

Greenville City Council Planning Session
January 26-27, 2018
City Hall Gallery
200 West Fifth Street

Where are we?
Where are we going?
How do we get there?

Friday, January 26, 2018 -- 4:30 p.m.

I. Welcome – Mayor PJ Connelly

II. Public Comment Period

The Public Comment Period is a period reserved for comments by the public. Items that were or are scheduled to be the subject of public hearings at the same meeting or another meeting the same week shall not be discussed. A total of 30 minutes is allocated with each individual being allowed no more than 3 minutes. Individuals who registered with the City Clerk to speak will speak in the order registered until the allocated 30 minutes expires. If time remains after all persons who registered have spoken, individuals who did not register will have an opportunity to speak until the allocated 30 minutes expires.

III. America's Next Great University and City – Dr. Jay Golden

IV. Overview of the 2016-18 Strategic Plan – City Manager Ann Wall and Department Heads

V. Economic Development: Where Are We Now and Where Do We Want To Go? – Roger Johnson and Christian Lockamy

VI. Wrap Up and Recess

The best way to predict the future is to create it. - *Abraham Lincoln*

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Saturday, January 27, 2018 -- 8:30 a.m.

- I. **Welcome Back** – Mayor PJ Connelly
- II. **Goal Setting** - Facilitated by Carl Stenberg
- III. **Mid-Year Budget Update** – Michael Cowin, Assistant City Manager, and Bernita Demery, Director of Financial Services
- IV. **Capital Improvement Plan** – Michael Cowin, Assistant City Manager, and Bernita Demery, Director of Financial Services
- V. **Open Discussion** – Mayor PJ Connelly
- VI. **Wrap Up and Adjourn**

The best way to predict the future is to create it. - *Abraham Lincoln*

Memorandum

To: Honorable Mayor and Members of City Council
From: Ann E. Wall, City Manager
Date: January 22, 2018
Subject: 2018 City Council Planning Session

I am pleased to provide you with the agenda and information for the upcoming City Council Planning Session. During the Planning Session, we will work to answer three key questions:

Where are we? Where are we going? How do we get there?

This Planning Session will lay the foundation for the City's work over the next two years and into the future. **In the words of Abraham Lincoln, "The best way to predict the future is to create it."** At the conclusion of this Planning Session, we hope to have a list of prioritized goals which will guide the City's work; these goals will be incorporated into our work plans and budgets.

This notebook includes the materials needed for the retreat. In the supplemental information section, there is an article from the Alliance for Innovation *"The Next Big Things: The Next Twenty Years in Local Government"*; it highlights 44 trends in four categories - Resources, Technology, Demographics, and Governance that could impact how local government operates in the next generation. *"Eleven Signs a City will Succeed"* from Atlantic Magazine provides an interesting look at what makes communities great. Finally, I have included the Vision Framework, Sustainability Themes and Big Ideas from the Horizons 2026 Plan. I hope these items are thought provoking for you as you prepare for your goal setting session.

I have attached the agenda for the planning session. Below are a couple of highlights:

- On Friday evening, we will kick off with a presentation by Dr. Jay Golden, East Carolina University Vice Chancellor of Research, Economic Development and Engagement. He will share information about our region and opportunities in Greenville, Pitt County, and Northeastern North Carolina.
- At the request of Mayor Connelly, City staff will share research and information about economic development in Greenville and North Carolina, highlighting lessons learned and successful projects.

- On Saturday morning, Carl Stenberg with the UNC School of Government will facilitate a goal setting session for the Council.
- On Saturday afternoon, Michael and Bernita will provide a mid-year budget update as well as review the draft Capital Improvement Program.

In the final wrap-up, we will discuss how to move the identified goals forward from both a City Council and staff perspective.

On Friday evening, dinner will be available beginning at 4:15 p.m., and we will start our session at 4:30 p.m. On Saturday, breakfast will be provided at 8:15 a.m., and the session will start at 8:30 a.m. Lunch will be available at 11:45. I recommend business casual attire for attendees.

On behalf of the staff, we are excited about this Planning Session. It should be an exciting opportunity to think about and prepare for the future of our great city. Remember Abraham Lincoln's words as we create the future for Greenville.

dr

cc: Emanuel McGirt, City Attorney
Carol Barwick, City Clerk
Michael Cowin, Assistant City Manager
Ken Graves, Assistant City Manager
Department Heads
Roger Johnson, Economic Development and Revitalization Manager

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Speaker Bios

Dr. Jay S. Golden

Vice Chancellor of Research, Economic Development and Engagement

Dr. Golden's teaching interest is in the areas of sustainable systems engineering. The topics include industrial ecology, industrial symbiosis, environmental life cycle assessment, urban climatology, energy modeling, process and risk modeling. He also teaches sustainable energy and energy resource topics.

Dr. Golden's research covers sustainable systems and production consumption systems of earth resources used for engineered infrastructure and manufactured goods. Current areas of focus include risks and resiliency resulting from increased industrialization of terrestrial-based biological feedstocks and the interactions with water and energy. In addition Dr. Golden explores the thermodynamic drivers of local scale and meso-scale climate from engineered infrastructure and the resulting implications to energy, ecosystem services and human health.

Dr. Golden received his Ph.D. in engineering from the University of Cambridge, and his master's degree in environmental engineering and sustainable development from a joint program of the Massachusetts Institute of Technology and the University of Cambridge. He also holds a Professional Mastery of Project Management Certificate from Stanford University and has a bachelor's degree in management. He also holds an MLE from Harvard University.

In 2009, Golden was presented the Faculty Pioneer Award by the Aspen Institute for his leadership in the field of sustainability education & research and named by Ethisphere as one of the 100 Most Influential People in Business Ethics. Prior to arriving at East Carolina University, Golden was a faculty member and chair of the Business & Environment program at Duke University.

Carl W. Stenberg III

James E. Holshouser Jr. Distinguished Professor of Public Administration and Government

Carl Stenberg joined the School of Government in 2003. Previously, he served as dean of Yale Gordon College of Liberal Arts, University of Baltimore; director of the Weldon Cooper Center for Public Service, University of Virginia; executive director of the Council of State Governments; and assistant director of the US Advisory Commission on Intergovernmental Relations. He is former feature editor of *Public Administration Review* and co-author of *America's Future Work Force*. Stenberg is a Fellow and former chair of the Board of Directors of the National Academy of Public Administration and past president of the American Society for Public Administration. He served as director of the MPA program at the School of Government from 2006 to 2011. Stenberg holds a BA from Allegheny College and an MPA and a PhD from the State University of New York at Albany.

OVERVIEW OF THE 2016-18

STRATEGIC PLAN

A Greater Greenville

Planning Session Goals and Objectives 2016-2018



Final Update



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EXECUTIVE SUMMARY

The Greenville City Council held its annual planning session on January 29-30, 2016, in City Hall. During the retreat, City Manager Barbara Lipscomb prepared a reorganization of the strategic plan into eight goals based on the input from citizens in the Horizons Comprehensive Plan Update. This document highlights the progress made toward achieving the Council's established short and long term priorities.

VISION STATEMENT

The City of Greenville is a vibrant, innovative, and inclusive community with unique and sustainable neighborhoods; an abundance of first-class arts, cultural and recreational opportunities; well-maintained and cost-effective infrastructure; a diversity of transportation options; and a strong business climate supported by entrepreneurialism and top-quality educational institutions.

MISSION STATEMENT

The City of Greenville's mission is to provide all citizens with high-quality services in an open, inclusive, professional manner, ensuring a community of excellence now and in the future.

GOALS

GOAL 1: BUILDING GREAT PLACES THAT THRIVE

The City of Greenville will be home to active, vibrant, and distinct places that are linked through a high-quality, walkable, and beautifully built environment.

GOAL 2: ENHANCING ACCESSIBLE TRANSPORTATION NETWORKS AND PUBLIC BUILDING, PUBLIC INFRASTRUCTURE DEVELOPMENT

Greenville's transportation corridors will provide accessibility to destinations throughout the city by complementing the built environment and offering well-connected, safe, and attractive travel networks for bicyclists, pedestrians, drivers, and users of public transportation.

GOAL 3: GOVERNING WITH TRANSPARENCY AND FISCAL RESPONSIBILITY

Greenville will encompass a culture of transparency and strategic focus in all aspects of City management.

GOAL 4: GROWING THE ECONOMIC HUB OF EASTERN NORTH CAROLINA

Greenville, a city that supports business development, entrepreneurialism, and labor force training, will have high-quality employment opportunities for an increasingly diverse population.

GOAL 5: CREATING COMPLETE NEIGHBORHOODS

Greenville will offer a variety of excellent living options for its growing and increasingly diverse population, while supporting established neighborhoods and their existing residents.

GOAL 6: GROWING A GREEN AND RESILIENT CITY

Greenville will be home to North Carolina's greenest city. Greenville will grow safely by protecting the city's natural water systems and managing development in hazardous areas.

GOAL 7: MAKING A HEALTHY AND VIBRANT CITY

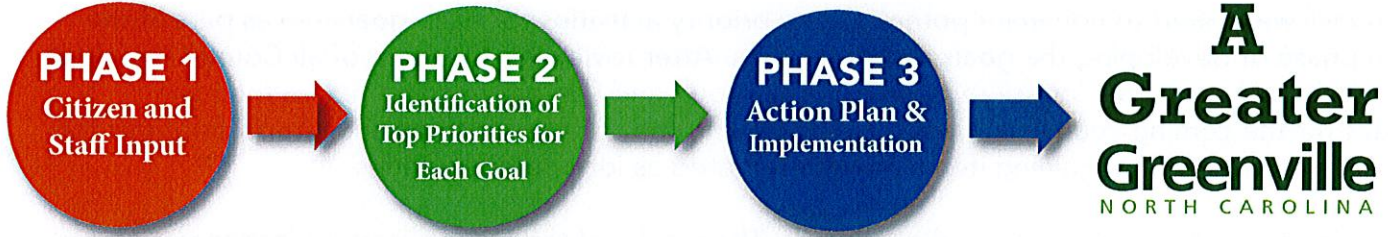
As the cultural and healthcare hub of eastern North Carolina, residents and visitors will benefit from Greenville's rich arts and entertainment opportunities, inspiring parks and civic spaces, excellent health services, and healthy local food options.

GOAL 8: SAFE COMMUNITY: PUBLIC SAFETY SERVICES

Greenville will continue to be a safe community, utilizing police, fire/rescue, code enforcement, building inspection services, and other public safety services, thereby enhancing the quality of life for all citizens in partnership with all people in our community.

DEVELOPMENT PROCESS

The City of Greenville's recent planning process consisted of three key phases as depicted below.



PHASE 1: CITIZEN AND STAFF INPUT

The first phase of developing the most recent goals and objectives involved soliciting input from citizens and staff.

CITIZEN INPUT

The reorganization of the strategic plan into eight categories was based on input from citizens in the Horizons Comprehensive Plan update. Horizons 2026 is Greenville's long-range process to update the City's comprehensive plan. This plan will provide a renewed vision and blueprint for the city's future.

At the time of the City Council Planning Session, seven clear vision statements for each goal area had been developed based on the citizen input component of the Horizons Plan. City Manager Lipscomb added an eighth category for a "Safe City" that was not addressed in the Horizon's plan.

STAFF INPUT

During the retreat, City Council members were presented with staff reports on a variety of topics. Council provided feedback on each presentation.

— Economic Development staff provided updates on current activity on economic development projects. Staff also shared a presentation on parking issues in the uptown area. Council feedback included:

- Focus on analytics. Look for more measurement of activity - how much money from outside of Greenville is spent here. Use NCDOT tools related to commuting activity.
- North of the river activity needs to be a priority - retail and pharmacy.
- Put fresh eyes on our economic development zones. Continue to look at high traffic corridors.
- Focus on bringing jobs to the area, particularly within the city limits.
- East Carolina University and Pitt Community College are advantageous.
- Economic Development should put together a proactive marketing plan and update its website.
- Explore expanding incentive options.
- Retention and expansion of jobs are also important.
- Look longer term e.g. creating a large industrial center. Think regionally.

— Financial Services staff presented an update on the mid-year 2015-16 budget status and budget projections for 2017 and 2018. The presentation was a forecast based on six months of data.

— Staff presented a capital funding plan with a vision to develop predictable capital financing with minimal impact on the taxpayers.

PHASE 2: IDENTIFY TOP PRIORITIES FOR EACH GOAL

During the January 2016 planning sessions, City Council members were asked to review posters for each of the eight goals. Staff provided updates on completed activities in each goal area as well as ongoing or mandatory activities.

The Council was asked to nominate potential new priority activities for each goal area as part of the second phase of developing the goals and objectives. After reviewing the work of all Council members across each goal area, the Council reconvened as a group and was asked to nominate their top priorities for the coming year. Lists were developed with the top two or three short-term priorities for the next two years. The remaining items were designated as long-term priorities.

Below in green are the eight proposed goal areas. The results of the Council's prioritization voting are summarized, including the short and long-term priorities. Updates on the current progress made toward each priority are included.

1. BUILDING GREAT PLACES THAT THRIVE

Short-Term Priorities

- **Fund Town Common - all of it**
 - Budget included \$1.3 million total for FY 16-17 & 17-18. Remaining projects expected to be completed in spring of 2018 include restrooms and a kayak/canoe launch. City is moving forward with design for Sycamore Hill Gateway and a spray pad.
- **Regional Sports Complex**
 - CSL International presented three concepts - nadatorium, an indoor complex, or rectangular fields in January 2017. There is currently no funding allocated for this project.
- **Gallery District**
 - OED has been working with the Arts Coalition on defining and implementing an "Arts District" in the Dickinson area. Pitt County Arts Council is pursuing SmART designation and funding.

Longer Term Priorities

- **Town Common/Tar River Bridge**
 - Adoption of the Town Common Master Plan set the stage for an ongoing series of phased improvements to the park. The playground and fishing pier are complete. Old antennae tower was removed. The Sycamore Hill Gateway was approved.
- **GO Science Partnership**
 - GO Science and A Time for Science have merged. A new executive director at A Time for Science has established regularly recurring programming. GO Science also recently signed a lease extension.
- **Performing Hall/Arts Center**
 - ECU completed a feasibility study for the development of a Performing Hall/Arts Center. Results indicated that the City could benefit from a 500-600 seat performing arts center.
 - Renovation work on the uptown theatre is underway. There is a commitment for a minimum of \$1 million of private funds to be spent and for work to be completed by March 31, 2018.

