban development areas being considered pursuant to Virginia House Bill 1071 – Urban Development Areas.

Legend — Compact Centers & Growth Corridors

- Preserved Open Space
- Rural Living
- Working Farm
- Large-Lot, Residential Neighborhood
- Small-Lot, Residential Neighborhood
- Mobile Home Community
- Multifamily Residential Neighborhood
- Urban Neighborhood
- Rural Cross Roads
- Suburban Commercial Center
- Suburban Office Center
- Light Industrial
- Heavy Industrial
- Mixed-Use Neighborhood
- Town Center
- Transit-Oriented Development
- Metropolitan Center
- Civic & Institutional
- Regional Airport
- Military Installation
- City & County Boundaries
- Water Bodies
- Railroad
- Interstate 95
- Major Roads



Green Print Initiative

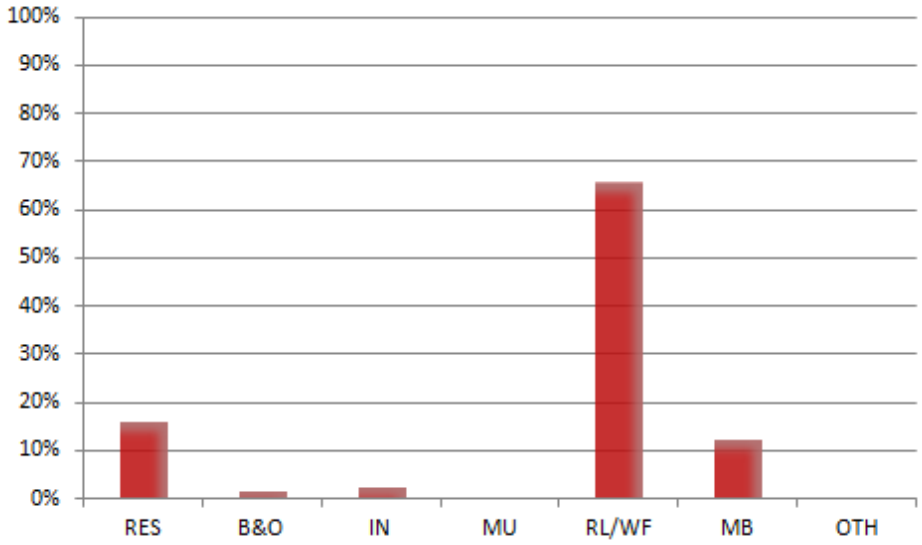
The green print initiative scenario contemplates how the region could develop if new growth is directed away from identified environmentally-sensitive lands and resources. Preservation of natural areas and cultural resources maximize the protection of large, contiguous forested lands and the tree bands that connect them; working farms; and battlefield landscapes identified in potential National Register boundaries.

Low impact development principles and best management practices for storm water runoff would be incorporated into future development. Transfer of development rights or purchase of development rights may be necessary for preserving some areas in the green print area approved for development but not yet built. (Note: A large-scale, printable version of the map to on the following page is available upon request from the Fredericksburg Area Metropolitan Planning Organization.)

Anticipated growth contemplated for the region recognizes the George Washington Region as a bedroom community to nearby large metropolitan centers, namely Washington, D.C. and Richmond, VA. Development patterns and intensities in the scenario consider the impact of new rules for the Chesapeake Bay Watershed, which link urban and suburban land cover to target pollutant loading thresholds for the Bay.

Land Use Profile

This scenario protected the maximum amount of rural land, working farms, and other environmentally-sensitive areas by redirecting growth to the edge of existing urban or suburban centers.



Notes:

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RL/WF = Preserved Open Space, Working Farm, Rural Living

MB = Military Installation

OTH = Civic & Institutional, Regional Airport

Growth Forecast (2040)

Population	617,330
Employment	253,180

Primary Growth Drivers

Development is generally directed away from environmentally-sensitive lands or cultural resources important to the region; including floodplains, natural heritage areas, resource protection areas, high-ecological integrity areas, permanent conservation areas, working farms, and battlefield landscapes (i.e., core area and potential national registry boundary).

Legend — Green Print Initiative

- Preserved Open Space
- Rural Living
- Working Farm
- Large-Lot, Residential Neighborhood
- Small-Lot, Residential Neighborhood
- Mobile Home Community
- Multifamily Residential Neighborhood
- Urban Neighborhood
- Rural Cross Roads
- Suburban Commercial Center
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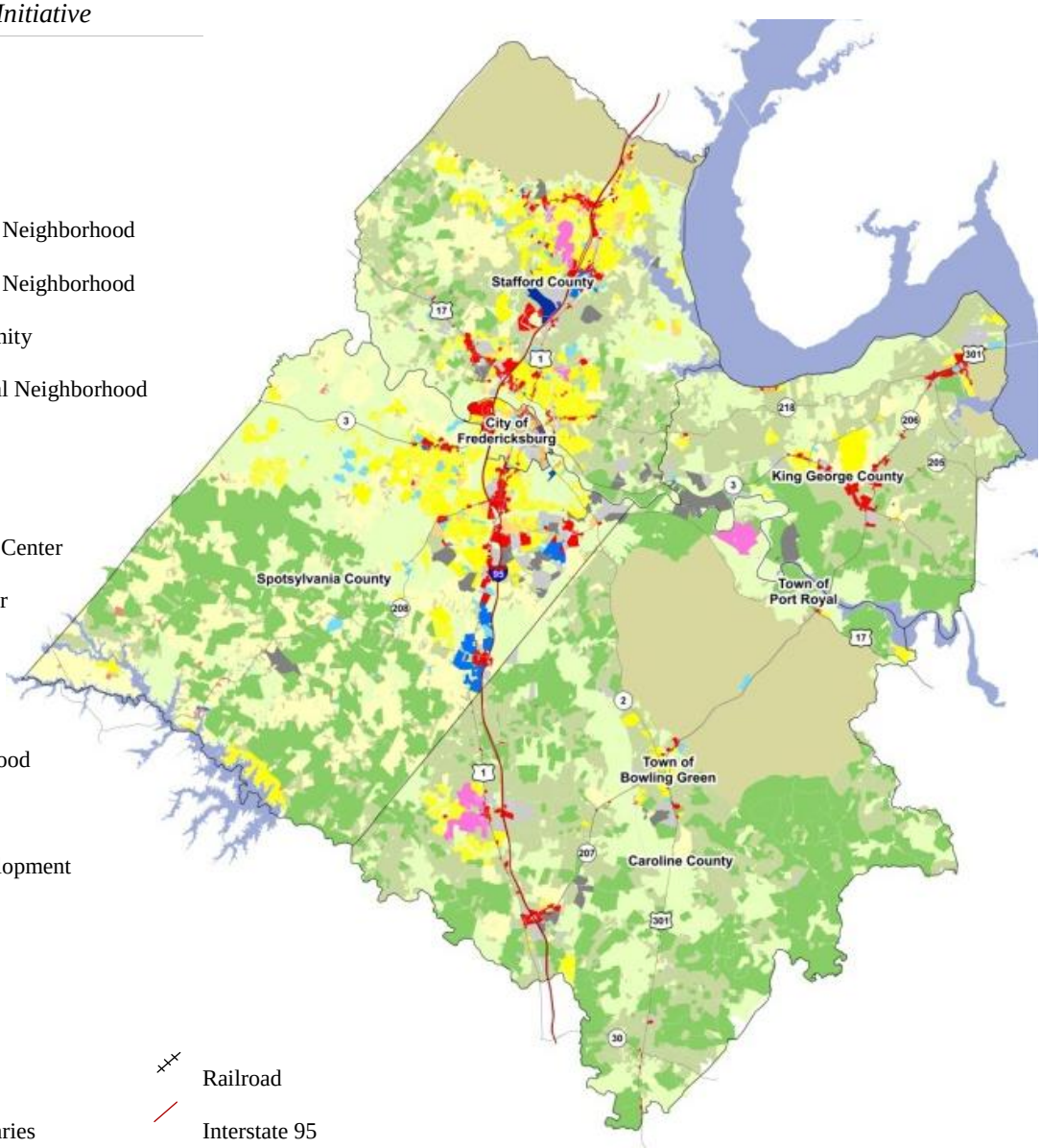


