

CONNECTIONS

The Regional Plan for a Sustainable Future



The Long-Range Plan for the Greater Philadelphia Region
SUMMARY BRIEF



REINVEST

REDEVELOP

REVITALIZE

**CONNECTIONS ESTABLISHES FOUR
KEY STRATEGIES THAT ARE ESSENTIAL
TO REALIZING A SUSTAINABLE FUTURE:**

- Managing growth and protecting natural resources
- Developing livable communities
- Building an energy-efficient economy
- Establishing a modern transportation system that serves all modes

The *Connections* plan puts forth a bold but achievable vision for the Greater Philadelphia region, a plan that will guide us in creating a vibrant and thriving region with improved opportunities for residents and businesses.

The long-range plan is a blueprint that allows us to capitalize on our strengths and become a model of sustainability, prosperity, and productivity; a map to guide the growth and development of our region; a compass to help us find our way to a promising future.

Developed with public guidance and input, this plan fulfills a federal requirement to establish a collective vision for our region across municipal, county, and state boundaries and optimizes how our metropolitan area develops and prepares for the future. It links our environment, our economy, and our infrastructure systems, and reflects the need to strengthen connections and create a competitive, efficient, and equitable future for all.

BEING RESPONSIBLE WITH OUR RESOURCES.

PRESERVE MORE THAN 500,000 ACRES OF OPEN SPACE BY MANAGING GROWTH AND PROTECTING NATURAL RESOURCES.

Between 1970 and 2005, 320,000 acres of open space were lost to development, or 25 acres each and every day for 35 years. The continued disappearance of our open space has resulted in significant negative consequences for our environment and quality of life. Our open spaces naturally help to improve our air and water quality, contribute to our region's character, and even return economic value to our region. Further, they serve as sources for fresh, local, and nutritious foods and provide opportunities for recreation, relaxation, and exploration.

Just over one million acres of open space and unprotected land remain in our region. While this may seem like a sizable sum to many, these lands and their considerable environmental, agricultural, and recreational benefits are endangered by sprawling development patterns and require significant efforts for protection and conservation. Preserving more than 500,000 acres is an important step in ensuring that our region has the resources it will need to sustain itself in the future. We can achieve this goal through a combination of efforts including smart growth development, open space acquisitions, conservation easements, the purchase of development rights, environmental protection ordinances, and, at the most basic level, the promotion of good stewardship. We must ensure that our most treasured open spaces aren't lost forever.

