MOTTO

"Make no little plans. They have no magic to stir men’s blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die...”
Daniel Burnham

QUO VADIS WASHINGTON?
Agenda for the Future of the Washington Metropolitan Area

Mircea Enache, Ph.D.
with the assistance of Marius Plescan and Alexandra Coltos, Ph.D.
International Urban Alliance

July 20, 2017
As the capital of the United States of America, Washington could and should develop more ambitious and more entrepreneurial plans for the future and aim at becoming a major global player, highly competitive, and a world leader in innovation, technology and quality of life.

Most of the resources for attaining this ambitious goal are there, and Washington is already the nation’s leader in many development and quality of life areas. This paper proposes an agenda for the future of Metropolitan Washington, which includes:

1. Developing an International Research Park built around the Washington Consortium of 17 Universities and the seven industrial clusters, which should attract key departments of global universities in Tokyo, Beijing, Singapore and London to locate in the area, along with major U.S. corporations.

2. Developing a long term, sustainable solution for financing the Washington Metrorail, by using development-based Land Value Capture (LVC), Public-Private-Partnerships (P3) and other creative financing instruments.

3. Reducing dramatically the traffic congestion in Washington, by developing a package of policy measures to include transit, automobile traffic, non-motorized mobility, and app-based services, with a view to the rapid changes in electric and autonomous vehicles mobility for people and freight (KonSULT Approach and MARS Model).

4. Improving the quality of life in Washington, and using smart city concepts and technology to attract, retain and nurture talent in the region, while uncovering all the human resources and using all synergies to achieve an inclusive and sustainable development.

The paper proposes developing concept papers and prefeasibility studies for the four items in the above agenda by a group of national and international experts, in consultation with the top Metropolitan Washington political and planning players.
From ideas to action

Washington is known for its traditionally weak entrepreneurial leadership, due in part to the strong conservatism in its culture, and in part to its sheltered position as “federal town”. Entrepreneurship is by definition, ambitious and aggressive. The Triangle Research Park in North Carolina is praised as one of the most successful industrial technological parks in the country, and the underlying explanation for that success is, simply, entrepreneurial leadership. Increasingly, the cities and the metropolitan areas must become more proactive and entrepreneurial, as most urban problems are local (The Metropolitan Revolution: Cities & Metros Fixing Politics & Economy, Katz, B, and Bradley, J., The Brookings Institution, 2013, and If Mayors Ruled the World - Dysfunctional Nations, Rising Cities, Barber, B.R., Yale University Press, 2013).

The Roadmap for the Washington Region’s Future Economy (Stephen S. Fuller, December 2015) contains excellent documents and analysis, reflecting the work of several organizations, under the leadership of the Metropolitan Washington Council of Governments (MWCoG) and the 2030 Group. What would be useful to develop as a next step would be an action plan with concrete actions, programs and plans.

For the Roadmap to become operational, the recommendations must go beyond urging the local governments, universities, and businesses to cooperate, to stop competing each other unfairly, and start working together for a bright future for Washington. In my experience, the entire picture is a game of power (Power and Conflict, Blalock, H., 1989, Sage Publications, Rules for Radicals – A Pragmatic Primer for Realistic Radicals, Alinsky, S.D., Vintage Books, 1971, and Power - Why We Want It and What to Do with It, Toombs, D., Prometheus Books, 2016). The jurisdictions, and in general all actors will only cooperate (while still competing among themselves) if they all have an ambitious common goal and a concrete action plan (like Burnham’s celebrated Plan of Chicago of 1909), with clearly stated benefits for each actor, and with the potential of a multiplier effect by leveraging all the regional internal strengths and resources. Attracting major international players in higher education and business to the area could be a key stimulus and catalyst of development.
A Vision....

where technology can radically change the future of Greater Washington, and the implications for the region of smart city concepts, ecological developments, climate change and green and healthy cities should be considered in deeper detail (Technology and the Future of Cities, Report to the President, February 2016). The available literature and initiatives on the topic are huge, starting with the research presented in Atlantic’s CityLab and Google’s Sidewalk Labs, and the national and international experience in resilient cities: Bloomberg’s What Works Cities, Rockefeller Foundation’s 100 Resilient Cities, MetroLab’s network of cities and universities, World Bank’s urban resilience initiative, and the recent United Nations’ shift to cities and local solutions to address global problems (Global 2030).

