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ROADMAP TO OUR REGION'S ECONOMIC FUTURE









Roadmap for the Washington Region's Future Economy

The Washington region's economy has undergone a major structural change since 2010. Coming on the heels of the Great Recession and just as the regional economy was moving into recovery mode, the region's principal economic driver—federal spending—was curtailed. The cutbacks in federal spending over the past four years resulted in the region's economy registering no growth in 2013 and having the smallest job growth rate among the nation's largest 15 metropolitan areas in 2014. The Roadmap for the Washington Region's Future Economy presents an alternative to this current slow-growth pattern and provides recommendations on repositioning our regional economy in a way that reduces our historic dependence on the federal spending and sets us up to compete in the global economy.

The Roadmap is designed to identify: (1) the Washington region's competitive advantages within the national and global economies; (2) its non-federally dependent, export-based, high-value added, advanced industrial clusters with high-growth potential; and (3) public and private sector initiatives that could accelerate the expansion of these advanced industrial clusters for which the Washington region has a competitive position. It also provides recommendations on state and local government initiatives that can be advanced through increased regional collaboration among local and regional business and not-for-profit organizations.

INTRODUCTION

t has often been said that when things fall apart, they may actually be falling into place. That just might be the case for Greater Washington.

At the start of 2015, Dr. Steve Fuller, longtime distinguished regional economist, outlined the grim realities that our regional economy was facing and warned regional leaders that we were at risk of falling behind other major metropolitan regional economies if there was not an increase in regional cooperation and a decrease in the region's reliance on federal funding.

To address these concerns, members of the 2030 Group, who have long worked to advance Greater Washington's regional economy and advocated for a regional approach to long term decision making and solutions across the region, commissioned Dr. Fuller and his research team to create a Roadmap for the region—one that identified the competitive strengths and weaknesses of our region, as well as non- federally dependent clusters that could spur economic growth and development throughout the region. From the onset, the purpose of the Roadmap was to spark high-level discussions among regional leaders and to create a plan that could be acted upon in order to maximize the potential of the region.

The level of regional cooperation, interest, and support behind the Roadmap has been nothing short of incredible. Regional leaders across a variety of sectors—business, government contracting, philanthropic, health, tech, and academic—joined together to support this effort and regularly convened over the course of this year to discuss and debate the research findings and the proper course of action moving forward. As a result, there is consensus behind the fact that we must address our transportation and housing affordability issues, rebrand the region, and increase the collaboration between the academic sector and business community in a way that ignites the entrepreneurial culture across the region. A unified front and focus behind these action items will help us to solve our issues locally and position ourselves to compete globally.

The strong regional coalition that has emerged through this process will play an integral role in moving the bold, game-changing action items coming out of the Roadmap forward, and I would like to thank all of those who have put their time, energy, and resources into this effort. I would also like to thank Dr. Fuller and members of his research team, Ellen Harpel, Derek Hyra and Jeffrey Werling, for their tremendous work. Dr. Fuller's expertise, when it comes to our regional economy, is unrivaled and the impact of his team's work on the Roadmap and other projects will reverberate for years to come.

It has been quite a year for regionalism. It is my hope that the spirit of regional collaboration that has ensued over the past year continues as we begin 2016 and beyond.

With much thanks, appreciation, and hope,

BOB BUCHANAN

President of The 2030 Group Chair of The Montgomery County Economic Development Corp.

Washington Metropolitan Region Economy Declines

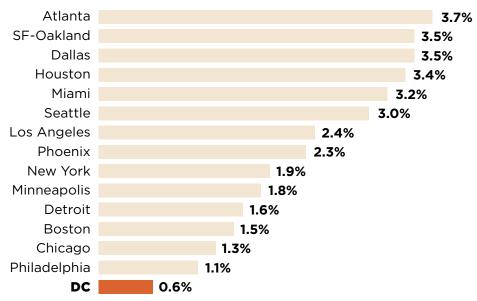
The Washington metropolitan area (WMA) economy is lagging the national economy and those of its peer metropolitan areas, including Detroit, Phoenix, and Minneapolis. This weak performance, evident in both the region's generation and value of new jobs, reflects a five-year trend dating to 2010 and a structural change unseen in the region since the end of World War II. ton region's economy enjoyed from 1980-2010 was driven by steadily increasing federal procurement outlays in the local economy (increasing from \$4.2 billion in 1980 to \$82.4 billion in 2010), complemented by growth in federal civilian employment and payroll that peaked in July 2010. Since then, federal spending in the regional economy has declined and growth in the region's employment and gross regional product, or value of goods and services produced within the

regional economy, has slowed.