2035 LAND USE PLAN

Existing Growth

Developed land as of 2005

Future Growth

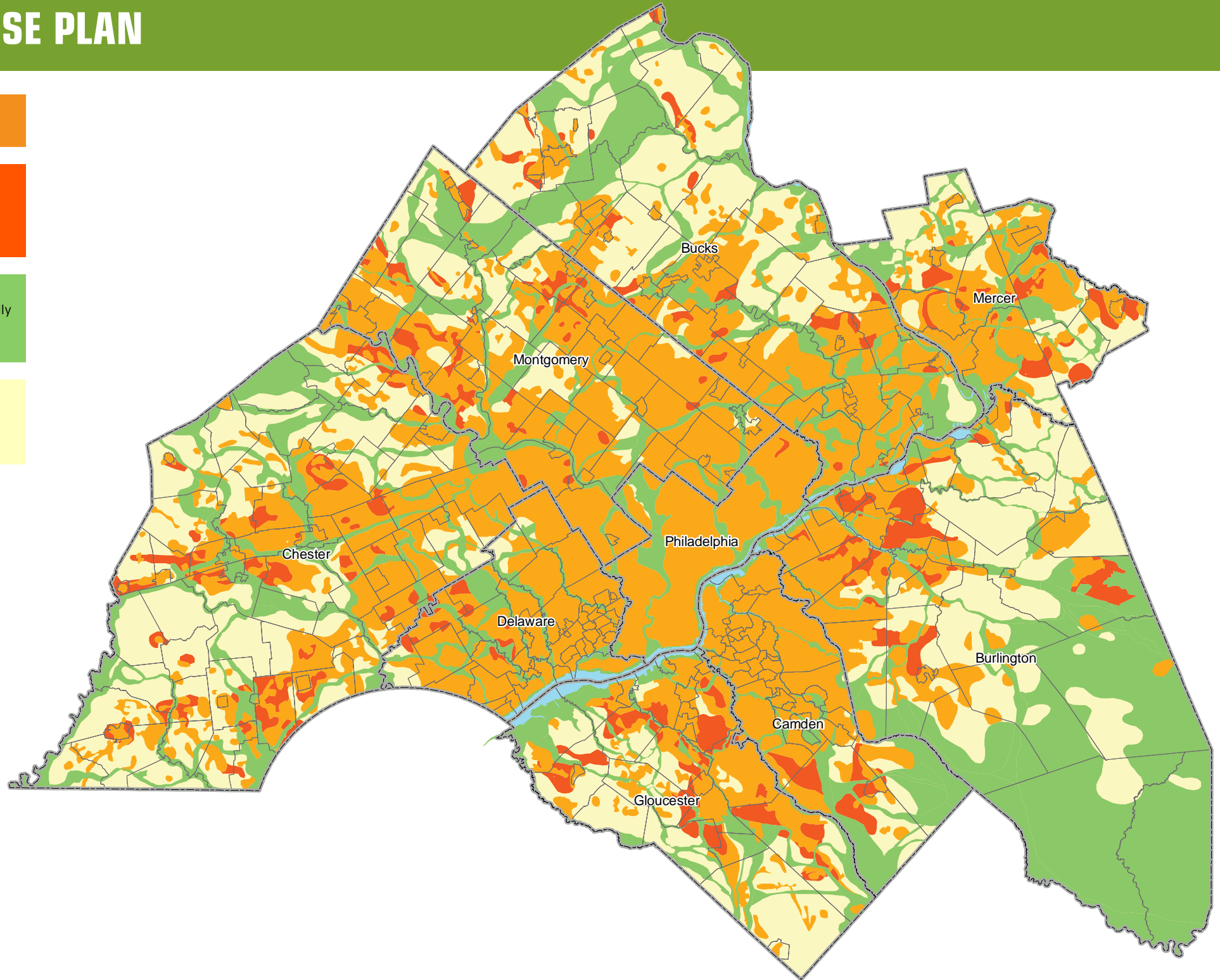
Areas with sufficient planned or in-place infrastructure that are appropriate for new development

Greenspace Network

Inter-connected system of naturally vegetated open space spanning urban, suburban, and rural areas

Rural Conservation Lands

Large agricultural, natural, and rural areas worthy of heightened preservation



EFFECTIVE GROWTH MANAGEMENT AND OPEN SPACE PRESERVATION WILL:

- Improve water and air quality, enhance personal health, and contribute to our region's character.
- Enhance our quality of life by providing opportunities for recreation, relaxation, and exploration.
- Save money by limiting the need for ever-expanding drinking water, wastewater, and transportation infrastructure that is becoming increasingly difficult to finance, build, and maintain.
- Preserve farmland and strengthen the local agricultural industry to improve access to healthier, fresher, and tastier foods.
- Protect scenic, historic, and cultural sites and landscapes that attract visitors and revenue into our region.

STRATEGIES TO PRESERVE AND PROTECT OUR OPEN SPACE:

- Focus growth by redeveloping areas with existing infrastructure.
- Promote compact, centers-based development to strengthen local communities and reduce suburban sprawl.
- Direct preservation efforts to protect and restore open space, farmland, natural habitats, and rural conservation areas.
- Employ a range of regulatory and voluntary funding techniques at the state, county, and municipal levels to acquire, preserve, and protect open space.
- Champion opportunities to integrate greening initiatives at local and regional levels including community gardens, shade trees, green streets, green roofs, and green schoolyards.

THE RETURN

The City of Philadelphia's 10,000 acres of parkland provide an annual payback of \$1.26 billion in health and direct use benefits, cost savings, and revenue to the City and its residents.¹ Similar benefits would be expected in communities across the region.

COMMUNITIES WHERE WE CAN LIVE, WORK, AND PLAY.

CREATE LIVABLE COMMUNITIES BY FOCUSING DEVELOPMENT INTO EXISTING CENTERS.