While each aspect of Washington’s development has been considered in depth and in a highly professional manner, the synergies between all those aspects have not received sufficient attention. And it is precisely those synergies that bring along creative and sustainable solutions to urban problem solving. Fixing the Washington Metrorail system has generated many ideas, policies and initiatives, yet a longer term, sustainable financial solution based on private initiative and entrepreneurship, like the rail systems in Tokyo and Hong Kong, has not been considered. Fixing the Metrorail will not resolve by itself the urban mobility in Washington: automobile traffic, parking, app-based mobility and non-motorized mobility must be considered, along with many policy measures to fight traffic congestion, optimize the use of land, and change the behavior of city’s inhabitants.

The synergies must also go beyond the problem areas, into the regional governance aspects of growth and development. No matter what form of regional cooperation, leadership and governance works for Washington, it has to be implemented effectively. Europe is a good example: Great Britain, which has had traditionally strong regional governments, is currently pushing for establishing the office of “regional Mayor” in at least five regions. The British are pursuing three types of institutional integration: 1) horizontal: between sectors within an authority; 2) spatial: between adjacent authorities; and 3) vertical: between tiers of government.
International Research Park for Global Competitiveness

Among the “requirements” stated in the Roadmap documents for Greater Washington’s competitive advantage, I will make reference to the following: 1) Talent development, attraction and retention, 2) The region’s quality-of-life, 3) Transportation flexibility and adaptability, 4) Entrepreneurial culture, and 5) Competition among local jurisdictions.

Talent and creative class must be cultivated if global competitiveness is an economic development goal, and the Washington Metropolitan Area universities are key in this effort - they would significantly benefit from a closer virtual and physical connectivity.

The Consortium of Universities of the Washington Metropolitan Area must be proactive and effective in building the synergies between the member universities, and identifying the particular strengths of each university related to the 7 industry clusters identified in the Roadmap. The Consortium’s program is impressive, but their actions and coordination are less so.

In order to take a leading position in the global competition, Washington should strive to attract departments from top international universities in Tokyo, Singapore, Beijing, and London. They would be closely cooperating with the Washington universities, and would connect with the Washington’s seven technological clusters: 1) advocacy, 2) information and communication technology, 3) science and security technology, 4) biological and health technology, 5) business and financial services, 6) media and information, and 7) business and leisure travel – in an effort to reduce Washington’s dependence to the Federal Government.

Land and utilities would be provided to the international universities, so they can build facilities in Washington – in an International Technology Park. The best locations are probably the campuses of the University of Maryland and the George Mason University, which have ample land resources – one good model is the location on Roosevelt Island in NYC of the Bloomberg’s competition winners – the Cornell-Technion Universities Consortium.
Businesses and high-tech industries must be targeted for location in the International Technology Park of Washington Metropolitan Area, based on a detailed, ambitious, yet realistic assessment of the seven industry clusters, in synergy with the Consortium of Universities. A good model for competitive advantage in the global economy is Research Triangle Park in North Carolina (*The Research Triangle: From Tobacco Road to Global Prominence*, William M. Rohe, University of Pennsylvania Press, 2011).
Further Actions Proposed

1. International Research Park in Greater Washington Area

1.1. Concept paper
Proposal for an International Research Park in the Metropolitan Washington Area, based on talent, the creative class, and university, government, and private business cooperation. Developing a complex database of the joint resources of the Consortium of Universities of the Washington Metropolitan Area, connecting the universities with the seven metropolitan area industrial clusters and identifying top international universities and top U.S. businesses to attract to the area.

1.2. Prefeasibility study
The Metrorail is in a very difficult financial situation and the top proposed solution is to renegotiate the compact and increase the subsidies from the involved jurisdictions (WMATA reports and various papers in Greater Greater Washington, Urban Land Institute weekly round-ups, and CityLab Newsletters).

The Washington Metrorail could become more entrepreneurial by considering long term financial sustainability achieved with development-based land value capture (LVC) mechanisms, rail-property creative financing and Public-Private-Partnerships (P3). Some of the best world examples are Hong Kong and Tokyo (Tama Garden City and others).
Developments around existing and future in-fill metro stations are critical. These developments, could use development-based land value capture (LVC) (World Bank Reports: *Transforming Cities with Transit* – Suzuki, Cervero and Iuchi – 2013, and *Financing Transit-Oriented Development with Land Values* – Suzuki, Murakami, Hong, and Tamayose - 2015. Models of mixed-use developments are illustrated in a quite few books including *Mixed-Use Development Handbook*, Schwanke, D., Urban Land Institute, 2003). Another interesting example is the recent British initiative of reviving the garden cities concept with increased density, LVC mechanisms, and institutional innovations – as part of the urban regeneration effort, and in response to the deep housing crisis.