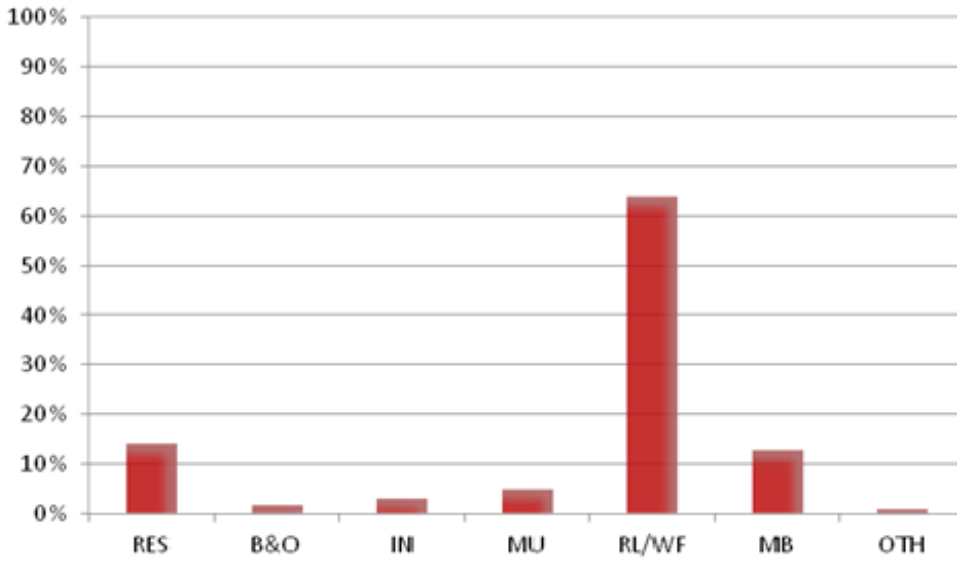
Greater Jobs-Housing Balance

The greater jobs-housing balance scenario contemplates how the region could develop if more employment was attracted to the George Washington Region. The objective would be to reduce overall commuting distance for residents because of greater proximity to local employment opportunities. Benefits may include reductions in commute time and distance, reduced traffic congestion, and reduced air emissions. Development locations, types, patterns, and intensities in the development scenario would mimic closely those recommended in the compact centers and growth corridors scenario. *(*Note: A large-scale, printable version of the map on the following page is available upon request from the Fredericksburg Area Metropolitan Planning Organization.)

Anticipated growth contemplated for the region theorizes a greater balance between employment and housing in the region. Specifically, employment forecasts were held for 2040 while population forecasts were decreased to 2020 levels developed to support FAMPO's 2040 Long Range Transportation Plan.

Land Use Profile

This scenario matched exactly the development types, patterns, and intensities depicted in the compact centers and growth corridors scenario.



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RL/WF = Preserved Open Space, Working Farm, Rural Living

MB = Military Installation

OTH = Civic & Institutional, Regional Airport

Growth Forecast (2040)

Population	423,510
Employment	253,180

Primary Growth Drivers

The scenario contemplates how the region would develop (theoretically) if more employment were attracted to the George Washington Region. Further studies into increasing the jobs-housing balance could significantly alter the development patterns or intensities depicted for the scenario.