Our region is expected to gain over 630,000 residents by 2035, which represents an increase of about 11% since 2005. Similarly, employment in the region is expected to increase by 370,000 or 13%. If current trends continue, the vast majority of this growth is projected to occur at the periphery of our region. Left uncontrolled, it will increase suburban sprawl, create the need for expensive new infrastructure, and contribute to the further disappearance of our open space and the depletion of our natural resources.

We can avert these issues through focused redevelopment to create compact, mixed-use, livable communities within and around our region's core cities, first-generation suburbs, and town and rural centers. There are more than 100 centers in our region that provide a unique sense of place, have existing infrastructure, and offer opportunities for new development and revitalization. Concentrating new growth within and around these centers will allow us to preserve open space, reduce strains on our natural resources, and create thriving, pedestrian-friendly communities that offer an improved quality of life for all residents. They will empower us to strengthen our local economies and our connections to each other and the surrounding region.

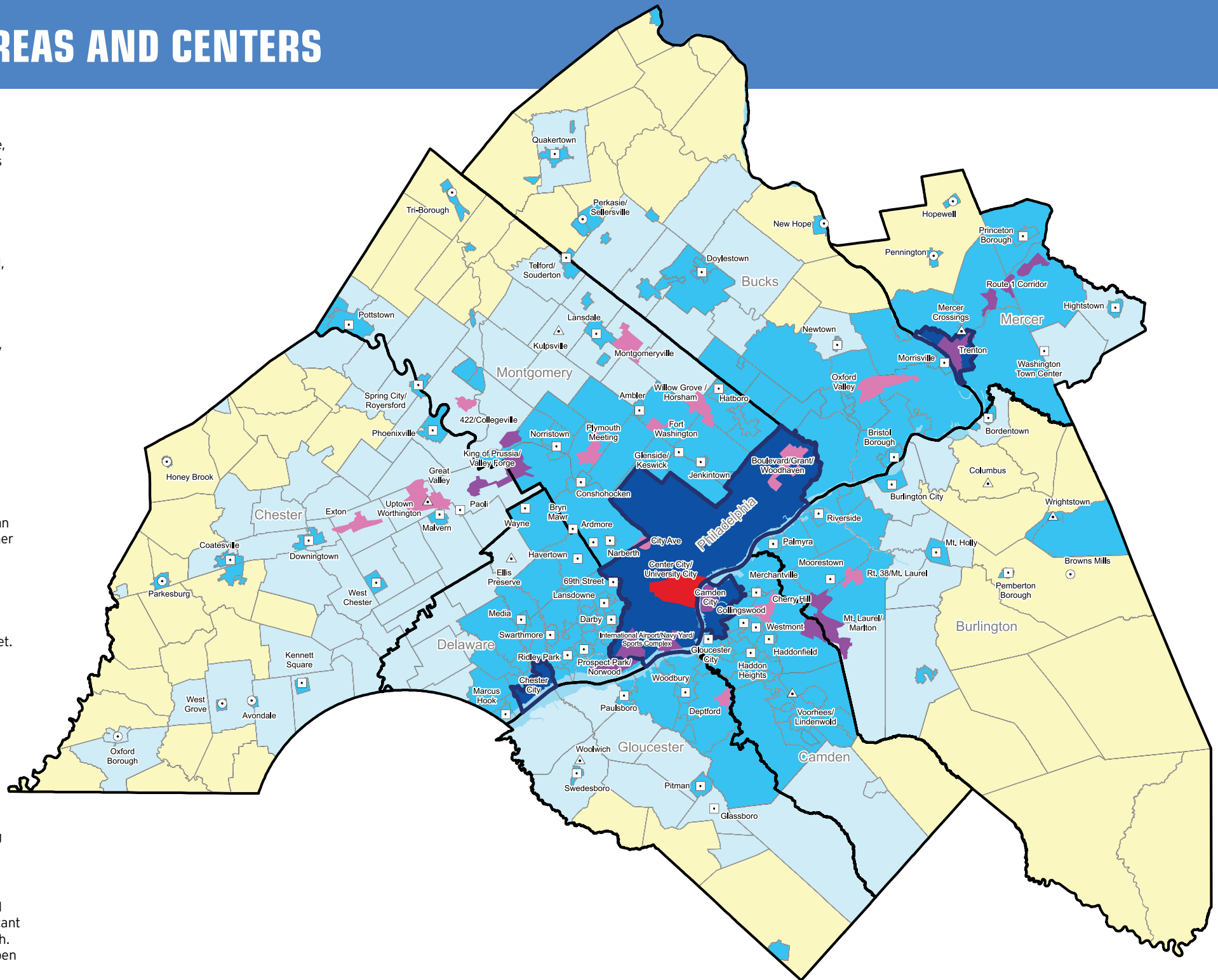
PLANNING AREAS AND CENTERS

CENTERS

- **Metropolitan Center** of Center City/ University City Philadelphia is a dense, compact mixed-use area that includes residential areas. This forms the core of the region's tourism and cultural amenities, and educational and medical institutions.
- **Metropolitan Sub-Centers** offer a mix of commercial, retail, institutional, and residential activities that reflect a region-wide significance.
- **Suburban Centers** are generally suburban auto-dependent areas but have a more compact mix of primarily commercial, professional, and light industrial development.
- ▣ **Town Centers** are pedestrian and transit-friendly areas that offer a mixture of high-density residential and commercial land uses and a distinct downtown/main street surrounded by suburban land uses.
- **Rural Centers** are surrounded by rural and agricultural areas and offer an integrated mix of land uses with a higher density than surrounding land uses.
- △ **Planned Town Centers** are generally new development in growing suburbs or rural areas that incorporate a mix of land uses, relatively high densities, and a distinct downtown or main street.

PLANNING AREAS

- **Core Cities** planning efforts should focus on infrastructure maintenance and rehabilitation, comprehensive revitalization, and reinforcing social and educational programming.