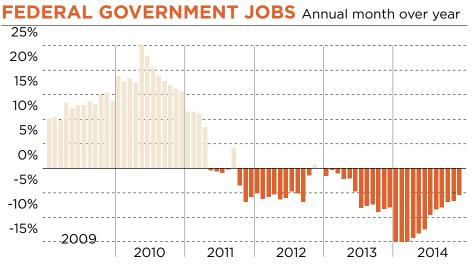
In order to reverse this downward trajectory and to regain its position as one of the fastest growing and high-value added economies in the nation, the WMA must shift from its historic dependency on growth in federal spending to growth in knowledge-based industries that are non-federally dependent, exportbased, and characterized by high-value added jobs that will thrive in the global marketplace.

The strong economic growth that the Washing-

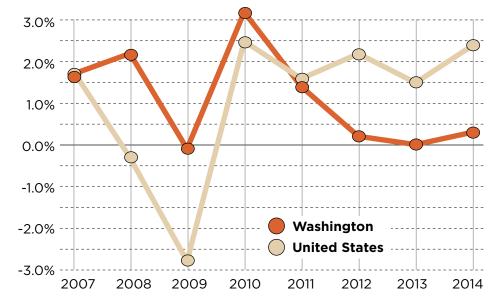
JOB CHANGE: 2013-2014



Source: Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

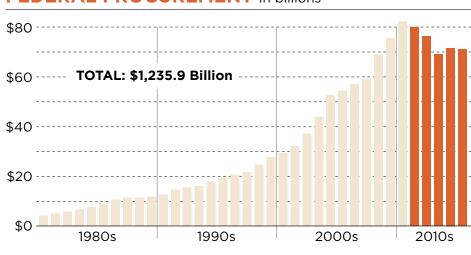


Source: Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis



U.S. GDP AND REGIONAL GRP Annual percent change

Source: IHS Economics, GMU Center for Regional Analysis, Forecast: September 2015



Source: US Census, Consolidated Federal Funds Report and USAspending.gov

Competitive Advantages Target Business Needs

The Washington region's competitive advantages are rooted in its position as the seat of the federal government. As the world's top government power center where nearly all foreign governments and consulates are represented, the region's diplomatic, political, institutional, and informational connectivity to the world bestows a uniquely attractive business ecosystem.

Reinforcing this unique global eco-

KNOWLEDGE BASED ECONOMY

The economies that will thrive in the future are those built around the dissemination of knowledge, the advancement of ideas, and the application of innovative technologies to solve global problems. Greater Washing-

system are the region's attractive quality of life, cultural diversity, prestigious academic institutions, highly educated workforce, and a specialized, advanced business base with identifiable concentrations of employment in high-wage occupations. These interdependent functions establish a distinctive competitive position for the Washington region within national and global markets.

WASHINGTON REGION'S ADVANTAGES

- Capital City/Federal Government Center
- International Governments and Institutions
- Connectivity to the WorldConcentration of Govern-
- ment and Business Leaders
- High Quality of Life
- Diverse Population
- Breadth of Higher Education Services
- Educated Work Force
- High Level of Labor Force Participation
- Advanced Occupational Specializations