Legend — Greater Jobs-Housing Balance

- Preserved Open Space
- Rural Living
- Working Farm
- Large-Lot, Residential Neighborhood
- Small-Lot, Residential Neighborhood
- Mobile Home Community
- Multifamily Residential Neighborhood
- Urban Neighborhood
- Rural Cross Roads
- Suburban Commercial Center
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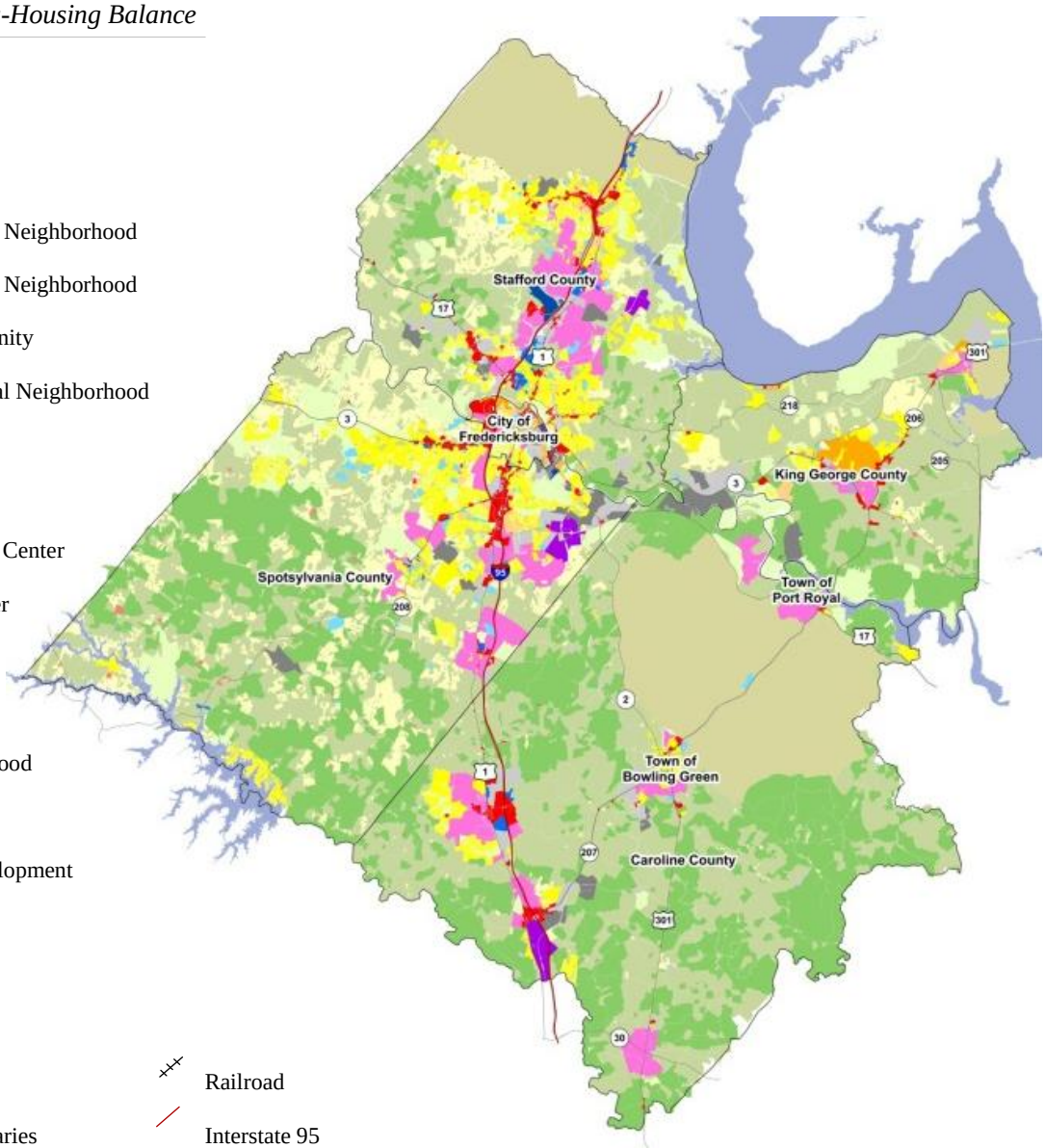


Growth Scenario Report Card

General themes identified in the planning process for *Your Vision, Our Future* were refined by the project steering committee and summarized in a document highlighting regional growth principles for evaluating the alternative growth scenarios.

Performance measures for each growth principle in *Your Vision, Our Future* were created to quantify and explain the differences between the growth scenarios. Summary statistics for comparing the output of performance measures for each regional growth principle were created using CommunityViz software and the FAMPO Regional Travel Demand Model.

A summary of the alternative growth scenario report card for *Your Vision, Our Future* follows.

Mobility

Mobility refers to the ability of residents and visitors to move from place to place within the region or to points outside of the region. Performance measures used to evaluate the principle of mobility include: vehicle miles traveled per capita, vehicle hours traveled per capita, congested corridors, viable mobility options, concentration of potential riders near a transit node, and percent of income spent on transportation.

Vehicle Miles Traveled

Decentralized Growth

Compact Centers

Green Print Initiative

Jobs – Housing Balance

Vehicle Hours Traveled

Decentralized Growth

Compact Centers

Green Print Initiative

Jobs – Housing Balance

Congested Corridors

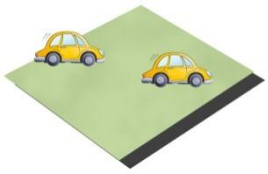
Decentralized Growth

Compact Centers

Green Print Initiative

Jobs – Housing Balance

Viable Mobility Options



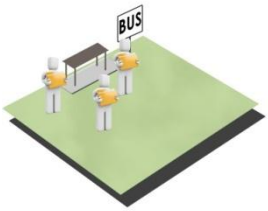
Decentralized Growth

Compact Centers

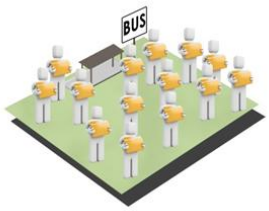
Green Print Initiative

Jobs – Housing Balance

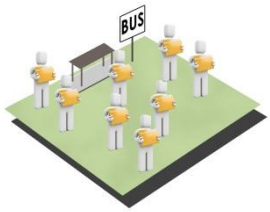
Percent of Population Near Transit



Decentralized Growth



Compact Centers



Green Print Initiative

Jobs – Housing Balance

Percent of Income Spent on Transportation

Decentralized Growth

Compact Centers

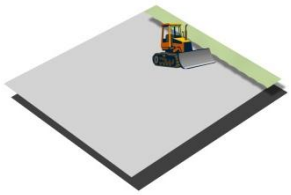
Green Print Initiative

Jobs – Housing Balance

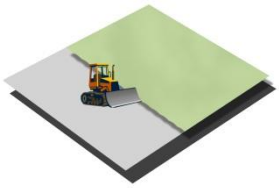
Environment

The environment is a broad category that includes physical features of the region and the ability of policies and programs to protect certain environmentally-sensitive areas. In addition, this category includes concerns for the adequate provision of natural resources (i.e., drinking water, open space, and agriculture). Performance measures used to evaluate the principle of environment include: urban footprint, agriculture land consumed, eco-core land consumed, and amount of protected open space.