- **Developed Communities/Mature Suburbs** have already experienced their population and employment growth. Strategies should focus on stabilizing housing prices, diversifying populations, and developing local economies.
- **Growing Suburbs** have a significant number of acres that are undeveloped and are forecast to experience significant population and/or employment growth. Policies should focus on preserving open space and managing growth through concentrated development and improved community design.
- **Rural Areas** possess large natural areas. Key policy approaches should target open space preservation, limited development, agricultural support, and natural resource protection.



DEVELOPING LIVABLE COMMUNITIES WILL:

- Revitalize neighborhoods, support economic growth, and reduce suburban sprawl.
- Create business-friendly town centers that strengthen our local and regional economy.
- Improve safety and security through stronger community connections.
- Reduce automobile dependence while promoting transit, walking, and biking as everyday modes of transportation.
- Enhance livability in our core cities, first-generation suburbs, and town centers.
- Preserve unique community and architectural character.
- Conserve open space to promote access to recreational opportunities and local foods.
- Reduce living and service delivery costs, transportation and logistics needs, and resulting pollution.
- Increase and diversify the housing stock that is centrally located to employment opportunities and transportation systems.

STRATEGIES TO DEVELOP LIVABLE COMMUNITIES:

- Concentrate growth around and within our region's 100+ centers where infrastructure already exists to reduce development costs.
- Foster collaboration at all levels of government to support responsible development through planning, zoning regulations, land use laws, community design, and related development incentives.
- Reinvest and redevelop centers through innovative and adaptive approaches.
- Attract residents and employers to targeted areas through public/private partnerships.
- Increase the stock of affordable housing units in suburban centers that are close to jobs and services accessible by public transit.
- Promote local greening initiatives such as community gardens and street trees.

THE RETURN

Center-based development saves \$25,000 per new housing unit in development and infrastructure costs, as compared to sprawl. Households in centers also spend \$1,300 less per year in energy and transportation costs, and have shorter commutes compared to households located outside established centers.²

AN ENVIRONMENT THAT SUPPORTS GROWTH.

REDUCE GREENHOUSE GAS EMISSIONS BY 50% WHILE BUILDING AN ENERGY EFFICIENT ECONOMY.