2. ENHANCING ACCESSIBLE TRANSPORTATION NETWORKS AND PUBLIC BUILDING, PUBLIC INFRASTRUCTURE DEVELOPMENT

Short-Term Priorities

- **Red Light Cameras**
 - Program began in October 2017 at five Greenville intersections.
- **Pedestrian Safety Improvements**
 - Crosswalks in the urban core as well as adjacent to the University have been re-applied. A pedestrian crossing signal was installed at Cotanche and Seventh Street with two others planned at

Cotanche/Ninth Streets and on Moye Boulevard.

- **Street Resurfacing**

- Arlington Boulevard between Memorial Drive and Heart Drive and between Red Banks Road and Fire Tower Road has been rehabilitated as has Red Banks between Arlington and Greenville Boulevard. Hooker Road, Elm Street, and First Street have also been rehabilitated.

- **Frontgate Drive/Thomas Langston Road Connector**

- Initial discussions took place regarding coordination with the property owner/developer on the potential construction of this roadway as part of a larger development. No further progress.

Longer Term Priorities

- **Bus System Merger**

- Greyhound, ECU, and Amtrak will occupy bays when GTAC is completed. Merger talks stalled.

- **Complete Streets**

- Continuing to partner with NCDOT on projects that revolve around "Complete Streets" design.

- **Caution Sound Strips**

- Sound Strips installed on East 10th Street in summer 2016.

3. GOVERNING WITH TRANSPARENCY AND FISCAL RESPONSIBILITY: ADMINISTRATIVE, FINANCIAL SERVICES, INFORMATION TECHNOLOGY, AND HUMAN RESOURCES

Short-Term Priorities

- **Long Term Debt Strategy**

- Complete. Debt Management Policy was presented to City Council in October 2016 and included a proposed long-range debt management strategy.

- **Move the Code Enforcement Division to the Community Development Department**

- Completed in March 2016.

Longer Term Priorities

- **Explore GUC-City Efficiencies**

- Former City Manager and General Manager held initial discussions. GUC seemed uninterested.

4. GROWING THE ECONOMIC HUB OF EASTERN NORTH CAROLINA

Short-Term Priorities

- **Virtual Building**

- Project is complete. Virtual building is on City's OED website and routinely submitted for economic development RFIs. Video is also shown at trade shows and marketing events to attract private capital.

- **Public-Private Partnerships - proactive recruitment**

- Currently, the City is working with Sidewalk, LLC, Community Smith, LLC (theater), the Taft Ward Group, Carolina Projects Equities, LLC (Winslow Point Phase II), and others on redevelopment initiatives.

- The City released a solicitation document for developer proposals for the Imperial Tobacco site project in summer of 2017. The City received three formal proposals.

- City is exploring the possibility of developing large parcels of land for a commercial business park.

- **Analytics with the Economic Development Plan**

- Hired Retail Strategies firm to provide retail data with a focus on economic indicators for Greenville as well as zip code origin of dollars spent in the city with specific emphasis for areas north of the river and in uptown Greenville.

- OED has developed a monthly report identifying the number of jobs created, RFI response, grant activity, investment, and other projects as assigned.

Longer Term Priorities

- **Arts as Economic Development Driver**

- The Arts Council visited three cities with thriving arts districts and benchmarked other successful cities. The plan is currently being created and will include public input, a task force, and budget considerations.

- **Review Incentives Program**

- The Capital Investment Grant was altered to remove dormitory style housing. The alternative incentive for job producing projects has been developed as a draft and is pending Council approval in early 2018.

- **Economic Development Strategy North of the River**

- Retail Strategies completed an analysis of the MSA. The results were presented to the Council in August 2017. Recruitment of specialty pharmacies is currently underway. The analysis showed population density, incomes, and traffic counts do not meet the minimum standards to attract many national retailers.

- **Industrial/Commercial Park**

- A study of 300 acres near US 264 SW Bypass found the land was not suitable for an industrial park. Discussions with Pitt County have started to locate an alternate location.

- **Innovation/Entrepreneurship Ecosystem**

- Greenville SEED is open and operational and currently home to 10 new startup businesses. SEED is joining other partners to launch a Shark Tank style pitch competition in February 2018.

5. CREATING COMPLETE NEIGHBORHOODS

Short-Term Priorities

- **Lighting - LED**

- More than 1,500 LED street lights have been converted or installed in the West Greenville, Stantonsburg Road, Kristin Drive, Riverbluff Road, and Westpointe areas. More conversions planned for the Grid, Stantonsburg Road from Arlington Boulevard to Allen Road, and Memorial Boulevard.

- **Pedestrian Safety Enhancements (Older Neighborhoods)**

- Ongoing: Traffic light and sound strips installed on East 10th Street.

- Crosswalks in the urban core and adjacent to the University have been re-applied. A pedestrian crossing signal was installed at Cotanche and Seventh Street with two others planned at Cotanche/Ninth Streets and on Moye Boulevard.

Longer Term Priorities

- **Parks/Open Space to be Required with New Neighborhoods**

- Staff has developed a schedule for completing this task by the second quarter of 2018.

6. GROWING A GREEN AND RESILIENT CITY

Short-Term Priorities

- **River Access Points to Tar River/Vantage Points**

- Construction of three camping platform sites along the Tar River is complete. Platforms are located off the South Tar greenway along the river near the FROGG's garden and off-leash dog area, at the GUC site, and at the Phil Carroll Nature Preserve.

- **Tar River Master Plan**

- Tar River Legacy Plan was completed and adopted by City Council. Some items such as the fishing pier and camping platforms are complete. Ongoing items include the kayak/canoe launch at Town Common and consideration of acquisition of riverside lake lands for future recreational development.

- **Complete South Greenville Fields Development**

- Multi-purpose sports field was completed and is available for use. It includes sports lighting.

Longer Term Priorities

- **Westside Park**
 - Westpointe Village Park Schematic Plan was approved by the Council in November 2017. Playground equipment has been ordered and will be installed in spring/summer 2018.
- **Countryside Estates Parkland**
 - Appraisal completed. No acquisition funds in the budget.
- **Thomas Langston/South Central**
 - Staff is exploring possibilities with school system about joint uses of park facilities.

7. MAKING A HEALTHY AND VIBRANT CITY

Short-Term Priorities

- **Arts Coalition**
 - Negotiated a 2-year contract with Arts Council to put together a strategic plan and cost estimate for creating a community-supported Uptown Arts District Plan.
- **Farmer's/Organic Market**
 - Down East Farmers Market opened in September 2016 on Saturday mornings at Five Points Plaza for limited first season. Market was open until November 2016. Attendance was sparse.
- **Tar River Legacy Plan Additions**
 - A feasibility assessment completed in 2016 indicated little chance for privately developed and operated adventure park on City land as revenue potential is limited. A focus for this proposed project remains a BMX/skatepark. Three camping platforms have been completed along the river, along with one overlook structure near River's Edge Park. Staff remains interested in acquiring available property bordering the river in response to a Tar River Legacy Plan recommendation.

Longer Term Priorities

- **Community Bike Share**
 - The City is planning to implement a bike share program in 2018.
- **SmART City Designation**
 - Awaiting information from NC Arts Council about whether there has been an increased budget for new cities to apply for the 2017-18 year. Arts Council will be conducting study of arts districts during the next year to determine how we can designate a district in Greenville through such a state program.
- **Art Incubator**
 - Staff continues to work with Arts Council to examine concepts of how downtown can be an art hub.
- **More Diversity on Arts Council**
 - 2016-17 Board is 29% multicultural and continues to focus on cultural and racial diversity and diverse community interaction; African-American Music Series began in the fall of 2016 at Emerge Gallery.
- **Art Walk**
 - Arts Council and Uptown coordinate the event for the first Friday each month.

8. SAFE COMMUNITY: POLICE AND FIRE/RESCUE

Short-Term Priorities

- **South Side Police Precinct**
 - Grand opening of the South Zone Police Substation was held on October 10, 2016.
- **Fund Operations for South Side Fire Station**
 - Funding is included in the City's Long Range Debt Plan. Engineering and design is scheduled for early 2018 with construction currently projected to begin during FY 2018-2019.
- **Explore Joint Communication with Pitt County**
 - The County chose not to co-locate their primary or backup centers in a City-owned facility. Steps are being made to integrate the GPD dispatching center more seamlessly with the County's 911 center.

PHASE 3: ACTION PLANS AND IMPLEMENTATION FOR TOP 10 PRIORITIES

The City Council ranked its top priorities from those listed across all goal areas. The following list identifies the top 10 priorities. It includes the action steps recommended for each priority and an update on the status of those recommendations.



PRIORITY 1: TOWN COMMON — DO THE WHOLE THING

Responsible Department: Recreation and Parks

Staff Contacts: Gary Fenton and Lamarco Morrison

ACTION STEPS AND STATUS UPDATES

1. Add high quality benches, picnic tables, trash/recycling containers and a water fountain to the park. Two additional water fountains to be installed in spring 2016.

Benches, picnic tables, and trash/recycling containers have been installed. A restroom facility will be completed in the spring/summer of 2018.

2. Installation of kayak launch and fishing pier.

The Robert Lee Cherry Fishing Pier was dedicated and opened to the public in April 2017.

The City obtained no-rise certification and state approvals for kayak launch in fall of 2017. City will solicit bids for the project in January of 2017 with the expected completion set for spring of 2018.

3. Construction of Trillium Accessible Playground

Construction was completed, and the new playground was dedicated on November 19, 2016. Grants from Greenville Utilities Commission and Vidant Health totaling \$68,000 were received, and businesses and individual donations totaling \$7,500 also supported the project. Trillium donated \$750,000.

4. Establish schematic design and cost estimates for Phase I development.

Rhodeside and Harwell (RHI) completed the schematic design and cost estimates for the entire Town Common.

5. Update Town Common Master Plan to incorporate Phase I schematics.

The update was completed, and the consultant presented the plan to the City Council on November 10, 2016. The schematic design and cost estimates for the entire park were approved by the Council.

PRIORITY 1 ACTION STEPS AND STATUS UPDATES CONT.

6. **Work with Economic Development and Uptown Greenville to develop a program to establish partnerships, sponsorships**
Recreation and Parks has recently hired a Marketing and Events Coordinator. Establishing partnerships to help with sponsorships and other initiatives is among this person's responsibilities.
7. **Explore possibility of funding alternatives for Town Common improvements identified in the Master Plan.**
Ongoing. A Recreation & Parks Marketing and Events Coordinator was just hired. This is part of her responsibilities.
8. **Greenway/Bridge from Town Common to River Park North**
Several versions of a pedestrian bridge from Town Common to River Park North with varying degrees of projected costs have been discussed by staff and also by an interested citizens' group. The most costly is a stand-alone, "signature" bridge. More economical possibilities involve the addition of a "bike and ped" structure to the existing Greene Street bridge or the a dedication of a single existing lane of the bridge to two-way pedestrian and bicycle use. Staff continues to explore alternatives for funding, including the possibility of STIP support.

PRIORITY 2: FARMER'S/ORGANIC MARKET

Responsible Departments: Community Development and CMO-Office of Economic Development

Staff Contacts: Ben Griffith and Roger Johnson

ACTION STEPS AND STATUS UPDATES

1. **Form Task Force**
Completed in March 2016.
2. **Staff evaluates current landscape**
 - a. Benchmark farmer's markets of five similar cities
 - b. Public input process
 - c. Determine interest from vendors
 - d. List all existing conditions

Met with key stakeholders in March 2016. This included Pitt County Farmer's Market representatives, Uptown, and Coalition for Healthier Eating. Other steps were completed by April 2016.
3. **Report to City Council on findings and staff recommendations**
Interim recommendation was to pilot a Farmer's Market concept at Sunday in the Park concert series.
4. **Consideration by City Council**
Staff reviewed and evaluate pilot program and presented findings and recommendations to the Council in the fall of 2016.
5. **Implementation of approved recommendations**
Pilot program was started in conjunction with Sunday in the Park in June 2016. This pilot program did not successfully attract enough vendors to be sustainable. The City Manager's Office attempted a second pilot on Saturday mornings at Five Points Plaza. The Down East Farmers Market opened on Saturday mornings at Five Points Plaza in September 2016. It remained open until November 2016. The market was not continued in 2017 due to lack of vendor interest.

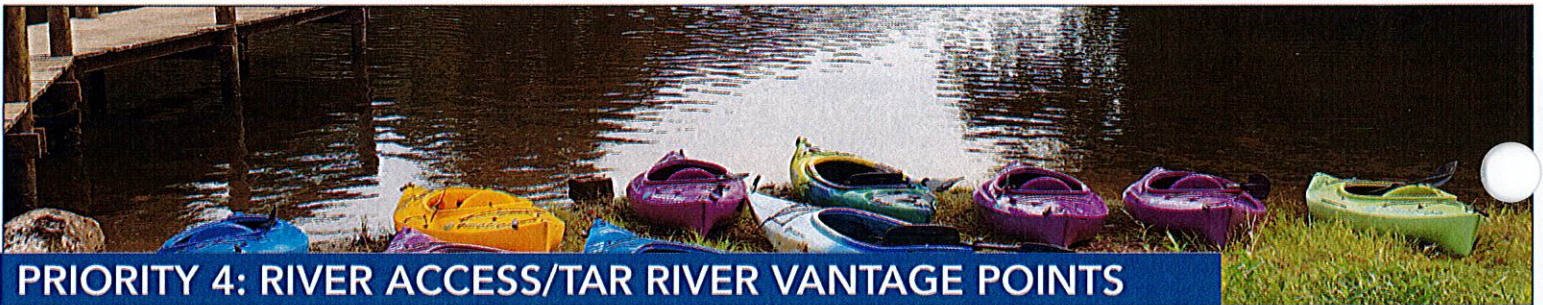
PRIORITY 3: LONG-TERM DEBT STRATEGY (COMPLETE)

Responsible Department: CMO-Office of Budget and Evaluation

Staff Contacts: Michael Cowin and Shelley Leach

ACTION STEPS AND STATUS UPDATES

- 1. Model capital projects funded every three, four, and five years under the Long Term Bond Strategy and determine the General Fund resources required to fund projects under each scenario**
Debt strategy was presented to City Council and approved in October 2016.
- 2. Develop budget based on strategy of reinvesting annual reductions in debt service expense into the financing of future capital projects**
FY 17 Budget and FY 18 Financial Plan was adopted on June 16, 2016.
- 3. Look for ways to fund the "Big Idea" related to tourism and economic development through public and private partnerships**
Ongoing. The Tar River bridge, Coastal Plain Baseball League and other Town Common improvements were discussed at Council's planning session in January 2017.