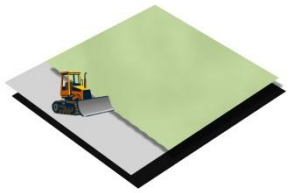
Urban Footprint



Decentralized Growth



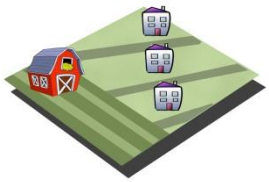
Compact Centers



Green Print Initiative

Jobs – Housing Balance

Agriculture Land Consumed



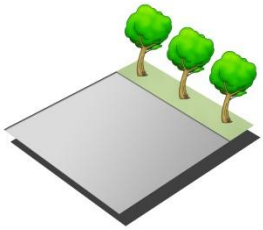
Decentralized Growth

Compact Centers

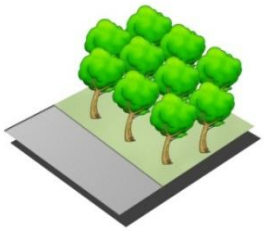
Green Print Initiative

Jobs – Housing Balance

Eco-Core Land Consumed

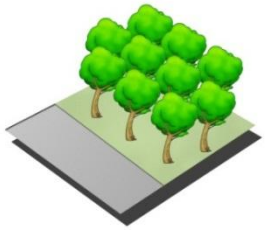


Decentralized Growth



Compact Centers

Green Print Initiative



Jobs – Housing Balance

Amount of Protected Open Space

Decentralized Growth

Compact Centers

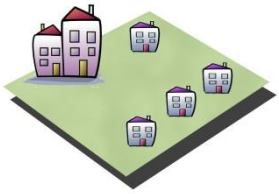
Green Print Initiative

Jobs – Housing Balance

Genuine Communities

A place to live and a community are very different concepts. Communities offer places for residents to live, work, and play. They also are distinguished by the physical and design characteristics of the buildings and neighborhoods they contain, and the social and qualitative aspects of human interaction that they nurture. Performance measures used to evaluate the principle of genuine communities include: housing mix, proximity to existing development, and jobs-housing balance.

Housing Mix



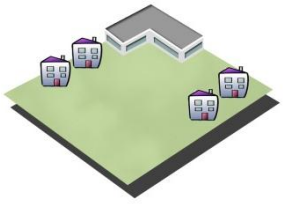
Decentralized Growth

Compact Centers

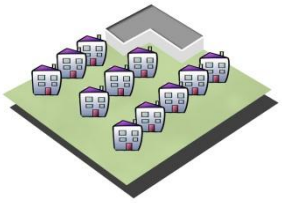
Green Print Initiative

Jobs – Housing Balance

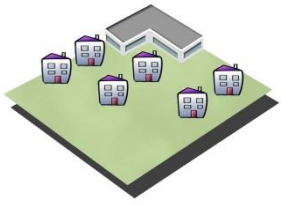
Proximity to Existing



Decentralized Growth



Compact Centers

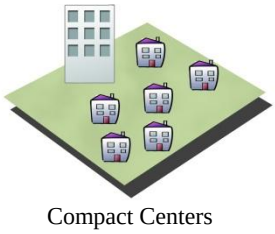


Green Print Initiative

Jobs – Housing Balance

Jobs – Housing Balance

Decentralized Growth



Compact Centers

Green Print Initiative

Jobs – Housing Balance

Regional Collaboration

Regional planning initiatives are only successful if local governments support them. Measuring the ability of a development scenario to capitalize on existing regional plans, programs, and policies is part of measuring the likelihood of a scenario to succeed.

Performance measures used to evaluate the principle of regional collaboration include: consistency with local plans, consistency with regional plans, and land use - transportation connection.

Consistency with Local Plans

Decentralized Growth | Compact Centers | Green Print Initiative | Jobs – Housing Balance

Consistency with Regional Plans

Decentralized Growth | Compact Centers | Green Print Initiative | Jobs – Housing Balance

Land Use – Transportation Connection

Decentralized Growth | Compact Centers | Green Print Initiative | Jobs – Housing Balance

Maximizing Efficiencies in Public Infrastructure

Over the past decade, growth in the region has stressed the ability of local jurisdictions to provide public services at the levels to which residents are accustomed. By maximizing the use of existing infrastructure, the region can promote responsible growth and relieve financial investments required by the construction of new infrastructure. Performance measures used to evaluate the principle of maximizing efficiencies in public infrastructure include: demand for new parks, demand for new schools, demand for water service, and demand for sewer service.