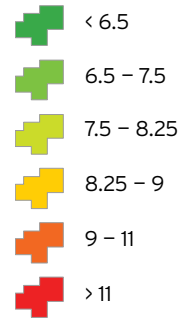
DVRPC's regional greenhouse gas (GHG) emissions inventory estimates that in 2005 our region produced just over 90 million metric tons of CO₂, roughly 1.5% of the US total. This level of emissions is about the same as Portugal and greater than Austria, both of which have populations that are nearly twice as large as our region. Over 90% of these emissions result from stationary or mobile energy consumption. Recent studies identify the need to reduce global GHG emissions by 80% by 2050 to keep climate change within an acceptable range. A 50% reduction by 2035 would put us on track to achieve this goal.

More than simply an environmental imperative, the act of reducing greenhouse gas emissions is also an economic opportunity. The expected increase in energy prices will have a tremendous impact on our region's economy and on municipal and household budgets. Savings aside, a "green economy" has the remarkable potential to create a stable supply of local jobs that offer family-sustaining wages. Further, it will create access to more local sources of clean energy that offset usage and transportation costs. Finally, considering quality of life, a shift to cleaner and more benign sources of energy will improve our region's water and air quality, and make our region more attractive for further economic growth.

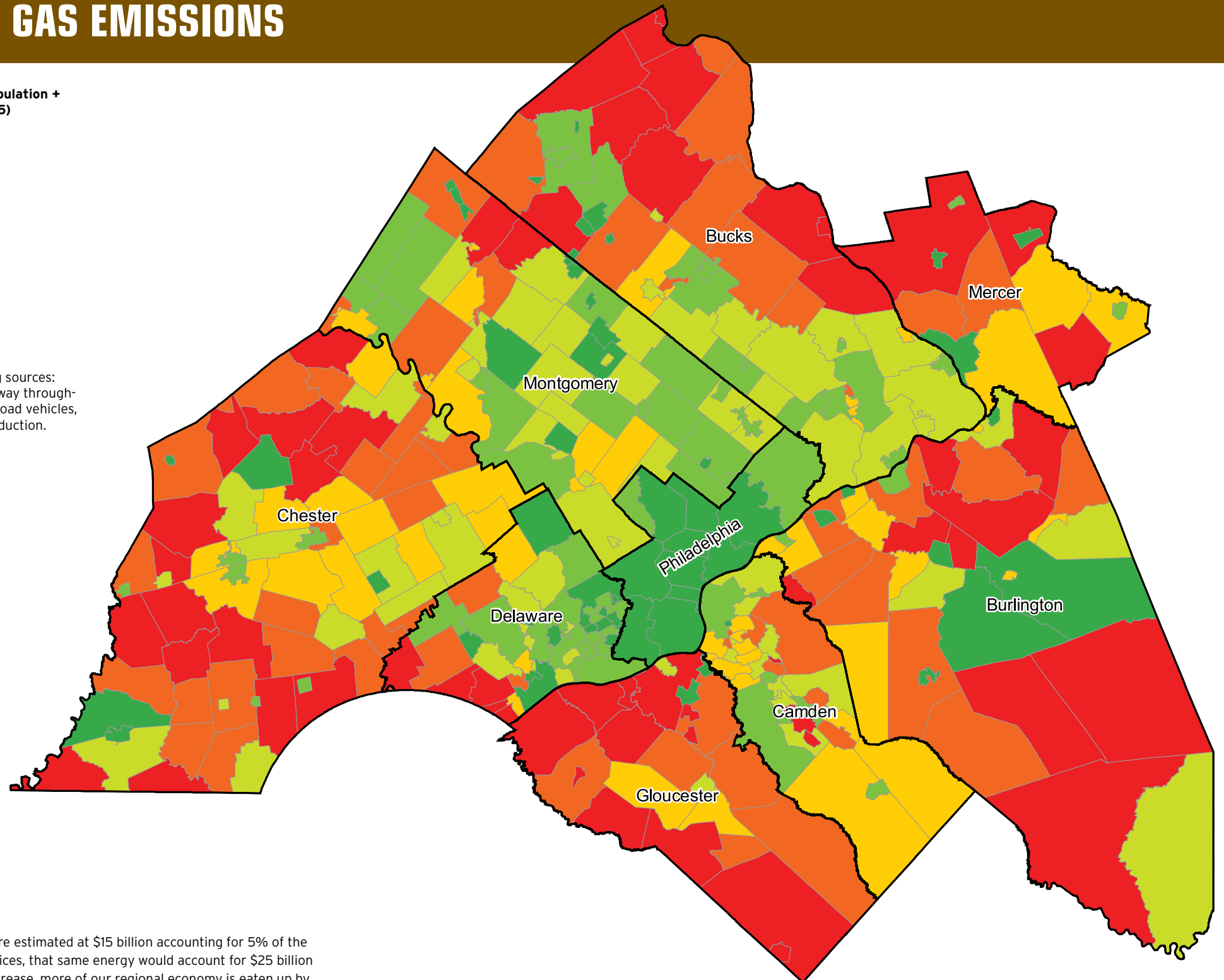
GREENHOUSE GAS EMISSIONS

Greenhouse Gas Emissions per Population + Employment by Municipality (2005)

All emissions in MTCO₂E



The allocation excludes the following sources: industrial energy consumption, highway through-traffic, aviation, marine vessels, off-road vehicles, livestock, cement, and iron/steel production.



CALCULATING THE COSTS

Total energy expenditures in 2005 are estimated at \$15 billion accounting for 5% of the region's total economy. At today's prices, that same energy would account for \$25 billion in expenditures. As energy prices increase, more of our regional economy is eaten up by energy costs, leaving fewer resources available to address other regional needs.

BUILDING AN ENERGY-EFFICIENT ECONOMY WILL:

- Create a steady supply of sustainable jobs in emerging, high-growth industries.
- Provide new green collar jobs for those currently underemployed.
- Reduce airborne pollutants to acceptable levels.
- Save residents on household energy and transportation costs.