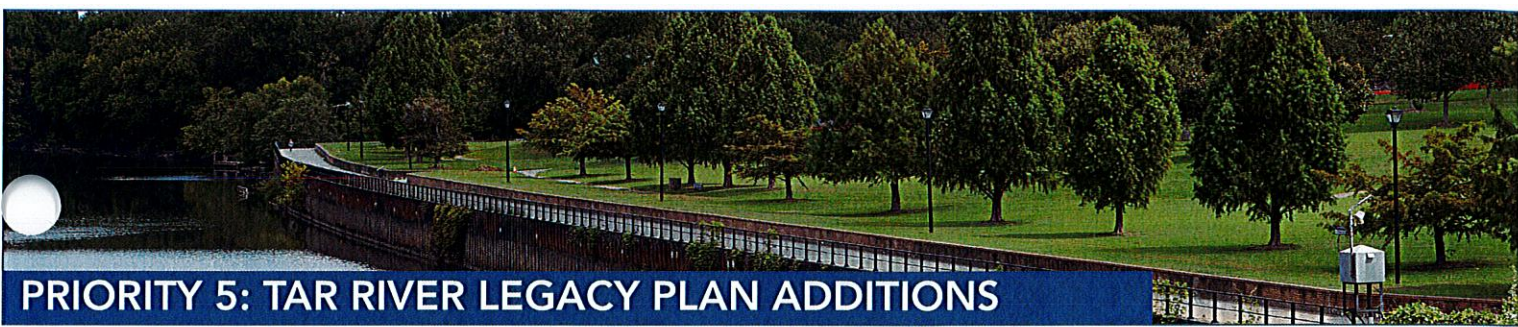
PRIORITY 4: RIVER ACCESS/TAR RIVER VANTAGE POINTS

Responsible Department: Recreation and Parks

Staff Contacts: Gary Fenton and Lamarco Morrison

ACTION STEPS AND STATUS UPDATES

- 1. Develop river overlook project along greenway near Off-Leash Dog Area**
Overlook structure completed in late December of 2016; located off the South Tar Greenway along the river near the FROGG's garden and off-leash dog area. Benches were installed in February of 2017.
- 2. Identify two additional locations for river overlook structures and an observation tower. Complete procurement engineering and design for these projects.**
Additional locations have not yet been identified. Three camping platforms have been built along the Tar River; located at River Park North, the GUC site, and the Phil Carroll Nature Preserve. The platforms are open for public use by reservation only.
- 3. Town Common fishing pier/kayak launch project**
The Robert Lee Cherry Fishing Pier was dedicated and opened to the public in April 2017.
The City obtained no-rise certification and state approvals for kayak launch in fall of 2017. Expected completion is set for spring of 2018.



PRIORITY 5: TAR RIVER LEGACY PLAN ADDITIONS

Responsible Department: Recreation and Parks

Staff Contacts: Gary Fenton and Lamarco Morrison

ACTION STEPS AND STATUS UPDATES

- 1. Investigate possibility of public/private partnership for the development and operation of an "adventure park" on City-owned riverside lands, as recommended by the Tar River Legacy Plan**

A feasibility assessment completed in 2016 by Strategic Adventures indicated little chance for privately developed and operated adventure park on City land as revenue potential is limited. A focus for this proposed project remains a BMX/skatepark.

Local BMX and skateboarding enthusiasts continue to investigate funding possibilities from within the extreme sports industry.
- 2. Develop visible, economical, river-related projects to generate excitement and support for additional and bigger initiatives. A project being considered is the installation of "hammock stations" at the Town Common and along the river, to create places to enjoy the river.**

An overlook shelter along the river was completed at River's Edge Park near the off leash dog area, and three riverside camping platforms were completed at various sites along the Tar River. Additionally, the development of a kayak/canoe launch at Town Common is underway with anticipated completion by spring of 2018.
- 3. Issue a request for proposals for private outfitters to operate river-related rental facilities and programs at the Town Common and other public sites along the Tar River**

On hold pending the Town Creek Culvert construction.
- 4. Complete a Phase I Environmental Assessment of the old landfill site to determine suitability for various outdoor activities, such as a motocross facility or mountain bike track.**

Terracon, Inc., completed a Phase I and Phase II environmental assessment of the City's closed landfill on Second Street. The assessment affirmed that the site could be reclaimed for certain recreational purposes, such as a BMX/skate park, dirt bike trails, and primitive walking trails.
- 5. Investigate possibilities for a Parks and Recreation Trust Fund (PARTF) grant for various river-related projects associated with the Tar River Legacy Plan.**

Staff remains interested in acquiring property in response to the Tar River Legacy Plan recommendation regarding acquiring "lake properties to expand recreational opportunities." Purchase would qualify for PARTF funding, but would require an in-kind or financial match. Staff has met with PARTF representatives regarding this issue. Deadline for applications is May 1, 2018.



PRIORITY 6: VIRTUAL BUILDING (COMPLETE)

Responsible Department: CMO Office of Economic Development

Staff Contact: Roger Johnson

ACTION STEPS AND STATUS UPDATES

1. Budget estimate

Completed in March 2016. \$47,000 estimated cost.

2. Contract scope services

Contract was executed with the East Group following June 2016 budget approval by City Council.

3. Seek partners

The City collaborated with the Pitt County Development Commission, which had a team member serving on the taskforce that created the virtual building. The City has also worked with the NCEast Alliance on marketing.

4. Site compatibility (Imperial Site)/Site preparedness

City contracted with Cardno to manage the clean up of environmental contamination at the Imperial Tobacco site through a Brownfields Grant. The Imperial Site is currently under contract with DFI for development that includes Class A office space.

5. Consideration of two additional sites

Ongoing. The East Group evaluated two sites (South Greenville and north of the Tar River) as a practical location for building a 30,000 square feet (or larger) building and required parking. The southern site is being developed and is no longer a practical site. Staff has used the virtual building in response to 5 RFI's. The building has also been used as a demo tool for 2 foreign companies, 3 mixed-use/retail developers and 6 site selectors. The building has also been shown at conferences and trade shows. The City has yet to land direct investment or jobs producing projects with the virtual building.

PRIORITY 6 ACTION STEPS AND STATUS UPDATES CONT.

6. Building design standard

The East Group has designed a 30,000 square foot building that can readily be expanded to 60,000 square feet. The design was presented to City Council during its 2017 Planning Session.

7. Create video

Marketing video was completed in late 2016.

8. Marketing Plan

The Office of Economic Development staff created the collateral marketing material in conjunction with Pitt County Development Commission staff. The Pitt County Development Commission, NCEast Alliance, and the Office of Economic Development use the marketing materials, new website, and virtual building video to market Greenville to the back office community. An email blast about the virtual building was sent to more than 900 site selectors, and the virtual building is currently being marketed at conferences and trade shows.

9. Launch plan to market to High Value Back Office Operations

The Office of Economic Development completed marketing materials that have been distributed to site selectors, been included in RFI's, been distributed at trade shows, and is on the City's Office of Economic Development website.



PRIORITY 7: RED LIGHT CAMERAS (COMPLETE)

Responsible Department: Police

Staff Contact: Chief Mark Holtzman

ACTION STEPS AND STATUS UPDATES

1. Presentation to City Council for legislative approval of program

Completed in March 2016.

2. Presentation of program to Transportation and Parking Commission

Completed in March 2016.

Presentation of program to the Pitt County Board of Education

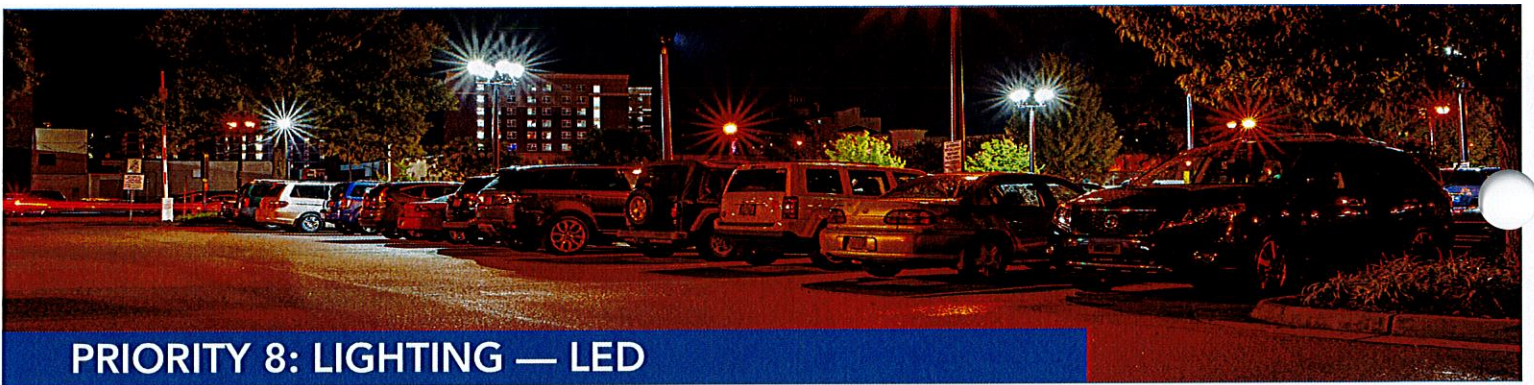
3. Completed in March 2016.

Presentation of program to the Pitt County Board of Commissioners

4. Completed in April 2016.

5. Pursue legislative action to grant the City of Greenville authority during the 2016 Legislative session of the North Carolina General Assembly.

The State approved the program on June 29, 2016. The cameras were activated in October of 2017. The first month was a warning period, and ticketing began in mid-November 2017. As of January 18, 2018, there had been 3,582 tickets issued for red light violations.



PRIORITY 8: LIGHTING — LED

Responsible Departments: Police and Public Works

Staff Contact: Chief Mark Holtzman and Kevin Mulligan

ACTION STEPS AND STATUS UPDATES

- 1. Upgrade LED street lighting on West Fifth area and Vance Street, total of 82 lights**
Completed in March 2016.
- 2. Upgrade decorative sidewalk lights on East Fifth Street from downtown to East Carolina University (42 lights)**
Completed in March 2016.
- 3. Public Works to upgrade street lights to LED on 10th Street in the area of Greenville Boulevard and Copper Beach**
Completed in March 2016.
- 4. Address lighting in Crime Reduction Initiative Areas (CRIA) in West Zone**
850 LED lights in West Greenville were installed. Additional lighting has been installed in some outlying neighborhoods such as WestPointe, Kristin Drive, and Riverbluff Road. Statistics show a 19 percent drop in violent crimes and property crimes in West Greenville since the installation.
- 5. Provide residential lighting upgrades through donations in West Zone**
Approximately 850 LED lights have been installed in West Greenville and some outlying areas.
- 6. Explore LED lighting in other CRIA's throughout the city**
The City's Capital Improvement Plan includes \$750,000 for streetlight and camera improvements. Public Works will work with Greenville Police to determine the needs in the remaining CRIA's throughout the city.
- 7. New street light installation (LED) on major thoroughfares in City based on pedestrian/traffic data (10th Street, Stantonsburg Road, Memorial Drive, etc.)**
LED lighting on Stantonsburg Road between Memorial Drive and Arlington Boulevard has been installed. The next phase of Stantonsburg Road between Arlington Boulevard and Allen Road and Arlington Boulevard between Memorial Drive and Fire Tower Road is scheduled to be completed this fiscal year.
- 8. Continue with LED conversion of street lights**
Street lights in the uptown urban core between Pitt Street and Reade Street and First Street are expected to be complete by the end of January 2018.

PRIORITY 9: ARTS COALITION

Responsible Department: CMO — Office of Economic Development

Staff Contact: Roger Johnson

ACTION STEPS AND STATUS UPDATES

- Budget request for a Visual and Performance Master Plan identification or arts in the Central Business District along with a short-term focused plan for arts within a defined area of uptown**
Benchmark cities were identified and visits were held to help with a short-term focused plan for arts within a defined area of uptown.
- Expand scope of Pitt County Arts Council (PCAC) in contract**
City entered into a two-year contract with the Pitt County Arts Council to put together a strategy, plan and cost estimate for creating a community-supported Uptown Arts District Plan. The Arts Council visited three cities and benchmarked other successful cities. City Council was updated on the progress. The plan is currently being created and will require public input, a task force, and budget considerations. The plan will be presented to the City Council by the end of the fiscal year.
- Seek City Council concurrence with plan**
Discussions continue. Arts Council will share a plan with the City Council when it is completed.

PRIORITY 10: SOUTHSIDE POLICE PRECINCT (COMPLETE)

Responsible Department: Police

Staff Contact: Chief Mark Holtzman


ACTION STEPS AND STATUS UPDATES

- Site selection for Southside Station**
Completed in March 2016.
- Presentation to City Council for lease approval**
Completed at March 14, 2016 City Council meeting.
- Construction of interior space using current FY16 funds (estimate under \$80,000)**
Completed in July 2016.
- Open substation**
Grand Opening held for Southside substation in October of 2016.
Substation has increased accessibility, providing easier access and parking for the public.
Substations often provide convenience for officers with regards to response times due to the proximity of the substation to some calls for service.

MID-YEAR BUDGET UPDATE

MEMORANDUM

TO: Ann Wall, City Manager

FROM: Michael Cowin, Assistant City Manager 

DATE: January 16, 2018

SUBJECT: Mid-Year Financial Update

Enclosed is the financial information for the six months ending December 31, 2017. The report includes the fiscal year 2018 mid-year financial update for the General Fund and the following Enterprise Funds: Transit, Sanitation, and Stormwater.

GENERAL FUND:

The following is a summary of the General Fund revenues and expenses for the six months ending December 31, 2017 as compared to six months ending December 31, 2016:

Description	Budget FY 2018	Actual Six Months 12/31/2017	Actual Six Months 12/31/2016
Total Revenues	\$ 80,893,720	\$ 46,906,531	\$ 45,390,561
Total Expenses	92,085,640	42,510,309	42,646,792
Revenue Less Expense	(11,191,920)	4,396,222	2,743,769
Fund Balance Appropriated	11,191,920	-	-
Net	\$ -	\$ 4,396,222	\$ 2,743,769

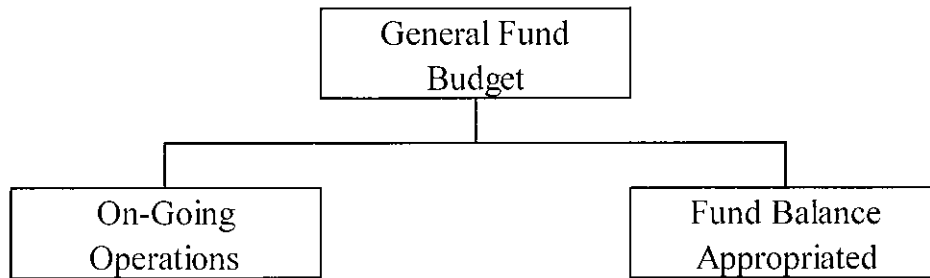
General Fund revenues exceeded expenses by approximately \$4,396,222 for the six months ending December 31, 2017 as compared to \$2,743,769 for the six months ending December 31, 2016.