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Further Actions Proposed

2. Sustainable Financing for the Washington Metrorail

2.1. Concept paper
Exploring development around existing or projected, in-fill metro stations, using Transit Oriented Developments (TOD), development-based Land Value Capture (LVC) and Public-Private Partnerships (P3) between the transit authority, the local government, the developer and auto manufacturers (Ford, GM etc) which would provide an urban mobility service: first and last mile.

2.2. Prefeasibility study
Addressing the Traffic Congestion Holistically

To fix the Metrorail system ("transit") and make it sustainable, traffic congestion in Washington must be addressed. Pouring more money into the Washington Metro without close coordination with the general transportation and the land use patterns cannot guarantee an increased Metro ridership.

Very few approaches to traffic decongestion are comprehensive, and none is “complete”. In my experience, an excellent approach is the one developed under EU projects, by Professor Tony May in Leeds: the KonSULT approach and the MARS Model for traffic decongestion. The KonSULT manual has 64 policy measures to address traffic congestion – their selection and order of priority depend on the city type, its development goals and other characteristics (Measure Selection: Selecting the most effective packages of measures for Sustainable Urban Mobility Plans, European Platform on Sustainable Urban Mobility Plans, March 2016). The MARS Model was applied in Washington by Matt Hardy (AASHTO) in his GMU Ph.D. dissertation (Simplified Integrated Transportation and Land Use Modeling to Support Metropolitan Planning Decisions, Matthew Hardy, George Mason University, 2011).

To increase transit ridership, auto access in downtown Washington must be reduced through congestion fees, more expensive parking, reduced parking availability, carpooling and sharing, changing commuters' behavior, etc.

The role and the future of app-based transportation (Uber, Lyft etc) must be clarified – Bruce Schaller, the former NYC Deputy Commissioner for Traffic and Plan, demonstrates their unsustainability, disastrous increase in vehicle miles travelled in NYC, and the implicit increased traffic congestion (Unsustainable? The Growth of App-Based Ride Services and Traffic, Travel and the Future of New York City, Schaller Consulting, January 2017).

KonSULT – Measure selection for traffic congestion relief, Bucharest, Romania
Further Actions Proposed

3. Traffic Decongestion in Washington D.C.

3.1. Concept paper
Supporting transit solutions (metro, busses, monorail) with traffic decongestion scenarios in Washington D.C. based on the EU KonSULT methodology (prioritizing a selection of policy measures from 64 measures available) and the MARS Rapid Assessment Model.

3.2. Prefeasibility study
High Quality of Life and Technology to Attract and Retain Talent the Region

- The smart graduates (millennials) must be retained in Washington. They need affordable accommodation and a new lifestyle ("Madrid, Spain" style and New York examples). Rental apartments might be possible solutions – smart design, with optimum use of space (The New Urban Crisis, Florida, R., Basic Books, 2017). Co-living solutions can be tried on an experimental basis. Place-making, eco districts, urban labs and co-design are key words here (Climate of Hope - How Cities, Businesses and Citizens Can Save the Planet, Bloomberg, M., St. Martin's Press, 2017).

- Infill walkable developments around transit are essential, provided they have excellent design, higher densities and mixed use (The Option of Urbanism: Investing in a New American Dream, Leinberger, C., Island Press, 2009). They must retain at least some of the dislocated population and resolve the NIMBY problem through smart rezoning and buffering.

- To attract world universities and top U.S. companies to the region, one has to offer a healthy city and a vibrant social and cultural life with meaningful activities and satisfying jobs. Vibrant street life, with street markets and events can be modeled after London, New York, and several successful U.S. cities (Triumph of the City: Richer, Smarter, Greener, Healthier & Happier, Glæser, E., Penguin, 2011). Event-based strategies can help economically, socially, and in marketing and branding the city – Barcelona's Olympic Games and Park as the focus for urban regeneration and city rebranding are a good example.

- Applying the most advanced technologies, big data and IoT (The Responsive City - Data Smart Governance, Goldsmith, S., Jossey-Bass, 2014) are key in the design and implementation of the smart city concept, which should include the participation of all stakeholders, and in particular the native digital millennials and Generation Z.