- Save local governments in reduced energy expenditures.

STRATEGIES TO CREATE AN ENERGY-EFFICIENT ECONOMY:

- Emphasize community design to locate employment opportunities closer to residential communities.
- Align and utilize the workforce development system to develop a high-quality workforce to support the needs of employers in emerging industries.
- Develop employment opportunities targeted to the skills of underemployed segments of the population.
- Prioritize transportation investments that serve or benefit key economic sectors and locations.
- Enhance the climate for business by expanding venture capital and regional collaboration.
- Develop innovations that allow for services to be delivered more efficiently.
- Advocate for more efficient cars, furnaces, and lighting and produce energy with less CO₂ by switching to non-carbon fuels.

THE RETURN

Just a 10% improvement in energy efficiency will save the region \$2.5 billion per year in direct costs while reducing greenhouse gas emissions. Promoting eco-industries and green-collar jobs will make our region more economically competitive, generate new jobs and revenue, and create jobs for the underemployed.³

MAXIMIZING MOBILITY AND CLOSING THE FUNDING GAP

RAISE \$100 MILLION ANNUALLY IN LOCAL FUNDING TO ESTABLISH A MODERN TRANSPORTATION SYSTEM THAT SERVES ALL MODES.




A safe, convenient, and high-performing multi-modal transportation network is the foundation for building a prosperous and productive region. Unfortunately, our system is at a crossroads. Age and under-funding have left considerable portions of our region's transportation system in poor condition. The collapse of the I-35 Bridge in Minneapolis and the extended closure of I-95 in Philadelphia underscore the importance of investing in our infrastructure. Our region's entire network requires significant investment for maintenance and optimization to ensure that it meets safety standards, projected capacity, and accessibility requirements.

As we look to repair and eventually optimize our transportation network, we face many challenges. First and foremost is funding. Working with federal, state, local, and operating agency partners, DVRPC developed a fiscally constrained financial plan for capital investments for the transportation system. The financial plan identified a \$45 billion gap between identified needs and anticipated funding levels.