The following is a commentary on the primary factors impacting General Fund revenues and expenses through the first half of fiscal year 2018. The discussion is broken down into the following sections:

1. General Fund Budget Components
2. General Fund Revenues
3. General Fund Expenses
4. Mid-Year General Fund Projection

General Fund Budget Components:

The General Fund budget is comprised of two components depicted as follows:



- **On-Going Operations:** On-Going Operations includes annual, recurring revenues received by the City, as permitted by State law and City ordinance, to carry out the City’s day-to-day functions. Such revenues include Property Tax, Sales Tax, and the Utility Franchise Tax on piped natural gas and electricity. Revenues also include the likes of Inspection Fees and the Transfer In from Greenville Utilities Commission (GUC) based on the formula included in the Charter between the City and GUC.

The revenues received by the City are used to fund the City’s core services. The revenues are used to fund the likes of public safety, road resurfacing, street lights, and maintenance of the City’s property. Revenues are also used to cover the cost of support services such as Information Technology, Human Resources, and Financial Services.

- **Fund Balance Appropriated:** Fund Balance appropriated represents the allocation of the City’s excess reserves to fund specific, unique purposes as approved by Council. The appropriation of Fund Balance is not used to balance the on-going, day-to-day operation of the City. The appropriation of Fund Balance is most commonly used for the following purposes:

1. To cover purchase orders that were open as of the end of the prior fiscal year (i.e. prior year encumbrances)
2. To cover the cost of projects funded in the prior fiscal year but not yet started by the beginning of the current fiscal year (i.e. prior year carryover)
3. To cover the cost of various projects funded with Powell Bill funds
4. To fund various one-time projects as part of the City’s Long Range Debt Plan

Fund Balance is appropriated in the fiscal year budget within the parameters of the Council’s Excess Fund Balance policy. The City’s policy is to maintain an Unassigned General Fund Balance of at least 14% of the total annual General Fund budget. This policy is evaluated by Council through City staff as part of the annual financial audit.

The following is a summary of the City's fiscal year 2018 General Fund budget broken down by component:

Description	On-Going Operations	Fund Balance Appropriated	Total Budget
Revenues			
Property Tax	\$ 32,750,000	\$ -	\$ 32,750,000
Sales Tax	18,823,000	-	18,823,000
Utilities Franchise Tax	7,102,077	-	7,102,077
Motor Vehicle Tax	1,503,457	-	1,503,457
Inspections Fees	950,000	-	950,000
Rescue Fees	3,127,484	-	3,127,484
Recreation Fees	1,999,487	-	1,999,487
Investments	500,000	-	500,000
GUC Transfer In	6,612,415	-	6,612,415
Powell Bill	2,220,065	-	2,220,065
All Other Revenues	5,305,735	-	5,305,735
Total Revenues	80,893,720	-	80,893,720
Expenses			
Personnel	\$ 53,265,688	\$ -	\$ 53,265,688
Operating	16,015,881	2,070,127	18,086,008
Capital Improvement	1,517,862	2,420,335	3,938,197
Reimbursement Indirect Cost	(1,459,519)	-	(1,459,519)
Transfers Out	11,053,808	6,701,458	17,755,266
Other Expenses	500,000	-	500,000
Total Expenses	80,893,720	11,191,920	92,085,640
Revenue Less Expense	-	(11,191,920)	(11,191,920)
Fund Balance Appropriated	-	11,191,920	11,191,920
Net	\$ -	\$ -	\$ -

For fiscal year 2018, expenses are budgeted to exceed revenues by approximately \$11,191,920 (highlighted in Green above). Fund Balance in the amount of \$11,191,920 has been appropriated to make up this difference. The appropriated Fund Balance of \$11,191,920 is included in the total expense budget of \$92,085,640. In other words, budgeted expenses have been increased by \$11,191,920 in order to cover the cost of the purposes for which Fund Balance has been appropriated. The following is a breakdown of Fund Balance appropriated in the budget by purpose and by the expense category in which the Fund Balance is included:

Purpose for Appropriation	Expense Category			
	Operating	Capital Improvements	Transfers Out	Total
Prior Year Encumbrances	\$ 1,373,252	\$ -	\$ -	\$ 1,373,252
Powell Bill Projects	-	712,578	-	712,578
One-Time Projects Including Prior Year Carryover	696,875	1,708,007	6,701,208	9,106,090
Total Fund Balance Appropriated	\$ 2,070,127	\$ 2,420,585	\$ 6,701,208	\$ 11,191,920

Approximately \$9,106,090 was appropriated in fiscal year 2018 to cover various one-time projects, including carryover from the prior year. The following is a list of projects funded with the appropriation of Fund Balance:

Project	Expense Category			Total
	Operating	Capital Improvements	Transfers Out	
Street Lights and Cameras	\$ -	\$ -	\$ 826,225	\$ 826,225
NCDOT Firetower Road Project	-	-	431,869	431,869
NCDOT Street Signal Conversion	-	-	912,000	912,000
Dickinson Avenue Parking	-	-	138,734	138,734
Town Common Gateway	-	-	2,000,000	2,000,000
Dickinson Avenue Streetscape	-	-	1,600,000	1,600,000
Replacement of 911 System	-	-	312,830	312,830
Public Safety Storage Building	-	-	225,500	225,500
Westpointe Park Bathroom	-	-	63,050	63,050
2016 Police COPS Grant	-	-	181,500	181,500
Other Miscellaneous Projects	-	-	9,500	9,500
Eastside Park Development	-	123,900	-	123,900
Fire/Rescue Parking Lot #3	-	139,551	-	139,551
Fire Station #2	-	244,665	-	244,665
Fire/Rescue Defibrillators	-	35,500	-	35,500
City Hall Upgrades	-	13,519	-	13,519
Purchasing Expansion	-	187,270	-	187,270
Greenmill Run Greenway	-	11,323	-	11,323
Mast Arm Poles	-	100,000	-	100,000
Parking Lot Upkeep	-	81,903	-	81,903
Cemetery Enhancements	-	30,000	-	30,000
Signal Progression	-	35,000	-	35,000
Sidewalk Construction Program	-	412,056	-	412,056
Westpointe Land Acquisition	-	26,735	-	26,735
Donation Carryover From FY2017	205,109	-	-	205,109
ED Revolving Loan Fund	-	266,585	-	266,585
Façade Improvement Grants	26,000	-	-	26,000
Adopted Budget Ordinance	465,766	-	-	465,766
Total	\$ 696,875	\$ 1,708,007	\$ 6,701,208	\$ 9,106,090

The appropriation of Fund Balance to fund one-time projects and prior year carryover has been accomplished within the requirements of the Council's Excess Fund Balance policy. The appropriation of Fund Balance within fiscal year 2018 maintains this policy as follows:

FY2017-18 Budget Less Powell Bill	\$ 79,081,156
Fund Balance Percentage	14.00%
Calculated Fund Balance	<u>\$ 11,071,362</u>
Unassigned Fund Balance per FY2016-17 Audit	\$ 20,177,452
Calculated Fund Balance	<u>(11,071,362)</u>
Amount Available for Appropriation	9,106,090
Amount Appropriated FY2018	<u>(9,106,090)</u>
Adjusted Amount Available for Appropriation	<u>\$ -</u>

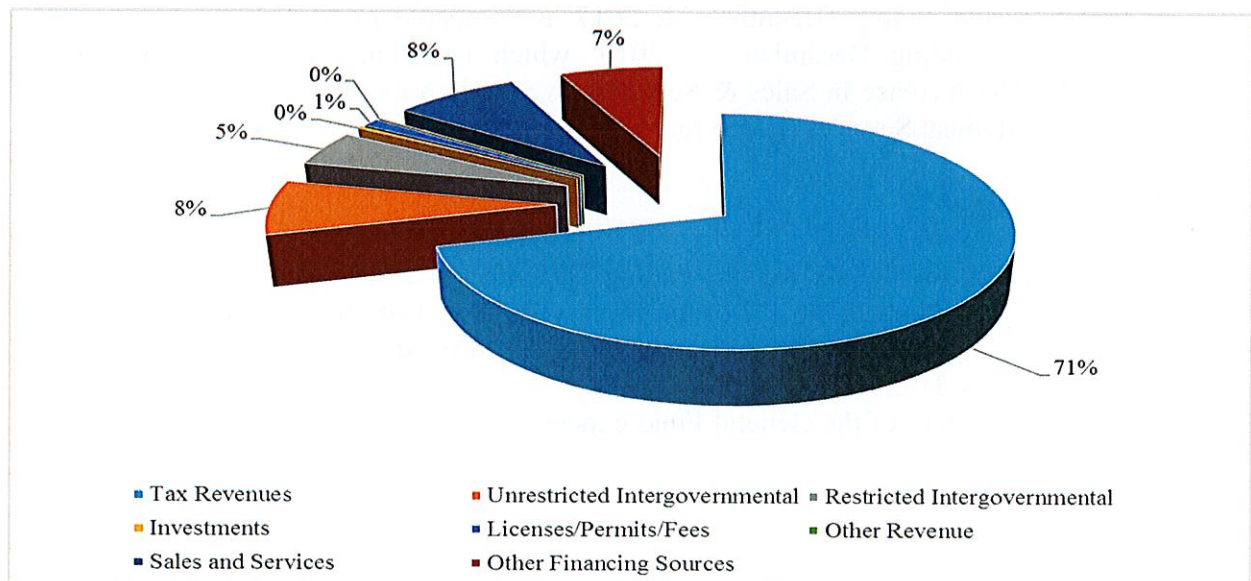
General Fund Revenues:

General Fund revenues for the six months ending December 31, 2017 stand at \$46,906,531, which accounts for approximately 58.0% of the fiscal year budget of \$80,893,720. For the six-month period, actual revenues are approximately \$1,515,970 higher than the prior year six-month period ending December 31, 2016.

The following is a summary of the General Fund revenues for the six months ending December 31, 2017:

Description	Budget FY 2018	YTD Actual FY2018	Remaining Budget	YTD Actual FY2017	Variance	% Variance
Tax Revenue	\$ 53,076,457	\$ 32,660,355	\$ 20,416,102	\$ 31,574,813	\$ 1,085,542	3.4%
Miscellaneous Tax	1,071,145	492,373	578,772	528,839	(36,466)	-6.9%
Unrestricted Intergov	7,590,418	3,549,968	4,040,450	3,549,615	353	0.0%
Restricted Intergov Streets	2,377,065	2,202,481	174,584	2,257,441	(54,960)	-2.4%
Restricted Intergov	356,580	130,440	226,140	349,414	(218,974)	-62.7%
Investment Earnings	500,000	139,292	360,708	46,799	92,493	197.6%
Licenses/Permits/Fees	705,838	518,998	186,840	413,581	105,417	25.5%
Other Revenue	482,764	25,168	457,596	199,961	(174,793)	-87.4%
Sales and Services	7,966,534	3,932,365	4,034,169	3,444,053	488,312	14.2%
GUC Transfer In	6,612,415	3,233,463	3,378,952	3,007,677	225,786	7.5%
Other Financing Sources	154,504	15,846	138,658	-	15,846	0.0%
Miscellaneous	-	5,782	(5,782)	18,370	(12,588)	-68.5%
Total Revenues	\$ 80,893,720	\$ 46,906,531	\$ 33,987,189	\$ 45,390,561	\$ 1,515,970	3.3%

The following graph depicts the composition of actual year-to-date revenues for fiscal year 2018 through six months by revenue type:



six months, current year tax revenues are tracking 3.4% higher than the previous year coming in at \$32.7 million as compared to \$31.6 million for the prior year period.

Nominally, this amounts to a one million dollar positive variance for the six-month period ending December 31, 2017 as compared to the six-month period ending December 31, 2016, summarized as follows:

Description	YTD Actual FY 2018	YTD Actual FY 2017	Variance
Property Tax	\$ 25,425,676	\$ 24,686,584	\$ 739,092
Sales Tax	6,617,740	6,366,201	251,539
Motor Vehicle Tax	616,939	522,028	94,911
Total	<u>\$ 32,660,355</u>	<u>\$ 31,574,813</u>	<u>\$ 1,085,542</u>

- **Restricted Intergovernmental:** Restricted Intergovernmental revenues include various grant monies from state, federal, and local agencies restricted to Public Works and Economic Development functions. Through six months, actual revenues stand at approximately \$130,440 as compared to \$349,414 for the prior year. This variance is primarily due to the timing of the receipt of grant monies.
- **Investment Earnings:** Investment Earnings stand at \$139,292 through six months, which is approximately \$92,493 greater than the six-month period ending December 31, 2016. The increase is due to the timing of coupon payment postings and the variability of investment transactions.
- **Other Revenue:** Other revenues stand at approximately \$25,168 for the six-month period ending December 31, 2017 as compared to \$199,961 for the six-month period ending December 31, 2016. This variance is primarily due to the timing of the recording of inventory sales related to the implementation of the City's new work order system.
- **Sales and Services:** Sales & Services revenue stands at approximately \$3,932,365 for the six-month period ending December 31, 2017 as compared to \$3,444,053 for the six-month period ending December 31, 2016, which is an increase of approximately \$488,312. The increase in Sales & Services revenue is primarily due to an increase in Emergency Medical Services (EMS) rescue fee billings.