Demand for New Parks

Decentralized Growth

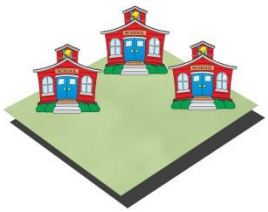
Compact Centers

Green Print Initiative

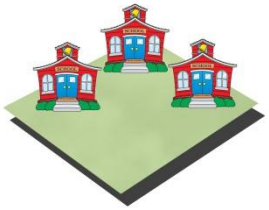
Jobs – Housing Balance

Demand for New Schools

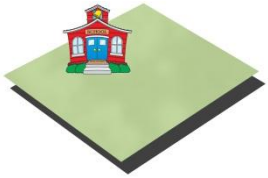
Decentralized Growth



Compact Centers

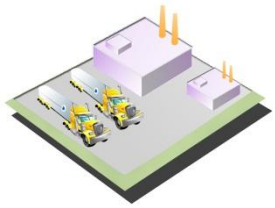


Green Print Initiative

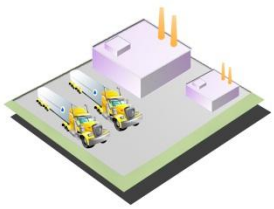


Jobs – Housing Balance

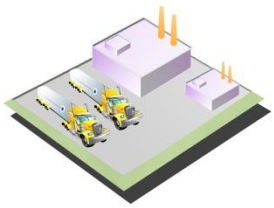
Demand for Water Service



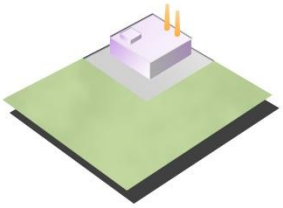
Decentralized Growth



Compact Centers

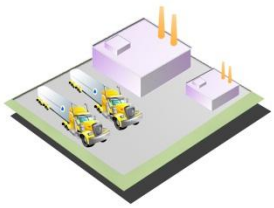


Green Print Initiative

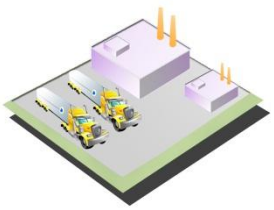


Jobs – Housing Balance

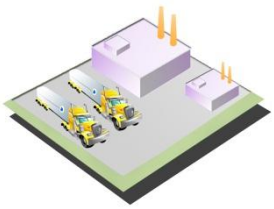
Demand for Sewer Service



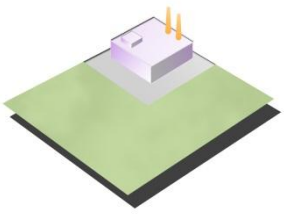
Decentralized Growth



Compact Centers



Green Print Initiative

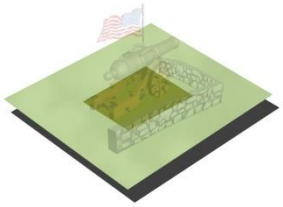


Jobs – Housing Balance

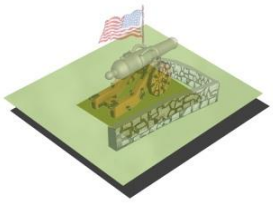
Quality-of-Life

Quality-of-life represents a combination of tangible amenities and intangibles qualities that make a place special. As the region continues to grow, citizens want to ensure that all residents will be able to enjoy a high quality-of-life. Performance measures used to evaluate the principle of quality-of-life include: protection of Civil War battlefields, maintaining rural character, jobs-housing balance, and amount of protected open space.

Protection of Civil War Battlefields

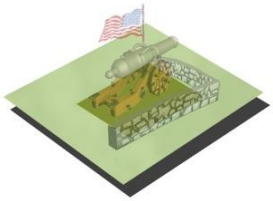


Decentralized Growth



Compact Centers

Green Print Initiative



Jobs – Housing Balance

Maintaining Rural Character

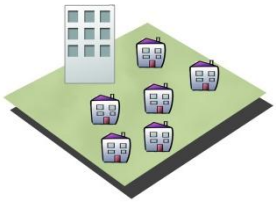
Decentralized Growth

Compact Centers

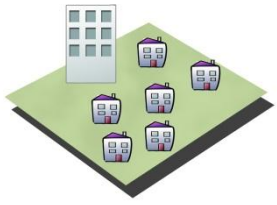
Green Print Initiative

Jobs – Housing Balance

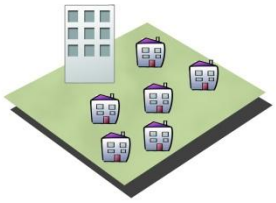
Jobs – Housing Balance



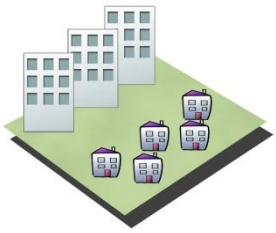
Decentralized Growth



Compact Centers



Green Print Initiative



Jobs – Housing Balance

Amount of Protected Open Space

Decentralized Growth

Compact Centers

Green Print Initiative

Jobs – Housing Balance

Summary Matrix

A summary matrix for the growth scenario report card compares all of the performance measures side-by-side; highlighting strengths and weaknesses associated with each of the four growth alternatives. Based on information presented in the table below, the greater jobs-housing balance scenario best satisfied the regional growth principles stated for *Your Vision, Our Future*; followed in order by compact centers and growth corridors, green print initiative, and decentralized growth.

STAKEHOLDER AWARENESS

Growth Scenario Report Card Summary

	Decentralized Growth	Compact Development	Green Print Initiative	Jobs-Housing Balance
MOBILITY				
Vehicle Miles Traveled per Capita	○	◪	⊙	●
Vehicle Hours Traveled per Capita	○	◪	⊙	●
Percent of Population Near Potential Transit Node	○	●	⊙	●
Congested Corridors	○	◪	⊙	●
Percent of Income Spent on Transportation	○	●	◪	●
Viable Mobility Options	○	●	◪	●
ENVIRONMENT				
Urban Footprint	○	◪	●	◪
Agricultural Land Consumed	○	◪	●	◪
Eco-Core Land Consumed	○	◪	●	◪
Amount of Protected Open Space	○	◪	●	◪
GENUINE COMMUNITIES				
Housing Mix	○	●	⊙	●
Proximity to Existing Development	⊙	●	◪	●
Jobs-Housing Balance	○	○	○	●
REGIONAL COLLABORATION				
Consistency with Local Plans	○	◪	⊙	⊙
Consistency with Regional Plans	○	◪	⊙	⊙
Land Use / Transportation Connection	○	●	⊙	●
MAXIMIZING EFFICIENCIES IN PUBLIC INFRASTRUCTURE				
Demand for New Parks	○	◪	◪	●
Demand for New Schools	○	⊙	⊙	●
Demand for Water	○	⊙	⊙	●
Demand for Sewer	○	⊙	⊙	●
QUALITY-OF-LIFE				
Protection of Civil War Battlefields	○	⊙	●	⊙
Jobs-Housing Balance	○	○	○	●
Amount of Protected Open Space	○	◪	●	◪
Maintaining Rural Character	○	◪	●	◪
COMPOSITE GRADE (W/ EQUAL WEIGHTING FOR ALL VARIABLES)	○	◪	⊙	●

● = Most satisfies the performance measure
⊙ = Somewhat satisfies the performance measure
◪ = Moderately satisfies the performance measure
○ = Least satisfies the performance measure

Information for the four alternative growth scenarios was shared with stakeholders in the region using a series of outreach meetings and on-line tools. Feedback from the stakeholder groups was influential in developing the preferred growth scenario assumed for FAMPO's 2040 Long Range Transportation Plan (LRTP) (currently underway). A description of each outreach activity used to evaluate the different growth scenarios is provided below.