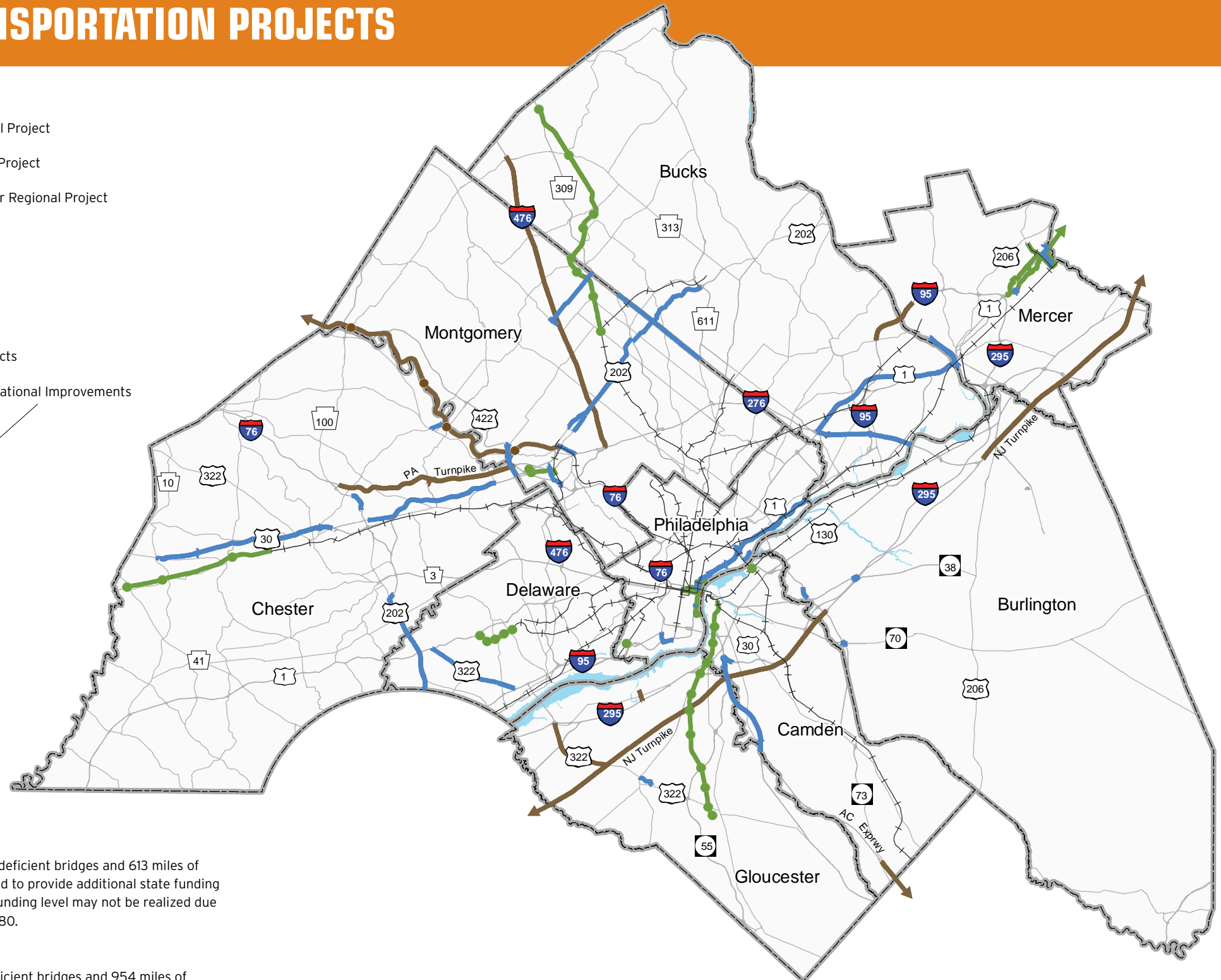
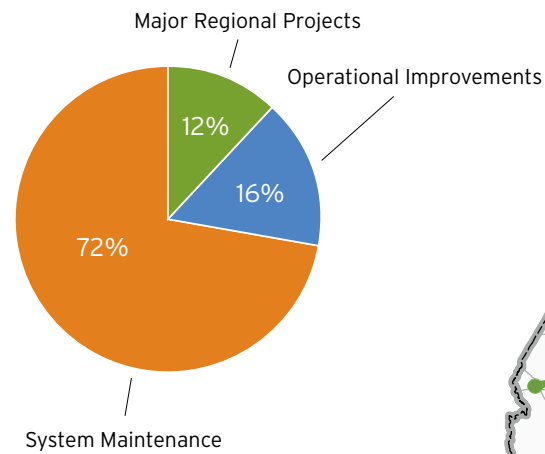
Regionally, we rely more heavily on federal and state funding and contribute less to our own transportation infrastructure compared to other major metropolitan areas. On a more local level, few towns have sufficient funds to contribute to large-scale regional projects. With all these challenges, we must collaborate to develop an innovative and self-sufficient funding stream to supplement existing sources. Feasible local funding strategies include local bonds, public-private partnerships, and user fees or tolling.