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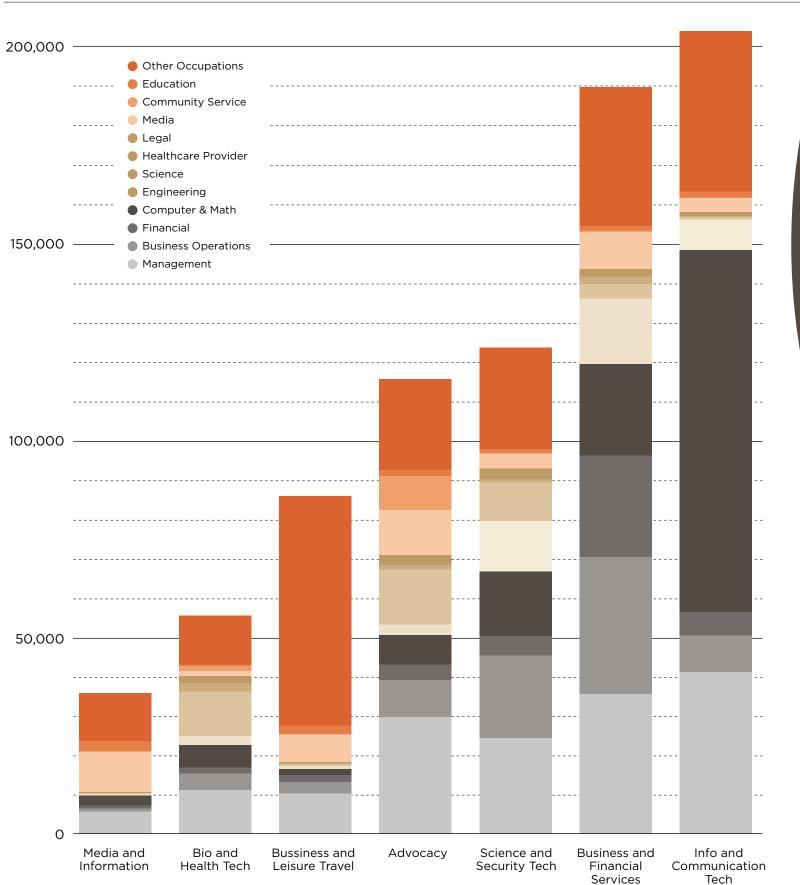
ton's economy has always been more knowledge-based and is well positioned to flourish in this environment, especially if it taps into it's privatesector business potentials.

FEDERAL PROCUREMENT In billions

Advanced Industrial Clusters Position Region for Growth

S even advanced industrial clusters in the target business sectors have been identified for their potential to re-accelerate the region's economic growth over the next decade. These clusters are well established within the region's knowledge-based economy and were selected based on the following criteria: they encompass natural advantages present in the nation's capital, they are technology intensive or otherwise advanced consistent with a knowledge-based economy, they support above-average wages, they possess high growth potential nationally and/or locally, and they have an existing concentration of employment opportunities in the Washington metropolitan area. These clusters represent high-value added and high-growth potential businesses for which the Washington region is a competitive location. Combined, the clusters employed 811,193 workers within the Washington region in 2014, accounting for 27.3 percent of the WMA's private employment base. Employment across the clusters grew 14.6 percent between 2003 and 2014, compared to 9.3 percent job growth across all sectors in the Washington region over this same period. The average wages for workers in the advanced industrial clusters were 35 percent higher than the average wages for all jobs in the Washington region.

SEVEN KEY ECONOMIC CLUSTERS



MEDIA AN

The Washington is a hub for worl documentary, ad and political me information firm as the seat of the government, will be a primary sou the nation's new information

BUSINES FINANCIAL

As home to important instit as the World Ba and the Feder Board, the re continue to pla role in globa

BUSINESS AND LEISURE TRAVEL SERVICES

The Washington region's professional environment, rich history, and national landmarks attract legions of business and leisure travelers annually. This cluster supports a large network of suppliers and complementary businesses that expand naturally with national income growth.

ADVOCACY SERVICES

The capital region is a logical setting for advocacy organizations, ranging from well-established lobbying firms and trade associations to philanthropic foundations to startup grassroots organizations.

ID ERVICES

region d-class vocacy, dia and s, and, federal always irce for vs and n.

S AND SERVICES

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2014 EMPLOYMENT

Cluster	Jobs	%Change ¹	LQ ²	Wage ³
Advocacy	115.731	19.0	3.5	1.7
Info & Comm. Tech	204,489	5.5	2.7	1.4
Sci & Security Tech	123,785	18.6	1.8	1.6
Bio & Health Tech	55,396	25.1	2.0	1.6
Business & Fin. Serv.	190,128	38.9	1.8	1.6
Media & Info Services	35.745	-20.1	1.5	1.7
Leisure & Business T.	85,919	-1.3	1.1	1.3
All Clusters	811,193	14.5*	2.0	1.6