Stakeholder Meetings

FAMPO staff attended the regular meetings of several stakeholder groups in the region to discuss the growth scenarios contemplated for *Your Vision, Our Future*. Participating groups included:

- Fredericksburg Regional Chamber of Commerce
- Green Drinks Fredericksburg
- Committee of 500
- Fredericksburg Clean & Green Committee
- Stafford Historical Commission
- Caroline County Chamber of Commerce
- Spotsylvania First Impressions Committee

A brief presentation was followed by an open discussion on the strengths and weaknesses of each scenario. General consensus at the meetings was to move away from decentralized growth patterns that contribute to the consumption of sensitive land for development, costly expansion of public infrastructure, and increasing traffic congestion.

Project Webpage / Facebook Page

A webpage on FAMPO's website and a Facebook page for *Your Vision, Our Future* disseminated key project information and collected input, ideas, and suggestions related to the four growth scenarios. The project website received 280 hits during the scenario planning initiative; including the public comment period for the four alternative growth scenarios.

On-Line Survey

A second on-line survey was prepared for *Your Vision, Our Future* to assess residents' preferences toward the four alternative growth scenarios, and understand the rationale behind their relative appeal. Respondents were shown a narrative, map, and photos for each scenario and asked to provide opinions. At the end of the survey, respondents were asked to choose their preferred scenario for seeing growth and development continue in the region.

The survey was completed with two separate samples. The more scientific, random sample survey was completed in May 2011. Four hundred and seventy-two respondents participated in the random survey. The less scientific, non-random sample survey was completed in June 2011. Two hundred and ten respondents participated in the non-random survey.

A summary of topline results from the on-line survey is provided in the info-graphics on pages 25 and 26. A copy of the full scenario evaluation survey summary report is available from the Fredericksburg Area Metropolitan Planning Organization (FAMPO).

Local Government Coordination Meetings

FAMPO staff held formal and informal meetings with local government officials throughout the region to register their comments or concerns with each of the four alternative growth scenarios.

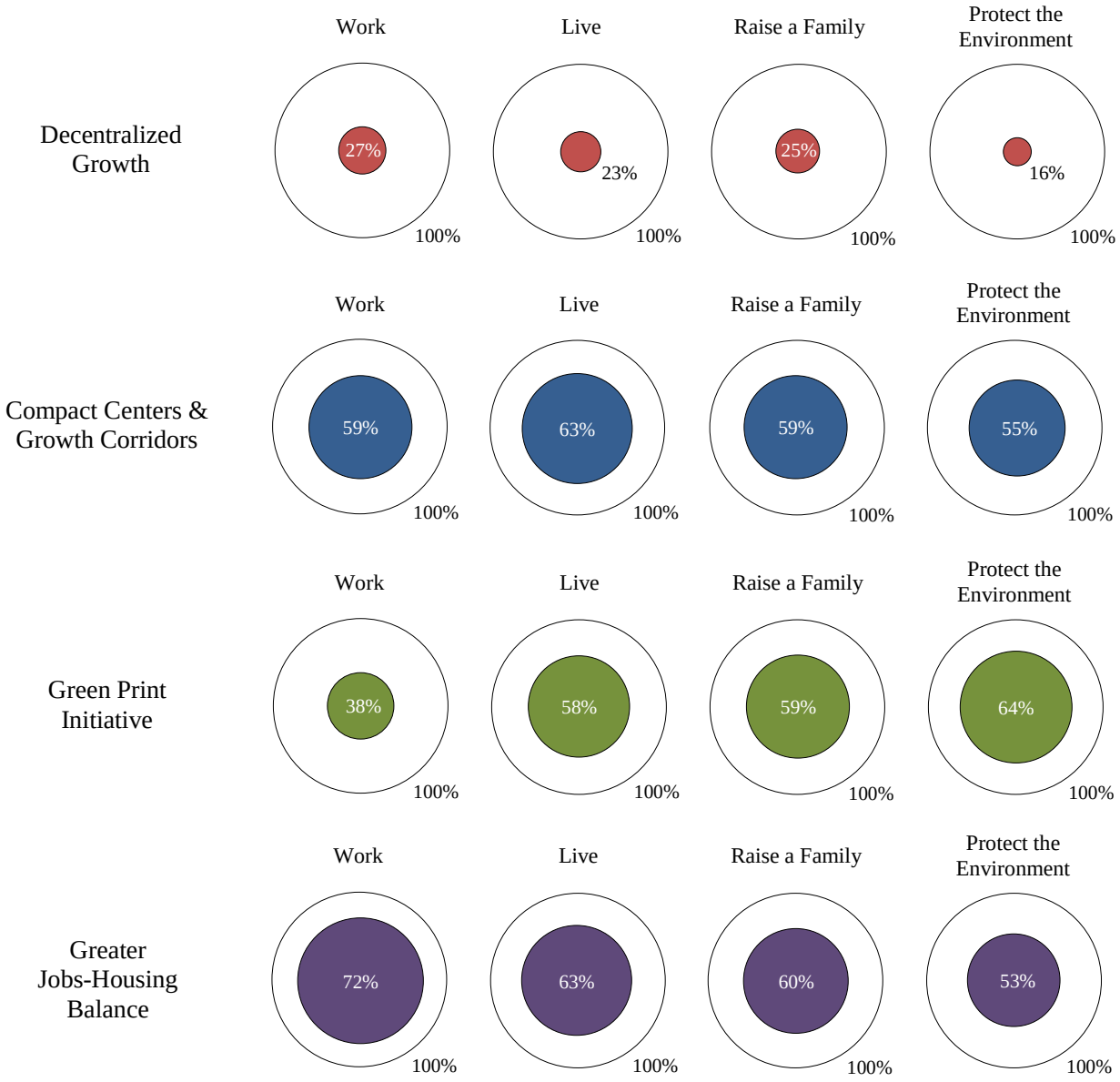
Several jurisdictions noted that their comprehensive plans were being updated concurrent with the *Your Vision, Our Future* initiative, and that recommendations in their new plans were generally supportive of the compact centers and growth corridors and / or green print initiative growth scenarios.