We are issuing a challenge to the region's leaders, decision makers, and citizenry to reach consensus on new local and regional means to maintain and optimize the region's critical transportation infrastructure, which impacts not just our standard of living, but also our economic competitiveness and environmental sustainability.

MAJOR TRANSPORTATION PROJECTS

-  Highway Major Regional Project
-  Transit Major Regional Project
-  Externally Funded Major Regional Project

Transportation Funding Allocation



PENNSYLVANIA'S CHALLENGE

As of 2007, Pennsylvania had 1,395 deficient bridges and 613 miles of deficient roadway. Act 44 was passed to provide additional state funding for transportation projects, yet its funding level may not be realized due to issues concerning the tolling of I-80.

NEW JERSEY'S CHALLENGE

As of 2007, New Jersey had 387 deficient bridges and 954 miles of deficient roadway. The state's Transportation Trust Fund expires in 2011. Even if it is renewed to its historic levels, the state will still have \$4 billion per year of annual transportation needs left unfunded.

ESTABLISHING A MODERN, MULTI-MODAL TRANSPORTATION SYSTEM WILL:

- Allow for greater mobility of people, products, and services.
- Save drivers in vehicle maintenance costs.
- Provide safer conditions for all modes.
- Reduce automobile congestion, dependence, and associated pollution.
- Preserve open space and natural resources that would be lost during the construction of new roads.
- Improve air quality by reducing emissions.
- Generate added revenue via freight distribution channels and increased productivity.
- Create new jobs by attracting business that benefits from a high performing transit system, educated workforce, and centralized location.

STRATEGIES TO ACHIEVE FUNDING AND TRANSPORTATION GOALS:

- Spearhead a well-coordinated campaign to identify and implement funding solutions for projects of regional significance.
- Promote redevelopment to offset infrastructure expansion costs.
- Encourage public transit, bicycle and pedestrian facilities, telecommuting, ride sharing, and car sharing.
- Ensure transportation projects are scaled to the size of the problem and tailored to specific needs.
- Enhance links between transportation and land use.
- Improve traffic flow through better traffic management, incident response and clearance, and information delivery.
- Pursue transportation projects based on sound, long-range strategic planning considerations, life-cycle investment analyses, and system performance and condition data.
- Limit development of new roads and seek alternatives to improve existing roadways and highways.

THE RETURN

Traffic congestion in our region consumes an average of 38 hours per traveler per year — the equivalent of a week's vacation — and costs the region over \$2.3 billion annually in lost productivity costs. Smart investments in transportation save time and money, improve the environment, and enhance the region's economy.⁴

REALIZING OUR POTENTIAL.

We can transform our region and position ourselves for a promising future. But to achieve this goal, we must acknowledge the value of what we have and how we can capitalize on our strengths to become a model of sustainability, prosperity, and productivity.

As the federally designated Metropolitan Planning Organization for the nine-county Greater Philadelphia region, the Delaware Valley Regional Planning Commission is working with elected officials, regional stakeholders, and the public to implement this plan. The plan defines regional policy and establishes a collective vision to enhance our environment, promote energy conservation, optimize transportation, guide investments, ensure consistency, and improve the quality of life for all residents throughout our region.

**DISCOVER YOUR ROLE AND DOWNLOAD
THE PLAN AT WWW.DVRPC.ORG/CONNECTIONS.**



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The Delaware Valley Regional Planning Commission (DVRPC) is dedicated to uniting the region's elected officials, planning professionals, and the public with the common vision of making a great region even greater. Shaping the way we live, work, and play, DVRPC builds consensus on improving transportation, promoting smart growth, protecting the environment, and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region — leading the way to a better future.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. DVRPC's website may be translated into Spanish, Russian, and Traditional Chinese online by visiting www.dvrpc.org. Publications and other public documents can be made available in alternative languages and formats, if requested. For more information, please call (215) 238-2871.