- The Kashiwa-no-ha Smart City near Tokyo was built on the themes of environmental symbiosis, health and longevity, and creation of growth industries. The objective was to develop a city focused on environment, healthy living, creativity, and communication around the Tsukuba Express train line. The initiative, formulated by Chiba Prefecture, Kashiwa City, the University of Tokyo, and Chiba University, states that its objective is to “realize an international academic city in which cutting-edge knowledge, industry, and culture can be developed and bring about a next-generational environmental city where people coexist in harmony with a rich natural environment and healthy, high-quality living and working environments in a creative setting that integrates the campus and town through partnerships among the government, private industry, and academia.”
High Quality of Life and Technology to Attract and Retain Talent

Eco-district concept for Greater College Park (UMD)
Further Actions Proposed

4. Demonstration Project for an Urban Development District (UDD) in Greater College Park – University of Maryland

4.1. Concept paper
Proposing a UDD in Greater College Park, based on the principles of smart cities, eco-districts and green cities. Connecting the campus and the UMD research park with the international higher education community, top U.S. companies, and the Washington community by developing an attractive technological park with broader attractions (international conference center, spa, entertainment center, universal studios, inclusionary developments, etc). Insuring participation, co-design and entrepreneurship through a Demonstration Project Platform (City - Web).

4.2. Prefeasibility study
While developing the studies and initiatives, the goal is to engage a class of urban planning/real estate students in this effort. They would no doubt develop excellent team building, urban problem solving and community participation skills, along with a sense of purpose for the 21st Century young urban professionals who will shape urban Washington and America.

This paper is proposing exploring a one or two-year urban planning curricula to be taught at one of the Washington Consortium universities or innovations centers, under the sponsorship of the Metropolitan Washington Council of Governments (MWCoG), 2030 Group, the Urban Land Institute (ULI), Greater Washington Board of Trade, prominent area developers, etc. The curricula would detail 4-6 regular courses or 8-12 shorter courses, and would be offered in a blended education format (face-to-face and on-line). The curricula would be project-based, focused on the Greater Washington Area, and following the main proposals in this paper. The core students would receive certificates and diplomas, while the on-line participants would receive open badges.

The Framework for a Project Based Planning Education Program is presented in Attachment 1.
The Next Steps

The next steps in this initiative are:

1. to expand the support of experts (top U.S. and international) for the initiative, and to secure the interest of the local governments, the business community, and the civic society
2. to use a wealth of pictures, info-graphics, visualizations and animations/video clips to convince planners and politicians that this is the desired smart approach to strategic planning
3. to convince a consortium of grant-makers, developers and interested tech companies to finance several studies, in the tradition of the Plan of Chicago of 1909

The list of prefeasibility studies proposed, and a tentative expertise structure (consultants and peer reviewers) are presented in Attachment 2.
A Potentially Disruptive Planning Education Model

Background Information and Action
• Examine broad, global and urban trends, and the impact of technology on society.
• Examine current and future graduates skills and job opportunities (industry and employers’ survey).
• Examine the “customer” – Generation X, Millennials (Gen Y), and Generation Z, in terms of values, behavior, commitment, learning strategies and styles, and social communication and involvement.
• Establish an outside Advisory and Certification Board recruited from the industry: government, planners, developers, builders, bankers and lawyers, and an international organization (International Urban Alliance).

Program Goals and Principles
• Goals: connecting with society and its needs, holistic, problem-solving approach in knowledge, wisdom, and skill acquiring.
• International, multicultural, and cooperative program, based on sharing information, best practices, knowledge and wisdom in a structured way.
• Broadly inter-disciplinary and flexible program: supervised studies, applied research, and studio work, combined with courses by academics and futurologists, and context-related lectures/meetings/interviews with key actors in the industry: mayors, planners, developers, builders, business leaders, technologists, lawyers, bankers, civic leaders, environmentalists, neighborhood activists, etc.
• Immersed in the real world: a joint problem-solving exercise connecting teachers and students, mentors and mentored, based on a complex theme (large project) attempting to solve a real problem over the program’s duration.
• Entrepreneurial – the feedback from the participants will identify creative and innovative ideas, and real or mock-up startup proposals will be developed and presented to angel investors and venture capital groups, complete with a pitch deck, strategic and implementation plan, scaling up plan, fundraising and financial plan, proposed partnerships with public and private entities, etc.
Program Format

• Open, blended (face-to-face and online/videoconferencing) program with a core of tuition paying, for credit students, and a fee paying, open badge receiving, broader audience.
• One or two-year program, a 12-18 credits module, focused on addressing a significant urban problem in the Washington Metropolitan Area.
• Short courses (1-2 credits each) in the evenings and weekends, lectures by guest speakers, meetings with mayors, planning directors, the business community, developers etc.
• Crowdsourcing urban problem solving and planning education: combining the intelligence of self-organized crowds, to provide personalized and involved teaching to the broader, fee-paying, open-badge receiving, participants.