Topline Results from On-Line Survey:

472 Random Sample Responses — May 2011

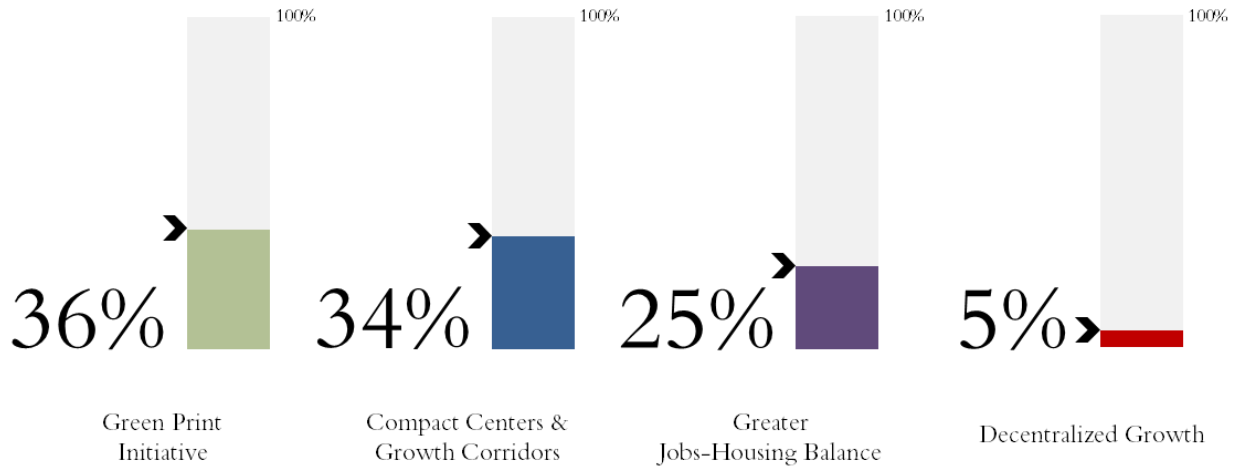
210 Non-Random Sample Responses — June 2011

To what extent would each scenario be an attractive place to do the following (% of people saying 'very attractive' or 'attractive' among all responses)?



Overall, how attractive is each scenario for continued growth in the region (% of people saying ‘very attractive’ or ‘attractive’ among all responses)?

My preferred growth scenario for continued growth in the region would be:



Preferred Growth Scenario

Results from the technical analysis for *Your Vision, Our Future* were joined with comments from the stakeholder awareness campaign to help the project steering committee recommend a preferred growth scenario for developing FAMPO's 2040 Long Range Transportation Plan (LRTP).

Ultimately, the project steering committee decided to create a new growth scenario — community plans — based on the information available. This scenario also met federal rules and requirements for updating a long-range transportation plan; specifically to consider land use and development controls reflected in adopted local government plans and ordinances for evaluating future year transportation conditions, recommending improvements, and prioritizing their implementation.

The preferred scenario was used to allocate population and employment forecasts prepared by FAMPO / GWRC staff for 2040 in the CommunityViz scenario planning model. Output from the scenario planning model was then used in the FAMPO Travel Demand Model to forecast future year travel behavior (and link deficiencies) on the regional transportation system.

A brief summary of the preferred growth scenario follows on pages 28-29.

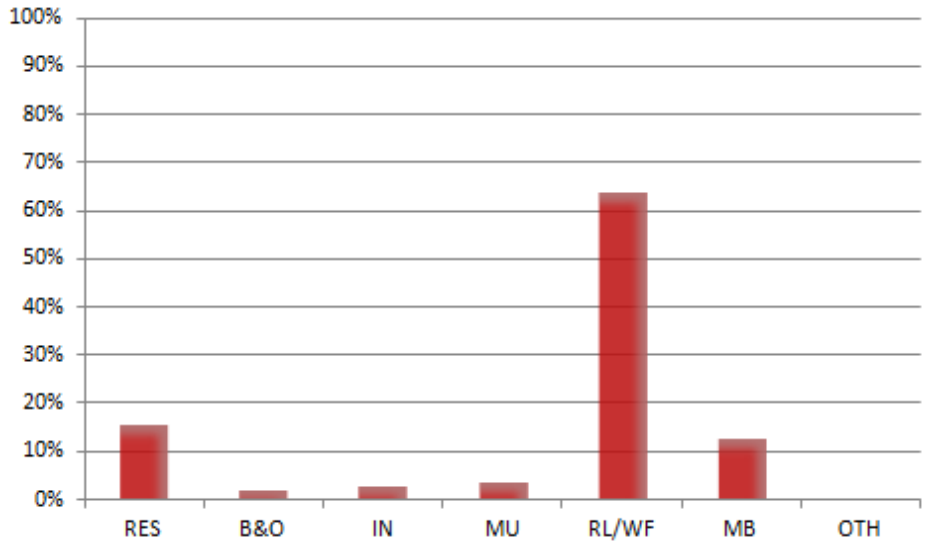
Community Plans

The community plans scenario contemplates how the region develops if city and county comprehensive plans were fully implemented. Preferred development types, patterns, locations, and intensities recommended in the local plans vary from rural to suburban to urban for different parts of the region. Common features of the growth scenario include: concentrated development areas (especially along Interstate 95 and CSX rail corridors), limited infrastructure investment outside designated service areas, preservation of working farms, and compatible land uses near military bases. (Note: A large-scale, printable version of the map on the following page is available upon request from the Fredericksburg Area Metropolitan Planning Organization.)

Anticipated growth assumed for the region recognizes the George Washington Region as a bedroom community to nearby large metropolitan centers, namely Washington D.C. and Richmond, VA.

Land Use Profile

This scenario used mixed-use development and higher densities / intensities to reduce the amount of land needed to meet population and employment growth for the region, which leaves significantly more land in rural or farm conditions.