2014-2015 JOB GROWTH FORECAST

Cluster	Low	%	High	%
Advocacy	122,303	5.7	138,868	20.0
Info & Comm. Tech	213,621	4.5	224,870	10.0
Sci & Security Tech	135,707	9.6	147,104	18.8
Bio & Health Tech	58,388	5.4	67,929	22.6
Business & Fin. Serv.	218,851	15.1	269,053	41.5
Media & Info Services	36,292	1.5	41,667	16.6
Leisure & Business T.	87,807	2.2	91,512	6.5
All Clusters	872,969	7.6	981,005	20.9
All Jobs in WMA	3,092,270	4.0	3,402,570	14.4

INFORMATION AND COMMUNICATIONS TECHNOLOGY SERVICES

This large and sophisticated cluster, which includes cyber-security and health information technology, is particularly important in the global economy.

SCIENCE AND SECURITY TECHNOLOGY SERVICES

This advanced technology cluster has important new opportunities for growth beyond the government's national defense, intelligence and space sectors.

> Sources: U.S. Bureau of Labor Statistics, JobsEQ, University of MD's Inforum

¹2003-2014 Percent Change; ²Percentage of local employment in a cluster divided by its respective percentage nationally; ³WMSA/US wage ratio; *Total job change for WMSA, 9.3%

BIOLOGICAL AND HEALTH TECHNOLOGY SERVICES

The region's role in health financing and research flows from the Centers for Medicare and Medicaid Services, the National Institutes of Health, and the Federal Food and Drug Administration. These organizations provide ongoing opportunities for biological and health research performed at regional universities and private labs.

Requirements for Future Economic Growth

In order to better understand how to accelerate the growth of these business clusters, as well as to learn more about the firms that comprise the seven advanced industrial clusters identified as potential drivers of the region's future economic growth, the Roadmap research team interviewed 33 of the region's top business leaders and CEO's. The takeaways from these interviews, which were conducted by senior members of the research teams from the American University Center for Metropolitan Policy Analysis and Business Development Advisors, identified the principal "requirements" needed to strengthen the business environment and advance the region's competitive position as one of the world's advanced knowledge-¬-based economies.

These "requirements" are most effectively achieved at the regional scale and can be bundled into two interdependent groups: (1) those that describe what businesses need in order to grow and (2) those that describe the region's inherent constraints to business growth.

BUSINESS REQUIREMENTS FOR GROWTH

Talent Development, Attraction and Retention

Qualified talent that supports an advancing economy is critical to competing in the global market. To meet the demands of a changing economy, the region must provide its current and future workers with the educational and training resources required to succeed in competitive knowledge-based economies. Strong public school systems and educational institutions that foster continued skills and professional development are needed to advance the region as a desirable place to live with excellent career pathways spanning all levels and stages of employment.

• Quality of Life

Talent is attracted and retained by a region's qualities of life and the vibrancy of its residential communities. Conditions that establish a place as competitively attractive include, but are not limited to: cost of living, especially housing affordability; quality public services including education and public safety; availability and quality of transportation services; attractive neighborhoods, public spaces, and cultural facilities; and cultural diversity.

• Transportation Flexibility and Adaptability

Transportation is a fundamental building block of a competitive economy. The cost of moving goods and services as well as workday mobility for business and personal purposes are intrinsically linked to the overall cost of doing business in the region and its quality of life.

Access to Capital

Venture capital and a strong commercial banking system are essential to generating a vibrant entrepreneurial ecosystem. Establishing a strong cadre of local entrepreneurs, experienced managerial talent and venture capitalists is necessary to realize the region's inherent business potentials.

CONSTRAINTS TO BUSINESS GROWTH

Regional Branding

The Washington region lacks a favorable brand to promote its business base in national and global markets. Federal functions have overshadowed the region's competitive advantages for non-federally dependent businesses and media coverage consistently fails to recognize the region as a major business center with a significant concentration of technology-intensive, scientific and professional business services.

• Entrepreneurial Culture

The region's roots and traditions as a Federal City have produced a culture described as bureaucratic and better suited to administration and management of programs and regulations, than as a culture perceived as entrepreneurial and fertile for innovation and business creation.