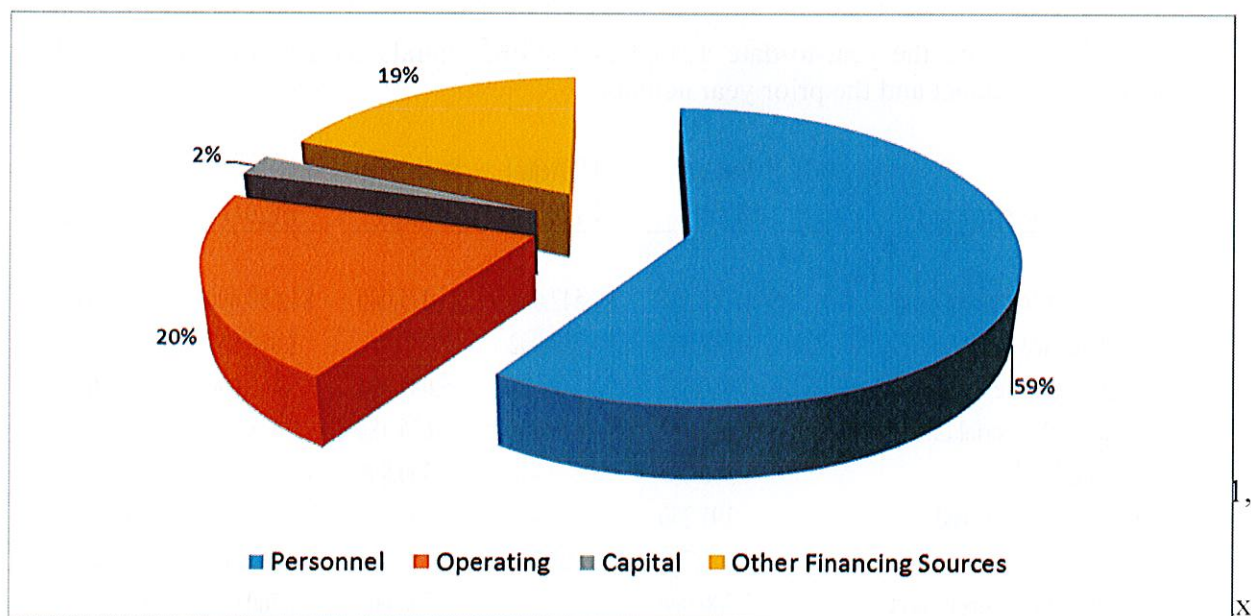
General Fund Expenses:

General Fund expenses for the six months ending December 31, 2017 stand at \$42,510,309, which accounts for approximately 46.1% of the fiscal year budget of \$92,085,640. For the six-month period, actual expenses are approximately \$136,484 lower than the prior year six-month period ending December 31, 2016.

The following is a summary of the General Fund expenses for the six months ending December 31, 2017:

Description	Budget FY 2018	YTD Actual FY2018	Remaining Budget	YTD Actual FY2017	Variance	% Variance
Personnel	\$ 53,265,688	\$25,160,853	\$ 28,104,835	\$ 24,844,693	\$ 316,160	1.3%
Operating	17,957,682	8,608,146	9,349,536	8,095,442	512,703	6.3%
Capital	4,566,523	969,717	3,596,806	827,618	142,099	17.2%
Other Financing Sources	16,295,747	7,771,593	8,524,154	8,879,039	(1,107,446)	-12.5%
Total Expenses	\$ 92,085,640	\$42,510,309	\$ 49,575,331	\$ 42,646,792	\$ (136,484)	-0.3%

The following graph depicts the composition of actual year-to-date expenses for fiscal year 2018 through six months by expense type:



months and accounts for approximately 59% of total operating expense. Actual personnel expense is approximately \$316,160 higher than the prior year six-month period ending December 31, 2016, which is a 1.3% variance.

The driving force for personnel expense is the City's vacancy rate, which currently stands at approximately 7.0% for the six-month period as compared to a budgeted rate of 4.0%. The actual vacancy rate is expected to decline throughout the second half of the fiscal year due to an increase in hiring for both the Police and Fire/Rescue departments.

- **Operating Expense:** Operating expense stands at approximately \$8,608,146 for the six-month period ending December 31, 2017 as compared to \$8,095,442 for the six-month period ending December 31, 2016, which is an increase of approximately \$512,703.
- **Capital Expense:** Capital spending is 17.2% higher than last year due to increased spending on Town Common and Sidewalk Construction.
- **Other Financing Sources:** Other Financing Sources include both Indirect Cost Reimbursements and Transfers to Other Funds.

The following is a year-to-date breakdown of Other Financing Source:

Description	Budget FY2018	YTD Actual FY2018	Remaining Budget	YTD Actual FY2018	Variance
Transfers to Other Funds	\$ 17,755,266	\$ 8,102,898	\$9,652,368	\$ 9,534,828	\$(1,431,930)
Indirect Cost Reimbursement	(1,459,519)	(331,305)	(1,128,214)	(655,789)	324,484
Total Other Financing Sources	<u>\$ 16,295,747</u>	<u>\$ 7,771,593</u>	<u>\$8,524,154</u>	<u>\$ 8,879,039</u>	<u>\$(1,107,446)</u>

Year-to-date, Other Financing Sources are down 12.5% as compared to the prior year due to the timing of the interfund transfers.

The following are the year-to-date Transfers to Other Funds with a comparison to the current year budget and the prior year actuals:

Description	Budget FY 2018	YTD Actual FY2018	Remaining Budget	YTD Actual FY2017	Variance
To Facility Improvement Fund	\$ 1,777,000	\$1,542,000	\$ 235,000	\$1,590,000	\$ (48,000)
To Debt Service Fund	4,737,002	4,737,002	-	1,678,357	3,058,645
To Capital Reserve Fund	5,082,603	-	5,082,603	460,000	(460,000)
To Sheppard Memorial Library	1,232,969	616,485	616,484	498,774	117,710
To Housing Fund	300,806	-	300,806	-	-
To Special Revenue Fund	191,250	-	191,250	258,303	(258,303)
To Transit Fund	603,781	603,781	-	565,269	38,512
To Street Improvement Project	2,200,000	-	2,200,000	1,700,000	(1,700,000)
To R&P Capital Projects	65,300	65,300	-	1,317,864	(1,252,564)
To South Greenville Capital Project	-	-	-	261,500	(261,500)
To Community Dev Capital Project	-	-	-	1,040,000	(1,040,000)
To Police Capital Projects	538,330	538,330	-	-	538,330
To Street Lighting Capital Project	1,026,225	-	1,026,225	-	-
To King George Road Capital Project	-	-	-	164,761	(164,761)
Total Transfers	<u>\$ 17,755,266</u>	<u>\$ 8,102,898</u>	<u>\$ 9,652,368</u>	<u>\$ 9,534,828</u>	<u>\$(1,431,930)</u>

The Transfers to Other Funds budget for fiscal year 2018 is comprised of dollars included in the adopted budget as well as dollars appropriated with Fund Balance by Council to fund capital projects as part of the City's Long Range Capital Funding Plan:

Mid-Year General Fund Projection:

The following is a summary of projected fiscal year 2018 General Fund revenues and expenses based on results through December 31, 2017:

Description	Budget FY 2018	FY 2018 YTD	FY 2018 Projected	Variance
<u>Revenues</u>				
Property Tax	\$ 32,750,000	\$ 25,425,676	\$ 33,446,429	\$ 696,429
Sales Tax	18,823,000	6,617,740	18,759,877	(63,123)
Utilities Franchise Tax	7,102,077	3,483,395	6,713,224	(388,853)
Motor Vehicle Tax	1,503,457	616,939	1,478,943	(24,514)
Inspections Fees	950,000	820,285	1,511,944	561,944
Rescue Fees	3,127,484	1,595,847	3,684,006	556,522
Recreation Fees	1,999,487	803,956	1,918,016	(81,471)
Investments	500,000	139,282	500,000	-
GUC Transfer In	6,612,415	3,233,463	6,651,929	39,514
Powell Bill	2,220,065	2,185,760	2,185,760	(34,305)
All Other Revenues	5,305,735	1,984,188	4,918,952	(386,783)
Total Revenues	<u>80,893,720</u>	<u>46,906,531</u>	<u>81,769,079</u>	<u>875,359</u>
<u>Expenses</u>				
Personnel	\$ 53,265,688	\$ 25,160,853	\$ 51,688,172	\$ 1,577,516
Operating	18,086,008	8,396,213	17,547,345	538,663
Capital Improvement	3,938,197	681,650	2,469,098	1,469,098
Reimbursement Indirect Cost	(1,459,519)	(331,305)	(1,459,519)	-
Transfers Out	17,755,266	8,102,898	17,755,266	-
Other Expenses	500,000	500,000	500,000	-
Total Expenses	<u>92,085,640</u>	<u>42,510,309</u>	<u>88,500,362</u>	<u>3,585,278</u>
Revenue Less Expense	(11,191,920)	4,396,222	(6,731,283)	4,460,637
Fund Balance Appropriated	11,191,920	-	-	(11,191,920)
Net	<u>\$ -</u>	<u>\$ 4,396,222</u>	<u>\$ (6,731,283)</u>	<u>\$ (6,731,283)</u>

For fiscal year 2018, expenses are budgeted to exceed revenues by approximately \$11,191,920 (highlighted in Green above). Fund Balance in the amount of \$11,191,920 has been appropriated in the budget to make up this difference. The appropriated Fund Balance of \$11,191,920 is included in the total expense budget of \$92,085,640.

For fiscal year 2018, actual expenses are projected to exceed actual revenues by approximately \$6,731,283. This amount is lower than the budgeted amount of \$11,191,920. The following is a summary:

<u>Expenses Exceeding Revenues:</u>	
Projected	\$ (6,731,283)
Budgeted	<u>(11,191,920)</u>
Difference	<u>\$ 4,460,637</u>

The amount by which actual expenses are projected to exceed revenues is approximately \$4,460,637 dollars less than what was budgeted for fiscal year 2018. This difference is comprised of various components which are summarized as follows:

1.	Actual Projected Revenues in Excess of Budget: Actual revenues are projected to exceed budget by approximately \$875,359. This difference is primarily due to Property Tax, Inspection Fees, and EMS Rescue Fees as compared to budget.	\$875,359
2.	Personnel Expenses Less Than Budget: Actual personnel expenses are projected to be approximately \$1.6 million less than budget. This is primarily due to the vacancy rate averaging 7% compared to the budget rate of 4%. In addition, the City has seen very positive experience with concerns to the health plan as compared to budget for the first half of the fiscal year.	\$1,577,516
3.	Operating Expenses Less Than Budget: Actual operating expenses are projected to be approximately \$538 thousand less than budget. This is typical with prior years experience. In addition, a portion of this excess will need to be carried over into FY2019 to complete various operating initiatives.	\$538,663
4.	Capital Expense Less Than Budget: Actual capital expenses are projected to be approximately \$1.5 million less than budget. As with operating expense, this is consistent with prior year. In addition, a significant amount of this excess may need to be carried over into FY2019 to complete projects that cross over fiscal years.	\$1,469,098
Total		\$4,460,637

Note: The General Fund revenue and expense projections are volatile and subject to change based on economic factors and changes in operation for the remainder of the fiscal year. The projected revenues and expenses are based on year-to-date actuals through six months as well as historical experience in the second half of the fiscal year. Projections will be updated monthly based on changes in economic and operating factors.

TRANSIT FUND:

The following are the revenues and expenses for the Transit Fund for the six-month period ending December 31, 2017 as compared to the prior year six-month period ending December 31, 2016:

Description	Budget FY2018	YTD Actual FY2018	Remaining Budget	YTD Actual FY2017	Variance	% Variance
<u>Revenues</u>						
Sales and Services	\$ 380,014	\$ 134,305	245,709	\$ 126,840	\$ 7,465	5.9%
Intergovernmental	1,757,197	455,517	1,301,680	182,235	273,282	150.0%
Transfers In	603,781	603,781	-	565,269	38,512	6.8%
Appropriated Fund Balance	157,313	-	157,313	-	-	0.0%
Total Revenues	\$ 2,898,305	\$ 1,193,603	\$ 1,704,702	\$ 874,344	\$ 319,259	36.5%
<u>Expenses</u>						
Personnel	\$ 1,163,282	\$ 651,842	\$ 511,440	\$ 541,035	\$ 110,807	20.5%
Operating	1,216,240	350,142	866,098	387,630	(37,488)	-9.7%
Capital Outlay	518,783	123,079	395,704	100,724	22,355	22.2%
Transfers Out	-	-	-	104,000	(104,000)	-100.0%
Total Expenses	\$ 2,898,305	\$ 1,125,063	\$ 1,773,242	\$ 1,133,389	\$ (8,326)	-0.7%
Revenues Less Expenses	\$ -	\$ 68,540	\$ (68,540)	\$ (259,045)	\$ 327,585	

For the six-month period ending December 31, 2017, actual revenues exceeded expenses by approximately \$68,540, whereas expenses exceeded revenues by approximately \$259,045 for the prior year six-month period ending December 31, 2016. It is very typical for the Transit Fund to have a negative net result during the first half of the fiscal year, as the majority of the fund revenues are FTA and NCDOT grant reimbursement based. The fund is projected to meet both budget for revenues and expenses based on the percentage spent year-to-date.

The following are a few highlights for the Transit Fund through six months:

- **Intergovernmental Revenue:** Intergovernmental Revenue has increased by approximately \$273,282 for the first half of fiscal year 2018 as compared to fiscal year 2017. This is primarily due to the timing of grant reimbursement revenues received for each respective fiscal year.
- **Transfers In:** Transfers In reflect the amount by which the Transit Fund is subsidized by the General Fund. The year-to-date actual revenues for both fiscal years 2018 and 2017 are reflective of the amount budgeted in the General Fund to support Transit operations.
- **Personnel Expense:** Personnel expense has increased by approximately \$110,807 for the first half of fiscal year 2018 as compared to fiscal year 2017. This is reflective of the increased cost of salaries and benefits, as well as the staffing of previously vacant positions.
- **Transfers Out:** The 100% reduction in Transfers Out is due to the prior year transfer of carryover grant funding to the GTAC project.

SANITATION FUND:

The following are the revenues and expenses for the Sanitation Fund for the six-month period ending December 31, 2017 as compared to the prior year six-month period ending December 31, 2016:

Description	Budget FY2018	YTD Actual FY2018	Remaining Budget	YTD Actual FY2017	Variance	% Variance
<u>Revenues</u>						
Sales and Services	\$ 7,544,480	\$ 3,081,494	4,462,986	\$ 3,038,214	\$ 43,280	1.4%
Other Revenues	74,806	49,242	25,564	30,461	18,781	61.7%
Appropriated Fund Balance	243,789	-	243,789	-	-	0.0%
Total Revenues	\$ 7,863,075	\$ 3,130,735	\$ 4,732,340	\$ 3,068,675	\$ 62,060	2.0%
<u>Expenses</u>						
Personnel	\$ 3,098,675	\$ 1,332,652	\$ 1,766,023	\$ 1,483,592	\$ (150,940)	-10.2%
Operating	4,076,548	1,338,382	2,738,166	1,831,666	(493,284)	-26.9%
Capital Outlay	318,093	168,337	149,756	30,210	138,127	0.0%
Transfers Out	369,759	250,000	119,759	237,816	12,184	5.1%
Total Expenses	\$ 7,863,075	\$ 3,089,371	\$ 4,773,704	\$ 3,583,284	\$ (493,913)	-13.8%
Revenues Less Expenses	\$ -	\$ 41,364	\$ (41,364)	\$ (514,609)	\$ 555,974	

For the six-month period ending December 31, 2017, actual revenues exceeded expenses by approximately \$41,364, whereas expenses exceeded revenues by approximately \$514,609 for the prior year six-month period ending December 31, 2016.