Notes:

RES = Large-Lot, Residential Neighborhood, Small-Lot Residential Neighborhood, Mobile Home Community, Multifamily Residential Neighborhood, Urban Neighborhood

B&O = Rural Cross Roads, Suburban Commercial Center, Suburban Office Center

IN = Light Industrial, Heavy Industrial

MU = Mixed-Use Neighborhood, Town Center, Metropolitan Center, Transit-Oriented Development, Urban Development Area

RL/WF = Preserved Open Space, Working Farm, Rural Living

MB = Military Installation

OTH = Civic & Institutional, Regional Airport

Growth Forecast (2040)

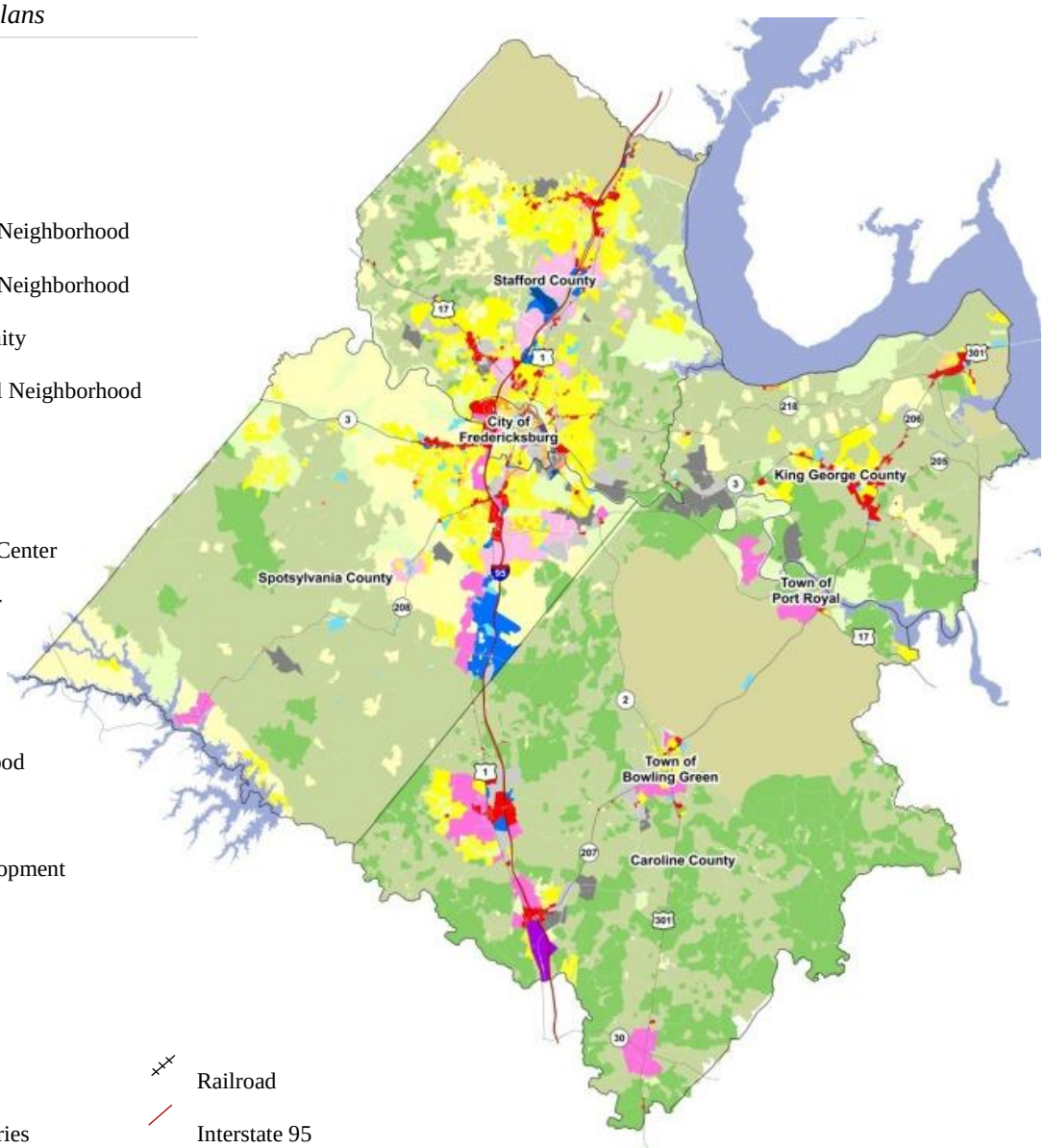
Population	617,330
Employment	253,180

Primary Growth Drivers

Growth patterns and development intensities assigned for the scenario follow exactly locally-adopted comprehensive plans in the region.

Legend — Community Plans

- Preserved Open Space
- Rural Living
- Working Farm
- Large-Lot, Residential Neighborhood
- Small-Lot, Residential Neighborhood
- Mobile Home Community
- Multifamily Residential Neighborhood
- Urban Neighborhood
- Rural Cross Roads
- Suburban Commercial Center
- Suburban Office Center
- Light Industrial
- Heavy Industrial
- Mixed-Use Neighborhood
- Town Center
- Transit-Oriented Development
- Metropolitan Center
- Civic & Institutional
- Regional Airport
- Military Installation
- City & County Boundaries
- Water Bodies
- Railroad
- Interstate 95
- Major Roads



Moving Forward

The *Your Vision, Our Futur*e initiative confirmed that stronger linkages between land use (demand), urban form (design), and transportation (supply) could significantly improve the efficiency of the regional transportation system; while also promoting a variety of local planning initiatives underway — revitalization of cities and towns, suburban place-making, rural preservation, and protecting the natural environment — to make the region more livable and economically viable.

However, benefits associated with moving away from a more decentralized growth pattern will only be possible if the region works together and builds enough support from enough people to make change feasible. We hope that the levels of coordination and cooperation exemplified during *Your Vision, Our Future* continue in future regional plans, programs, or studies. Likewise, we hope cities, towns, or counties in the region consider some of the recommendations from aspirational scenarios considered for *Your Vision, Our Future* when updating their locally-adopted plans or ordinances.

The first opportunity to continue the momentum from *Your Vision, Our Future* is development of FAMPO's 2040 Long Range Transportation Plan (LRTP). The preferred growth scenario prepared under the scenario planning initiative – community plans – meets federal rules and requirements for updating a long-range transportation plan; specifically to consider land use and development controls reflected in adopted local government plans and ordinances for preparing the document. Data and tools for the preferred growth scenario should inform the LRTP planning process, and may be useful for the identification, prioritization, or scheduling of certain transportation projects.

Visualization of the interaction between land use, urban form, and transportation decisions within the LRTP update may also set expectations and/or establish commitments for linking transportation investments with appropriate land use patterns and minimum densities or intensities; especially for technology choices in major transit corridors, building more walkable neighborhoods, or safeguarding environmentally-sensitive areas.

Finally, FAMPO officials plan to repeat the scenario planning initiative started under *Your Vision, Our Future* every four years to coincide with future updates to the Long Range Transportation Plan (LRTP). Under this program, kick-off activities for the next round of scenario planning should begin sometime in 2014.