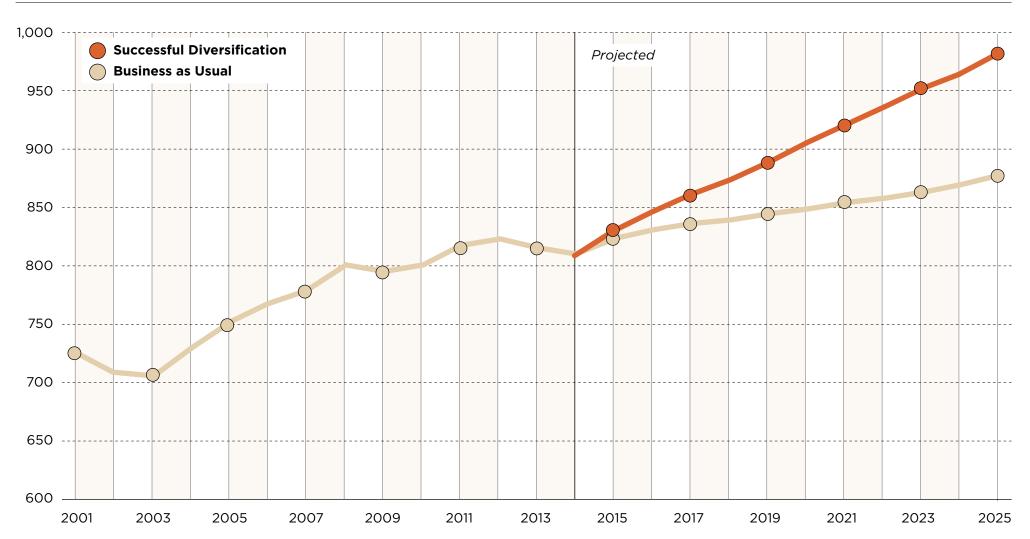
Competition among Local Jurisdictions

The Washington region, as defined by the U.S. Census, consists of three state-level governments, six independent cities, and sixteen counties. With its federal overlay, the region presents a complex structure that negatively impacts business development by creating obstacles, inconsistencies, and jurisdictional competition across political boundaries.

• Public Costs and Disincentives

Business thought-leaders cite high publicly imposed fees and costly regulatory processes as barriers to doing business in the Washington region. The added costs associated with land use and business development in the region contribute to higher costs of living and provide business owners and investors reasons for choosing more businesscost favorable locations elsewhere in the U.S.

WMA JOB GROWTH ACROSS SEVEN CLUSTER, 2001-2015 Thousands of jobs



CALL TO ACTION

ccording to a recent report done by the Global Cities Initiative, 86 percent of global economic growth is projected to occur outside the United States over the next five years, which underscores the need for Greater Washington to expeditiously reposition itself to compete in global markets.

Recognizing that the time for action is now, regional leaders across

ACTION ITEMS

The Region's Talent Requirements

Developing, attracting and retaining a skilled workforce begins with a strong education system. Enhancing student internship opportunities, increasing financial support for advanced educational curriculum and teacher development, and implementing programs that prepare students with job readiness skills are recommended initiatives that should involve local business leaders, business organizations and public school systems collaboratively in developing the region's future workforce.

The Consortium of Universities of the Washington Metropolitan Area should provide leadership in advancing collaborative education to achieve the workforce requirements of the region's advanced industries. To broaden its base, the Consortium should consider expanding its regional membership by adding other local institutions of higher education including the area's community colleges.

• The Region's Quality of Life

High housing costs and resultant challenges of affordability negatively impact our quality of life and ability to attract and retain talent and businesses. Local governments need to assess regionwide policies affecting land use mix and densities in order to reduce unproductive housing costs. In addition, local organizations like the Greater Washington Housing Leaders Group should examine housing affordability solutions implemented in other regions, such as housing compacts, to better understand what might work well here.

• The Transportation System's Quality and Capacity

The future economic development potential of the Washington Metropolitan Area hinges on improving mobility and connectivity in and around the region. Right now our transportation system is failing and a system-wide assessment of operations and alternatives for improving transportation services, including analysis of transportation-oriented technology, is required.

In the short term, a dedicated revenue stream to support operations of the region's transit system should be reconsidered. A longer-term solution is creating a Tri-State Transportation Authority to plan, finance, construct and operate the region's transportation system.