The following are a few highlights for the Sanitation Fund through six months:

- **Sales and Services:** Sales and Services revenues account for approximately 99% of the fund's total revenues. Actual year-to-date Sales and Services revenues reflect a rate of \$16.00 per month for curbside and multi-family service, which is an increase of \$0.25 per month from the fiscal year 2017 rate of \$15.75. Revenues for the first half of the fiscal year have increased accordingly by approximately \$43,280.
- **Personnel Expense:** Personnel expense has decreased by approximately \$150,940 for the first half of fiscal year 2018 as compared to fiscal year 2017. This decrease is the net of the increased cost of salaries and benefits and the decrease in actual expense related to current vacancies within the department.
- **Capital Outlay:** The 100% increase from the prior year is due to the purchase of a new sanitation truck.
- **Transfers Out:** Transfers Out expense is reflective of the repayment of a \$750,000 loan taken out with the Vehicle Replacement Fund. In fiscal year 2016 Council approved a \$750,000 loan between the Sanitation Fund and the Vehicle Replacement Fund so as to

establish a net positive Fund Balance within the Sanitation Fund. As part of the agreement, the Sanitation Fund is to repay the Vehicle Replacement Fund approximately \$250,000 each year for three years. Fiscal year 2018 reflects the second year of the repayment agreement with the final year of repayment being scheduled for FY2019.

STORMWATER FUND:

The following are the revenues and expenses for the Stormwater Fund for the six-month period ending December 31, 2017 as compared to the prior year six-month period ending December 31, 2016:

Description	Budget FY2018	YTD Actual FY2018	Remaining Budget	YTD Actual FY2017	Variance	% Variance
<u>Revenues</u>						
Stormwater Utility Fee	\$ 5,928,998	\$ 2,464,243	3,464,755	\$ 2,188,610	\$ 275,633	12.6%
Appropriated Fund Balance	2,539,228	-	2,539,228	-	-	0.0%
Total Revenues	\$ 8,468,226	\$ 2,464,243	\$ 6,003,983	\$ 2,188,610	\$ 275,633	12.6%
<u>Expenses</u>						
Personnel	\$ 1,469,997	\$ 584,672	\$ 885,325	\$ 596,992	\$ (12,320)	-2.1%
Operating	3,459,025	191,248	3,267,777	204,426	(13,178)	-6.4%
Capital Outlay	1,807,149	157,228	1,649,921	54,560	102,668	188.2%
Transfers Out	1,732,056	101,514	1,630,542	203,028	(101,514)	-50.0%
Total Expenses	\$ 8,468,226	\$ 1,034,662	\$ 7,433,564	\$ 1,059,006	\$ (24,344)	-2.3%
Revenues Less Expenses	\$ -	\$ 1,429,581	\$ (1,429,581)	\$ 1,129,604	\$ 299,977	

For the six-month period ending December 31, 2017, actual revenues exceeded expenses by approximately \$1,429,581 whereas revenues exceeded expenses by approximately \$1,129,604 for the prior year six-month period ending December 31, 2016.

The following are a few highlights for the Stormwater Fund through six months:

- **Stormwater Utility Fee:** The Stormwater Utility Fee accounts for 100% of the funds actual revenues and is based on a rate of \$5.35 per equivalent residential unit (ERU). This represents an increase of \$0.50 per ERU from the rate of \$4.85 charged for fiscal year 2017.
- **Capital Outlay:** The increase from the prior year is due to an increase in dollars appropriated to stormwater emergency repairs.
- **Transfers Out:** Transfers Out for fiscal year 2018 reflect the timing of the indirect cost transfer from the fund to the General Fund. Additional funds were appropriated per Budget Amendment #5 to fund projects associated with the Watershed Master Plan.

Upon review of the mid-year financial report, please let me know if you have any questions.

Cc: Ken Graves, Assistant City Manager
Bernita Demery, Director of Financial Services

SUPPLEMENTAL INFORMATION:

**(1) “THE NEXT BIG THINGS: THE
NEXT TWENTY YEARS IN
LOCAL GOVERNMENT”**

**(2) “ELEVEN SIGNS A CITY WILL
SUCCEED”**

**(3) HORIZONS 2026 PLAN
VISION FRAMEWORK,
SUSTAINABILITY THEMES AND
BIG IDEAS**



 [#NBT](#)

THE NEXT TWENTY YEARS IN LOCAL GOVERNMENT



The Alliance for Innovation is inspiring innovation to advance communities. As the premier resource for emerging practices in local government, the Alliance is building cultures of innovation and connecting thought leaders in the profession with the help of our partners ICMA and ASU. We are accessible and valuable to all levels of an organization.

transformgov.org

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I. ARE WE
FUTURE READY?

 #NBT

An Open Letter from the Alliance for Innovation



When the Alliance for Innovation completed its recent strategic plan, we committed to discovering the "next big things" facing local governments. We challenged ourselves to look beyond the horizon we could see, and imagine what our cities and counties might look like one generation from now. It was an audacious task, undertaken to ensure that our members and their successors—the most innovative city and county leaders on the planet—are well equipped to face the future, whatever it holds.

We chose a twenty-year time horizon.

Why? Twenty years is the average length of a generation.

Thinking twenty years into the future enables us to get out of our own way and imagine a future beyond ourselves when many of us will be retired, or handing the reins to our successors. Thinking of the kinds of communities our children and grandchildren will inherit – and the communities we have served and loved – often brings out the best in us: we want to imagine the greatest number of possibilities and when those possibilities impact those we love, we bring focus to the task.

But thinking twenty years into the future is also difficult. The human brain is hard-wired for pattern recognition. And patterns, by their nature, are based on events that have already happened. Because the brain is not geared for future thinking, we used a set of tools, Strategic Foresight, and a team of trained Futurists to guide this process.

The timing is terrific. Many experts and city professionals say that we are entering "the city century", an era when local government will definitively surpass regional, state, and national governments as the lead innovators in how we deal with change – from climate change to infrastructure financing, from mobility to education, urbanization, and beyond.

To identify the next big things, we worked with experienced and emerging professionals, a global panel of subject matter experts, and all the data available to us. As you'll learn, some of the next big things aren't "big" in a traditional sense; they're pernicious, quietly growing in strength over time. Others are surprising, and communities must choose whether to ignore, mitigate, or adapt.

Whether you're a member of the Alliance for Innovation or not, we expect that *The Next Big Things* will influence your local government conversation. But even more, we hope it will help your community get future-ready.

The future, after all, doesn't just happen to us. The future passes through us.

And the future starts now,

Karen Thoreson
President, Alliance for Innovation
September 23, 2015

II. FOUR FORCES
AND FORTY-FOUR
TRENDS

If we asked you, "What trends are impacting your community?" you could probably fill a large whiteboard. Twice.

To help organize and prioritize the trends impacting communities in the next twenty years, we use the Four Forces model developed by futurist Cecily Sommers. These four forces are agents of mega-change; if any of the four forces are undergoing drastic change or disruption in your community, it will likely mark a significant shift in how citizens act, engage, and respond to each other, and to their government.

In priority order, the Four Forces are:

1

Resources

The availability of resources is most closely tied to survival, so it is the most important force. Resources include the food, water, air, habitat, and other material nature offers. Especially important are the resources that enable energy production. Trends and resource drivers related to this force include: climate, ocean, space, energy, minerals, water, land, food, animals and forest.

2

Technology

Technology includes the tools and knowledge we use to extract and transform resources into new products and capacities that make our lives more comfortable and convenient, or to develop capabilities beyond our physical bodies that allow us to go places and discover new realities. Trends and drivers related to this force include: genetics, robotics, information, nanotechnology, health care, education, collaboration, virtual reality, games, telephony, manufacturing, infrastructure, and capital formation.

3



Demographics

Demographics is the “who” behind society’s changes. People are producers. We produce through our physical and intellectual labor, so “who” is producing matters, e.g. does your community have enough working people to support your very young and very old; do you have the right ratio of women to men; is there enough social cohesion among groups to ensure the good of the community? Trends and resource drivers related to this force include: population growth, the developing world, industrialization, immigration, multiculturalism, multilingualism, nationalism, and conflict.

4

Governance

Distribution and management of society’s assets—resources, technology and people—are administered through the *rule of law* and the *rule of markets*. *Of all the forces, governance is the most reactive, i.e. changes in resources, technology and people often run ahead of government’s capability to deal with them.* Trends and drivers related to this force include: tribalism, market drivers, values, interests, beliefs, online communities, personalization, polarization, and identity politics.

*Communities can use the **Four Forces** model as a way to organize and prioritize the trends impacting them.*

For innovative city and county leaders, it’s sobering to think that you can have the best-run local government (the fourth force), but if there is a serious resource shortage (the first force), an abrupt technology change (the second force), or a significant in-migration or out-migration of people (the third force) it won’t matter; change will be forced upon you. Understanding the four forces and their order of importance is fundamental to building a future-ready community.

In the following pages, we outline these forty-four trends:

Resource Trends

1. Climate Change
2. Food Insecurity
3. Water Shortages & Access
4. Energy Grid Disruption (U.S.)
5. Mining
6. The "NORC" Shift

Technology Trends

7. Digital Citizens
8. Sharing Economy
9. Education Reform
10. Open Innovation
11. Behavioral Insights
12. Unmanning
13. Decentralized Manufacturing & 3-D Printing
14. Global, Digital Currency
15. Carless Communities
16. Infrastructure Overhaul
17. New Financial Partnerships
18. Microgrids
19. Off-Gridding
20. Electric Vehicles
21. Water Recycling
22. Desalinization
23. Nanotechnology
24. Tech-Enabled Health Care
25. Biomimicry

Demographic Trends

26. Tribalism & Identity Politics
27. Structural (Youth) Unemployment
28. Civil Rights Spring
29. Mass Migration
30. Middle Class Map
31. Elder Expense
32. Urbanization: Mega & Mid-Sized
33. Rural v. Urban
34. Smart Citizens
35. Nomadic Workforce
36. Hyper-Localization

Governance Trends

37. Declining Federal Government Effectiveness
38. Trust in Government
39. City-to-City Collaboration
40. VUCA Leadership
41. Citizen Engagement
42. Direct Democracy
43. Corporate and Special Interest Influence
44. Fiscal Uncertainty

Resource Trends

Author: Robin K. White, Ph.D.,
Senior Mediator and Program Director, Meridian Institute

I have had the distinct pleasure to work with thought leaders around the world on developing resilient communities – communities that, when hit with an unexpected and disruptive event, can bounce back even stronger.

But this takes work. And planning. As the Chinese proverb says, "The best time to plant a tree was twenty years ago. The second best time is now."

Being a resilient community means investing now, to be future-ready. Resilient communities honestly assess their vulnerabilities and their assets, and are willing to consider the worst case. This isn't headline-grabbing work. It won't make you popular. And it doesn't win elections. But when your community is rocked by disaster, this is the work that gives us a path forward, through the mess.

Your community has an incredible opportunity to start building its resilience. This document, *The Next Big Things*, lays out dozens of trends that may affect your community. Chief among them are the Resource Trends on the following pages. Your community's understanding of its resources is the most important factor impacting your resilience. Because when your community loses its flow of clean water or affordable energy, nothing else matters. People panic. If you're prepared, you have a way to handle it, to engage people and reroute their emotional energy toward a productive path.

A responsible resilience plan demands that your community understand its resource trends and limitations. Start here.

And if your community discovers that its resources are limited, constrained, or vulnerable, consider it a blessing. Time and again, I have seen communities face the facts squarely, and seen how creative and inspired their solutions can be. Finally, I strongly encourage you to have this discussion about resources and resilience within neighborhoods, at churches, and on the front lines. Top-driven responses to major disruptions often fall short; preparation by local residents is more effective because everyday residents are the ones who will have to live and work through any catastrophe or resource shortage.

I encourage you in your journey to take the long-term view on your resources, and be future-ready.





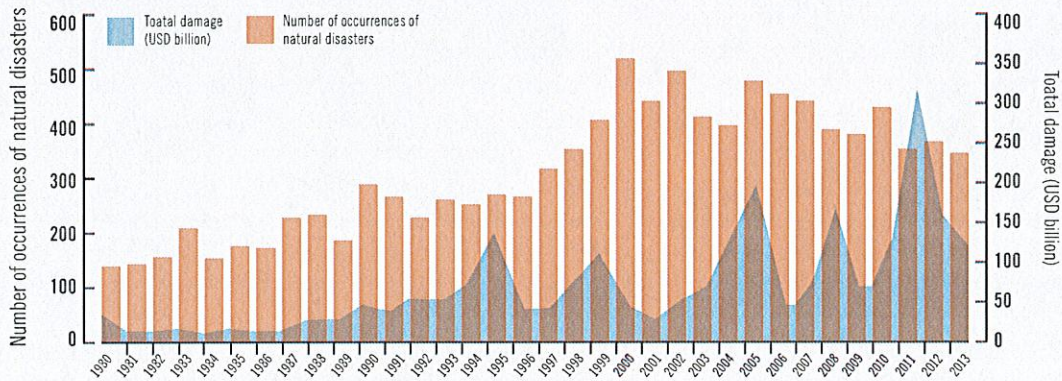
Which of these trends might be the "next big thing" in your community?

1

Climate Change

Over the next twenty years, climate change will be the most important resource issue facing local governments. Climate change affects our oceans, fresh water, arable land and food sources, and animals. Not only are climate-change events like rainstorms, hurricanes and tornadoes growing more intense, the cost of their damages is increasing over time:

Figure 1. Economic Consequences of Global Increase in Occurrence of Severe Weather Events



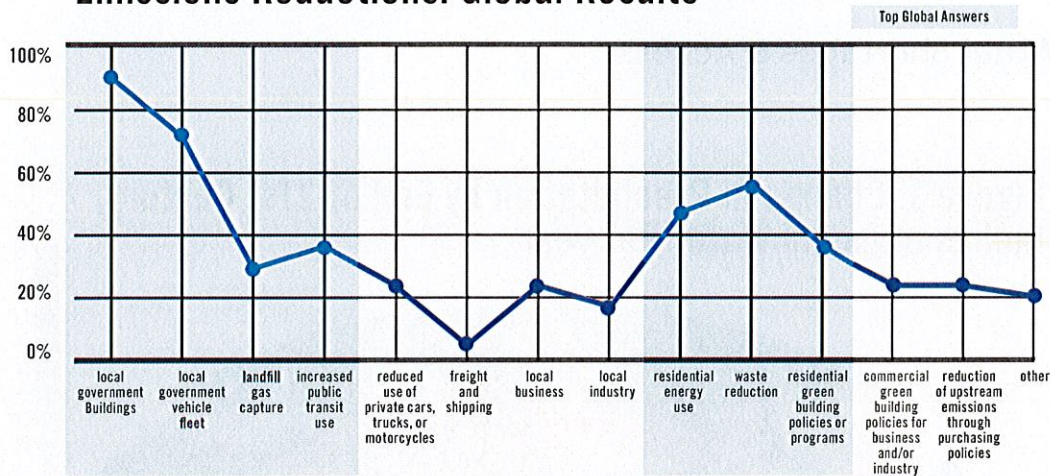
Source: The International Disaster Database, EM-DAT database

Cities and counties are responding. MIT's Alexander Aylett conducted a global survey of cities' responses to climate change and found that Canadian municipalities are international leaders, weaving climate-change plans into other local government department plans, long-range plans, and sustainable development plans. Globally, levels of integration vary by country and region. The United States however is the only country where cities report consistently low levels of integration across different local government plans.¹

¹Aylett, Alexander. 2014. *Progress and Challenges in the Urban Governance of Climate Change: Results of a Global Survey*. Cambridge, MA: MIT.