Program Contents and Methodology

• The Module should attempt to address a concrete urban planning problem of the Greater Washington Region, e.g. regional competitiveness, mobility and transportation infrastructure, housing and social equity, climate change impact on urban areas, impact of technology, and inclusionary development.
• Hi-tech in contents: evidence-based analysis, rapid assessment and decision support tools, based on structured and unstructured (big) data, Google Earth and Street View to solve urban neighborhood problems, remote sensing and satellite imagery to solve traffic problems and finding the optimum use of land 24/7.
• Hi-tech in delivery methods: blended teaching, videoconferencing, online material, Google Earth and Street View, etc. Major efforts should be made to deliver user-friendly presentation and learning tools, such as visualizations, info-graphics, animations, what-if pictures and illustrations, etc.
• Highly scalable: the crowdsourcing group will be organized in groups of interest, work groups, analytic groups, on the program platform and social media, emulating a city's planning office. There will be group and self-appointed leaders, peer reviews, and feedback structures in order to maximize the individual attention and personalized learning.
• Individual and team assignments will be assessed by all participants in the program in a system of self-evaluation, peer evaluation, and vetting, similar to Uber and AirBnB.

Accreditation/Certification

• Tuition-paying students receive 12-18 credits from the University.
• Fee-paying participants receive an open badge from the University, the Advisory and Certification Board and the International Urban Alliance (IUA).
1. International Research Park in the Metropolitan Washington Area
Proposal for an International Research Park in the Metropolitan Washington Area, based on talent, the creative class, and university, government, and private business cooperation. Developing a complex database of the joint resources of the Consortium of Universities of the Washington Metropolitan Area, connecting the universities with the seven metropolitan area industrial clusters and identifying top international universities and top U.S. businesses to attract to the area.

**TENTATIVE EXPERTISE: Consulted Institutions, Consultants and Peer Reviewers**
- Metropolitan Washington Council of Governments
- Federal City Council
- 2030 Group
- George Mason University
- University of Maryland at College Park
- National Center for Smart Growth
- Consortium of Universities of Metropolitan Washington
- International Urban Alliance (IUA): Lorenzo Ciapetti (Bologna, Italy), Jieming Zhu (Shanghai, China), Center of Excellence in Planning (CEP)

2. Sustainable Financing for the Washington Metrorail
Exploring development around existing or projected, in-fill metro stations, using Transit Oriented Developments (TOD), development-based Land Value Capture (LVC) and Public-Private Partnerships (P3) between the transit authority, the local government, the developer and auto manufacturers (Ford, GM etc) which would provide an urban mobility service: first and last mile.

**TENTATIVE EXPERTISE: Consulted Institutions, Consultants and Peer Reviewers**
- Washington Metrorail (WMATA)
- Transportation Planning Board (TPB)
- University of California at Berkeley
- George Washington University
- University of Maryland at College Park
- Center of Excellence in Planning (CEP) - IUA
3. Traffic Decongestion in Washington D.C.
Supporting transit solutions (metro, busses, monorail) with traffic decongestion scenarios in Washington D.C. based on the EU KonSULT methodology (prioritizing a selection of policy measures from 64 measures available) and the MARS Rapid Assessment Model.

TENTATIVE EXPERTISE: Consulted Institutions, Consultants and Peer Reviewers
- Transportation Planning Board (TPB)
- D.C. Office of Planning
- Institute of Transport Studies, University of Leeds
- Schaller Consulting
- Georgetown University
- Center of Excellence in Planning (CEP) – IUA

4. Demonstration Project for an Urban Development District (UDD) in Greater College Park – University of Maryland
Proposing a UDD in Greater College Park, based on the principles of smart cities, eco-districts and green cities. Connecting the campus and the UMD research park with the international higher education community, top U.S. companies, and the Washington community by developing an attractive technological park with broader attractions (international conference center, spa, entertainment center, universal studios, inclusionary developments, etc). Insuring participation, co-design and entrepreneurship through a Demonstration Project Platform (CityWeb).

TENTATIVE EXPERTISE: Consulted Institutions, Consultants and Peer Reviewers
- University of Maryland at College Park
- Maryland National Capital Park and Planning Commission
- Prince George’s County Planning Department
- Urban Land Institute (ULI)
- International Urban Alliance (IUA): Amador Ferrer (Barcelona, Spain – author of 1992 Olympics Plans), Edgar Kiviet (adj. Director, RTKL-UK), Dietmar Wiegand (Technische Hochschule Wien), Gabor Sooki-Toth (Budapest, Hungary), Center of Excellence in Planning (CEP)
CONTACT INFORMATION

International Urban Alliance (IUA)
A 501(c)(3) Corporation
Bethesda, Maryland
Website: www.iua-global.org
Tel: 301-320-8780