Business Branding for the Washington Region

The reputation of the Washington region as a good place to do non-federal business is weak and often overshadowed by its image as the seat of the Federal government. In order to overcome this, the private sector should take the initiative to develop and promote a brand that advances the Washington region as a global business center.

• Regional Collaboration among Local Jurisdictions

a variety of sectors-business, philanthropic, health, tech, government

discuss and debate the Roadmap's research findings. These high-caliber

discussions culminated in the development of action items that can be

undertaken by public and private sector leaders to jump start the need-

ed shift from "company town" to global business center.

contractors, and academic-regularly convened over the past year to

Competition among local jurisdictions can be costly and weaken the region's economy, which is why establishing a cultural of collaboration among local jurisdictions should be made a top priority. Creating a non-compete alliance similar to one put in place in Denver could be helpful in realizing this goal. In Denver, each jurisdiction agrees that it will not poach businesses from any other jurisdiction that is part of the agreement and accepts being penalized if it does so.

Elected officials could also play a role here by teaming up on economic development promotional tours. Doing this would signify that the Washington region has its act together and speaks with one voice for the region.

Inefficiencies among Multiple Governments

Reducing counterproductive fees and administrative costs imposed by the region's local governments will enhance its attractiveness for business investment. Each jurisdiction should assess its regulatory and administrative fees and charges to determine if they are business-location neutral within the region.

All of these initiatives will require proactive collaboration among the public and private sector and will necessitate strong leadership across multiple local organizations and governments. Ultimately, a regional organization whose mission it is to undertake initiatives on behalf of the region's economic growth and long-range vitality may be required for Greater Washington to reach it's potential.

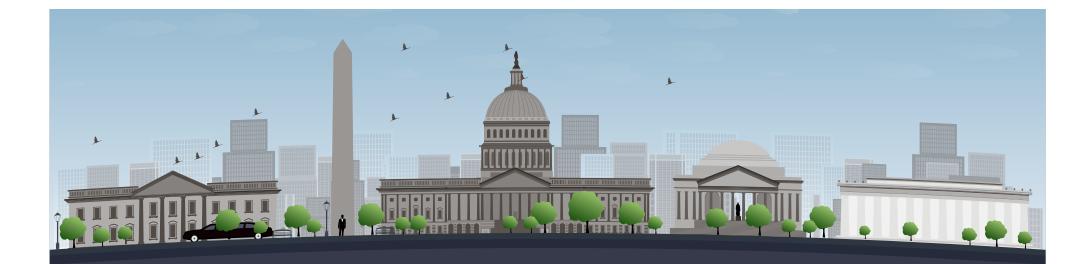
CONCLUSION

he Roadmap has awakened the spirit of regional collaboration across the District, Maryland, and Virginia and has created a strong cross-sector coalition that will be the backbone behind eco nomic development of the region moving forward.

In fact, the 2030 Group and Roadmap participants have already begun to take the next steps in moving the recommendations and action items coming out of the Roadmap forward by creating working groups. These working groups will take a deeper dive into each initiative and will provide updates to the group on their findings and progress. For example, the Fairfax Chamber will examine transportation issues, such as establishing a regional transportation authority. The Greater Washington Housing Leaders Group will look at compacts in other regions that addressed housing affordability to ascertain what might work in our region. The Consortium of Universities of the Washington Metropolitan Area and George Mason University will identify collaboration opportunities between the academic sector and the business sector. And, the Urban Land Institute will be leading the rebranding effort.

There is much work to be done in order to maximize the potential of this great region, but we are on our way thanks to the Roadmap.

Onward and upward!



ROADMAP RESEARCH SPONSORS

The 2030 Group George Mason University Adventist HealthCare Northern Virginia Chamber of Commerce Montgomery County Chamber of Commerce Federal City Council Metropolitan Washington Council of Governments Urban Land Institute-Washington Chapter MITRE Tech Council of Maryland Greater Washington Board of Trade Washington Regional Association of Grantmakers Washington Airports Task Force

ROADMAP RESEARCH TEAM

Center for Regional Analysis, George Mason University Inforum, University of Maryland Metropolitan Policy Center, American University

www.2030roadmap.com