Local governments use many tools to mitigate climate change through the reduction of greenhouse gases as Aylett's research shows in Figure 2 below

Figure 2. Where Cities Have Made Measurable Emissions Reductions: Global Results



Source: Alexander Aylett, Progress and Challenges in the Urban Governance of Climate Change

The following issues are closely linked to climate change, but may impact communities at various levels of intensity:

2

Food Insecurity

As the planet gets hotter, droughts will drag on longer and with greater intensity. This will lead to decreases in food production, and increases in food prices.

For example, the United States is the lead producer of corn and soya beans, two of the most important primary crops in the world. In 2012 the U.S. Department of Agriculture declared over half of all counties "disaster areas" due to drought.² As corn and soy crops wilted in the heat, food prices increased. This led hungry and desperate people in 28 countries to riot. Links between climate change, food insecurity and political instability have been made in Syria,³ North Korea, Iran and Somalia.⁴ And as food like corn is being diverted to energy production, food prices may become more unstable. To offset these possible food price shocks and

² Michael Muskal, "As drought widens, 50.3% of U.S. counties declared disaster areas," Los Angeles Times, August 1, 2012

³ Colin P. Kelley, Shahrzad Mogtadi, et. al., "Climate change in the Fertile Crescent and Implications of the recent Syrian Drought," Proceedings of the National Academy of Sciences, March 2, 2015

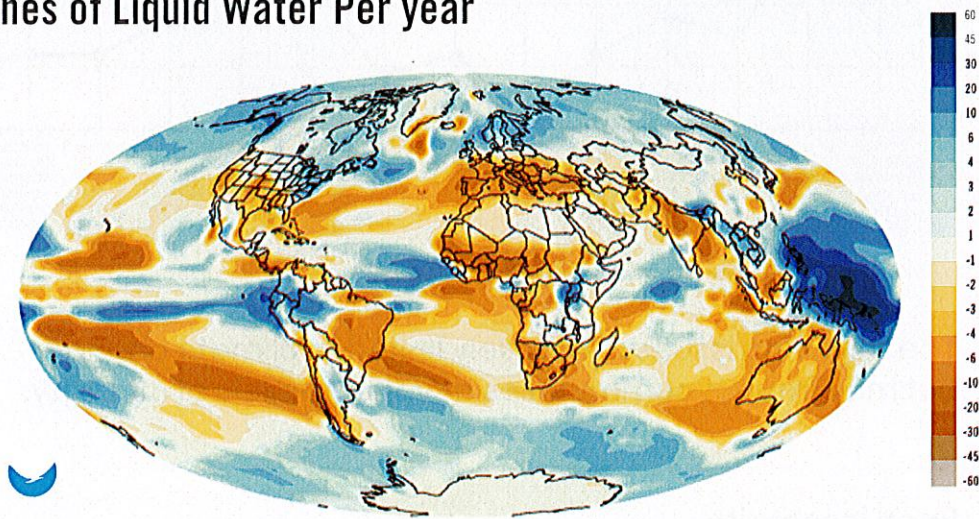
⁴ Johanna Nesseseth Tuttle and Kristin Wedding, "Will Food Prices Drive Instability," Global Forecast 2012, Center for Strategic and International Studies

instability, the G20 is forging agreements on smoother import and export practices (banning protectionism) in an effort to keep food prices relatively stable worldwide. In addition, the private sector is increasingly being called on to offer support for food security and agricultural investment around the world.

3

Water Shortages & Access

Figure 3. Change in Precipitation by End of 21st Century, Inches of Liquid Water Per Year



AS PROJECTED BY NOAA/GFDL CM 2.1

The steady march of climate change is forging ahead and is having a huge impact on water availability. Droughts like the one we are facing now will become more common in the future, and likely even more severe, especially later in the century. It is climate change that is making drought the new normal, and we need to adjust our personal thinking, and our statewide and national water management accordingly.

- Jay Famiglietti, Senior Water Scientist, NASA Jet Propulsion Laboratories

By 2025, two-thirds of the world's population will be living in water-stressed conditions. By 2030, half of the world's population will live in "high water stress" areas. The following maps show the changes from 2010 to 2050 if we do nothing and anticipated population and economic growth proceeds as expected⁵:

Figure 4. Water Stress as a Percent of Total Renewable Water Withdrawn, 2010

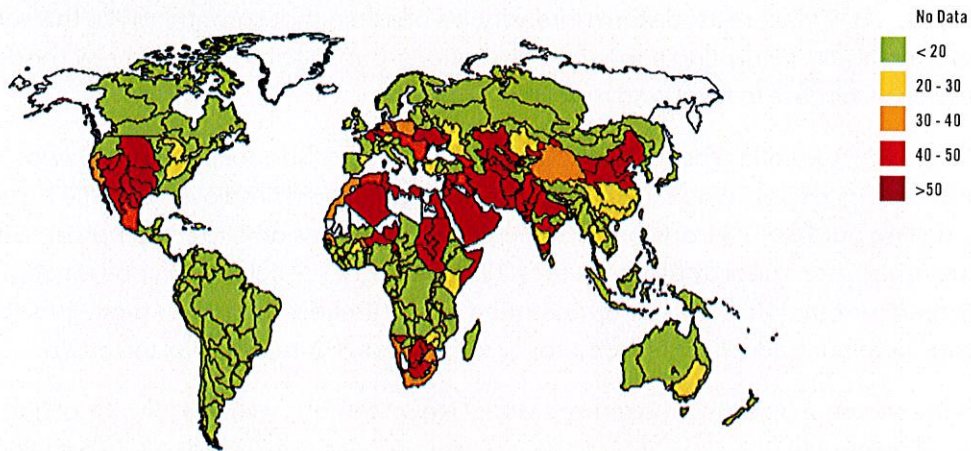
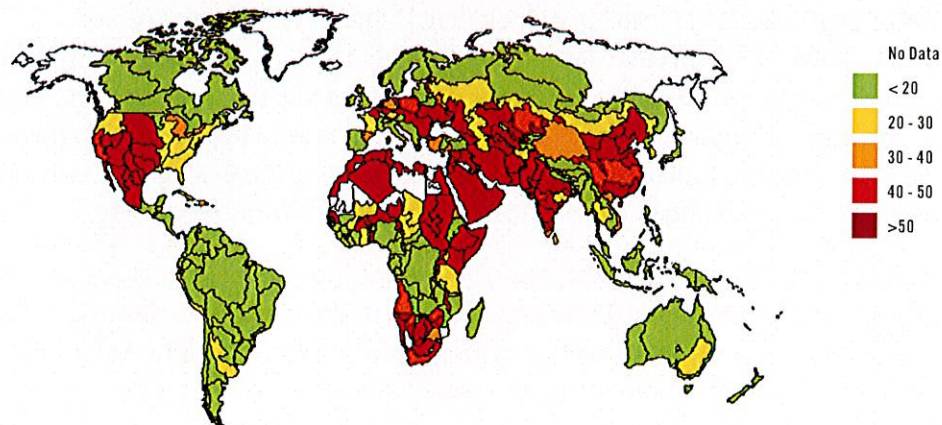


Figure 5. Water Stress by 2050 Under Business As Usual, Medium Growth Scenario



⁵ "Sustaining growth via water productivity: 2030/2050 scenarios", Veolia Water and International Food Policy Research Institute. http://growingblue.com/wp-content/uploads/2011/05/IFPRI_VEOLIA_STUDY_2011.pdf. Accessed June 30, 2015

Energy Grid Disruption (U.S.)

The United States' energy grid is the most complicated machine ever built by man.

We rely on it every day to charge our smart phones, power our refrigerators, operate our lights, and heat and cool our homes. But the grid's transformers and substations were not designed to be protected from physical attack. Many of them sit idly in rural areas, protected by little more than a chain-link fences and guarded by a camera. Just how vulnerable is the grid? In 2003, trees hit transmission lines and caused a cascade of blackouts affecting 50 million people in the Eastern U.S. and Canada for days.⁶ And with increased storm intensity, it's possible that something like this will happen again, disrupting financial transactions, public safety, emergency medical response, access to food, and mobility.

In April 2013, Pacific Gas & Electric announced that its San Jose substation was attacked by people who cut communication cables and fired over 100 rifle bullets, knocking out 16 of 23 transformers. Although PG&E was able to route power to its customers from nearby utilities, it took 27 days to get the substation operational. Sixteen months later, the same substation was attacked again. This highlights the fragility of our grid, and its susceptibility to national or international terrorism.

Many communities, and the entire state of New York, are investigating local grid development to ensure more reliable energy sources. (See trends 18, 19 and 20.)

Mining

Two sources of mining will unlock greater energy resources in the next twenty years. The first, hydraulic fracturing, commonly known as "fracking", is a technique used to access natural gas. In the U.S., the energy industry refers to natural gas as a "bridge fuel" that will help make the transition from coal to renewable energy. Fracking is creating jobs in the energy sector, and is also being studied for its impacts on water and air safety.

As the world's ice recedes and the sea floor becomes accessible, deep sea mining will uncover an estimated 10 billion tons of polymetallic nodules, which are used in everything from electronics to wind turbines and hybrid cars. As with fracking, environmental concerns including the loss of habitat, are expected.

⁶ Rebecca Smith, "Assault on California Power Station Raises Alarm on Potential for Terrorism," *Wall Street Journal*, February 5, 2014, <http://www.wsj.com/articles/SB10001424052702304851104579359141941621778>

⁷ Michael Lodge, "Deep Sea Mining: The New Resource Frontier," 2015. *Outlook on the Global Agenda*. World Economic Forum.

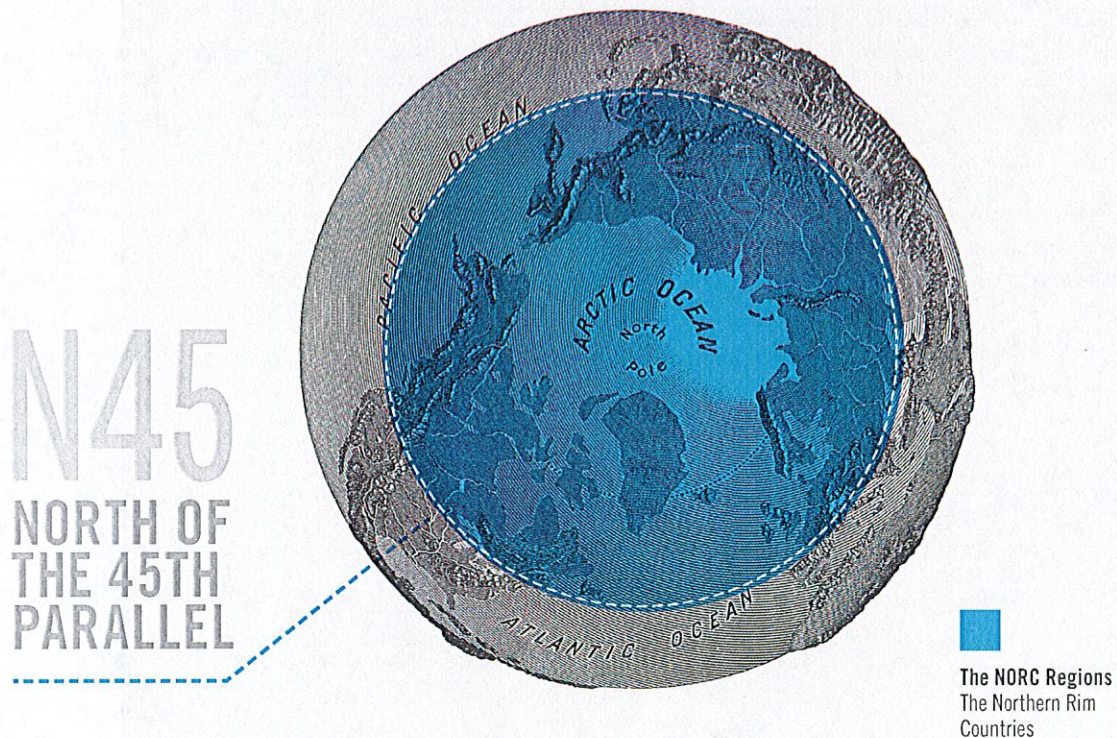
6

The "NORC" Shift

A hotter planet will negatively affect some communities while "positively" impacting others.

The "NORC", or Northern Rim countries, lay north of the 45th parallel and will be beneficiaries of climate change. The NORC regions include Canada, Denmark, Finland, Iceland, Norway, most of Russia, Sweden and the thirteen U.S. states that are contiguous with Canada: Alaska; Washington; Idaho; Montana; North Dakota; Minnesota; Michigan; Ohio; Pennsylvania; New York; Vermont; New Hampshire; and Maine. The NORC regions will experience longer growing seasons and produce more food. And they will also have less ice, which will enable easier shipping routes and access to fuel and nonfuel resources.⁸ They may also be the recipients of massive immigration from other, hotter and drier parts of the world.

FIGURE 6. MAP OF NORTHERN RIM COUNTRIES



⁸ Lawrence C. Smith. *Four Forces Shaping Civilization's Northern Future*. Plume, 2011.

Technology Trends

Author: Erik Johnston, Director, Center for Policy Informatics; Senior Sustainability Scientist, Julie Ann Wrigley Global Institute of Sustainability; and Associate Professor, School of Public Affairs, College of Public Service and Community Solutions, Arizona State University

How does governance evolve when nearly everyone now carries around a personal supercomputer? That smart phone you carry with you is an incredibly useful tool and it is transforming the relationship between publics and their communities. It has replaced your watch, your paper maps, your need to tune-into the local news for the weather, and more. And it has replaced a passive relationship with government with a dynamic one filled with new possibilities, obligations, and consequences.

At the city level, your smart phone, pooled with thousands of other "smart devices", is making your community smarter and more connected than ever.

Or at least, that's the promise.

Technology in the next twenty years will have a transformative effect on how citizens interact with their governments, what they expect from their governments, and what they can provide to their governments.

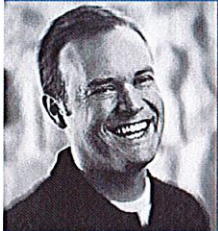
Why? Because for the first time, technology allows real-time, two-way engagement. Publics that stumble across graffiti or potholes or corrupt officials can report them on the spot (the public as sensors). Publics can also show up for a government-sponsored hackathons and turn open data into new insights and apps (the public as inventors). What's more, because of the "internet of things," the amount of data we're able to collect and analyze enables us to be more proactive and more effective in communicating to the public about things that really matter, like weather alerts or how to evacuate in case of a natural disaster (just in time governance customized to individual experiences).

Technology could be a great enabler, improving the relationship between government and citizens. And the quality of that transformation will depend on how local governments respond. Will they see technology and greater citizen engagement as a threat or an opportunity, as a tax on their resources or an investment?

As a cautionary tale, read the "Democracy 3.0 scenario" later in this document; failing to embrace technology for citizens' effective self-governance could create mutiny.

Governments will not be able to dictate *which* technologies are invented, or which go mainstream. Technology will always run ahead of government adoption. But, governments can control how they approach technology and what their goals are.

I suggest that smart, future-ready local governments will mindfully design systems and processes that give citizens clear pathways to interact with government, and will channel their engagement for a greater, social good.





IBM, Cisco, Google and others are in an arms race to apply technology to cities. When Larry Page announced Sidewalk Labs— Google's new venture to improve life in cities for everyone through the application of technology to solve urban problems— he said:

"By improving urban technology, it's possible to significantly improve the lives of billions of people around the world. With Sidewalk, we want to supercharge existing efforts in areas such as housing, energy, transportation and government to solve real problems that city-dwellers face every day."

The future ready community recognizes these trends:

Digital Citizens

In the next 20 years, Millennials and the iGeneration (b. 2002-2022 est.) will define what it means to be a digital citizen. In their book *Digital Citizenship*, authors Karen Mossberger, Caroline Tolbert and Ramona McNeal define digital citizens as "those who use the Internet regularly and effectively". To qualify as a digital citizen, a person generally must have extensive skills, knowledge, and access to the Internet through computers, mobile phones, and web-ready devices to interact with private and public organizations.

In a *Fast Company Magazine* interview, President Obama, father to two Millennials, commented on his hopes for digital citizenship:

"But it's no secret that many people feel alienated and distant from government. And I think the opportunities for us to think about how tech can empower citizens and make them feel ownership for their government is really important.

Some of it is as simple as giving people quick, easy access to information about how taxpayer money is spent, or improving transparency, or being

able to navigate a site easily. But eventually, what we should also be thinking about is, how can technology enhance the experience of democracy? How can we make it easier to vote? How can we make it easier for like-minded citizens to petition their government in a way that is meaningful?

*I look at my daughters, who are, as every teenage kid is today, completely fluent in technology and social media. They might not go to a town hall meeting physically, the way their grandmother might have, and sit through a two-hour debate. Because they're just used to things moving faster. But we can imagine creating a corollary process for them that is consistent with how they interact generally. We can think of apps that promote engagement and the power of people. Their expectations are different, and how they build communities are different. They might be less geographically based."*⁹

There is enormous potential for local governments to leverage technology and become more relevant to citizens. As Madeleine Albright recently noted:

"Citizens are talking to their governments using twenty-first century technology. Governments are responding on twentieth century technology, giving 21st century answers." – Madeleine Albright

Sharing Economy

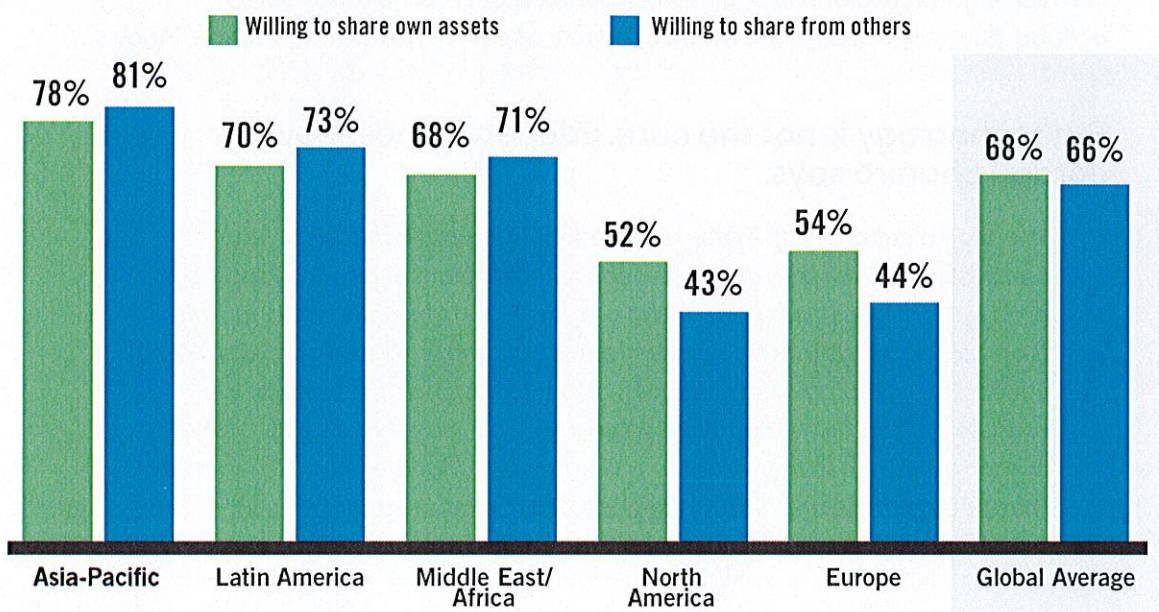
It's been called the sharing economy, the collaborative economy, collective consumption, or peer-to-peer (P2P) networks. Whatever you call it, it generally means eliminating the middleman to share resources, products, and services directly between users, usually via technology.

- o Uber created technology that linked a surplus supply (drivers with cars) with unmet demand (travelers who need rides).
- o AirBnB found a similar market opportunity: people who had extra rooms or homes (supply) were matched with people who needed a place to stay (demand).
- o Crowdfunding matches excess capital (supply) with those who need financing (demand).

The sharing economy is here and growing as more online consumers are willing to participate in sharing communities as Figure 7 shows.

Local governments must figure out how or if to tax these services and how to manage user safety, equity, and keeping a level playing field for existing businesses, especially in light of growing fiscal uncertainty (Trend 44.)

Figure 7. The Rise of the Sharing Economy*



* based on an online survey among 30,000 consumers in 60 countries conducted in Q3 2013

Source: Nielsen and Statista

9

Education Reform

Any discussion about the future of society must include a question about the future of education. In the U.S. for example, student achievement has been slipping for over a decade compared to other countries. At the local level, there is growing evidence that America's public schools under-serve African-American and Latino students, who are growing in numbers. In Madison, Wisconsin— a city that's been named a "Best Place to Live" many times – Caucasian students have an 80% likelihood of graduating from high school; African American boys have a 40% chance. And although STEM (Science, Technology, Engineering and

Math) education has been an international educational focus since the 1990s, most countries have little to show for it. According to the US Department of Education, only sixteen percent of high school seniors are proficient in mathematics and interested in a STEM career.¹¹

New models of teaching and learning will transform education, and technology will enable it, e.g. MOOCs (Massive Open Online Courses) can be customized and personalized to students across the learning continuum; rural and inner city schools will gain access to courses and resources previously unavailable including those from universities, museums and the world's great libraries; and flipped classrooms, in which students do online coursework at home and come to school for collaboration and discussion, will be used to transform the education experience.

But technology is not the cure. Educator and innovator Jordan Shapiro says:

We need a cultural shift in how we think about what it means to learn because we're shifting what you need to learn. Our society is changing in crazy, enormous ways now and in ways we don't fully understand. This is one of the things that drives me crazy about the whole ed conversation: Instead of us having a conversation about what kind of society do we want to see for the next generation and how do we educate kids for that outcome, we're assuming that we all agree on what they need to learn and then finding these utilitarian solutions to try to execute that.¹²

Open Innovation

In October 2006, Reed Hastings of Netflix announced a \$1M (USD) prize for anyone or any team that could develop an algorithm to improve the accuracy of movie predictions for its customers. The "Netflix Prize" would go to the first team that could improve predictions by at least ten percent. It was a three-year competition among data geeks, mathematicians, statisticians and software engineers. It attracted more than 40,000 teams from 186 countries. It was a roll of the dice for Hastings, who'd been wrestling for years to develop a better algorithm.

¹¹ Science, Technology, Engineering and Math: Education for Global Leadership, <http://www.ed.gov/stem>

¹² Westervelt, Eric. 2015. Interview with Jordan Shapiro. "The Future of Education: Truths, Lies, and Wishful Thinking." National Public Radio.

In the end, Hastings got his algorithm. But a bigger lesson was unfolding; the winning team didn't start as a team; they joined forces midway through the competition when they realized that their algorithms and teams were stronger together. In fact, the first time all the team members met was at the awards ceremony. As team manager Chris Volinsky explained, "You need to think outside the box, and the only way to do that is find someone else's box."

Apple, Toshiba, Texas Instruments, Philips, BASF, GlaxoSmithKline, Procter & Gamble, GE, the BBC, US AID, and Nokia have embraced open innovation, realizing the benefits of harnessing inventiveness from outside their corporate walls. Local governments are beginning to catch the wave.¹³

Alliance Board Member Kevin Desouza and co-author Akshay Bhagwatwar surveyed 38 communities and determined four "technology-enabled participatory platforms" that engage the public in solving community issues¹⁴:

- o Citizen-centric, citizen-sourced data. Citizens offer data about themselves, and other citizens analyze the data and offer insights.
- o Citizen-centric, government open data. In this model, the government provides data, e.g. crime details, and the public is invited to analyze and assess the data, and share insights with the community and/or the city.
- o Government-centric, citizen-sourced data. At its broadest, the government is asking for ideas from citizens.
- o Government-centric and citizen-developed solutions. The government provides data and solicits citizens for solutions or helpful applications.

New York and San Francisco have used contests to develop apps from open data.

Behavioral Insights

"The great majority of people in your local area pay their tax on time. Most people with a debt like yours have paid it by now."

¹³ "Open Innovation Success Stories," Idea Connection, <http://www.ideaconnection.com/open-innovationsuccess/>

¹⁴ Desouza, Kevin C. and Akshay Bhagwatwar. 2014. "Technology-Enabled Participatory Platforms for Civic Engagement: The Case of U.S. Cities." *Journal of Urban Technology*, 21.4, 25-50, DOI 10.1080/10630732.2014.954898.

These two sentences written on tax letters in Britain caused a 15% increase in ontime payments. The reason, according to Britain's Behavioral Insights Team, is that we're wired to behave as others do. Other behavioral insights show that things like how government forms are designed impact outcomes, e.g. Dan Ariely has shown that when organ donation is the default option, organ donation increases.¹⁵

In the next twenty years, behavioral insights, coupled with big data, will have a huge impact on local governments. Bloomberg Philanthropies is spearheading the What Works Cities initiative to apply behavioral economics to help 100 midsize U.S. cities deliver better services and become more transparent. Seattle, Boston, Louisville and San Francisco are already putting Bloomberg's behavioral insights to the test and reaping rewards.

Unmanning

We have entered the age of robots, artificial intelligence ("AI") and "smart cities".

At home, Roomba vacuums your floors. Siri or Google Voice responds to voice commands. Amazon is aggressively pursuing authority to deliver packages by drone.

At work, robots do precision manufacturing and medical surgeries. IBM's Watson can read all the medical journals ever printed in the time it takes you to drink your first cup of coffee.¹⁶ At lunch, a Ziosk tablet sits on your table, enabling customers to order food and drinks at the touch of a button, no waiter needed.¹⁷ And the Japanese government is investing millions to develop a \$1,200 to \$1,500 "home health aide" robot. The robots help patients remember their medications, assist in acts of daily living like using the bathroom and bathing, and provide assistance with physical therapy and socialization. The robots solve Japan's nursing and home health aide employment shortage and enables senior citizens to stay in their homes longer.

In northern cities, smart bridges deploy anti-icing agents automatically when sensors perceive the weather conditions for "black ice". Larger cities are experimenting with road sensors that measure traffic and adjust toll prices based on congestion. The more traffic, the higher the toll. In 2014, California issued the first drivers' licenses for autonomous vehicles.

¹⁵ Ariely, Dan, "Three Main Lessons of Psychology", <http://danariely.com/2008/05/05/3-main-lessons-ofpsychology/> accessed on July 12, 2015

¹⁶ Jon Gertner, "IBM's Watson is Learning Its Way to Saving Lives." *Fast Company Magazine*, November, 2012.

¹⁷ Jeff Macke, "Ziosk Could Put Waiters out of Work but not How You Think," *Yahoo Finance*, October 10, 2014.

These technologies make our lives easier. They also eliminate the need for human workers. Oxford researchers estimate that by 2035, nearly half of all occupations in America could be automated.¹⁸

This has several possible impacts.

- o As robots and AI take over jobs that humans once did, there will be possible long-term, structural unemployment.
- o Autonomous vehicles—which most experts agree will be on our roadways within a decade—are less accident prone and more rule-compliant than their human-driven counterparts. This could impact revenue local governments collect from car-related fees and violations.
- o Robotics, AI and smart technology could supplant or transform many jobs currently conducted by local government employees. We already see machines replacing garbage handlers and security cameras replacing patrol personnel. Using Big Data, cities and counties could predict likely tax evaders. Property could be assessed using more indicators, resulting in more fair assessments. And routine requests for filings and forms could be handled online or via kiosks at municipal buildings.

Decentralized Manufacturing & 3-D Printing

Do you shop on the internet and have things delivered to your home? Or do you still shop “the old fashioned way,” by going to the store?

Imagine being able to *print at home* what you want to buy. You could print a new doorknob or a part for an appliance. Wake Forest Baptist Medical Center’s Institute for Regenerative Medicine is collaborating with others to 3-D print bones, skin, muscle tissue, cartilage, and kidneys.¹⁹ The airline industry has 22,000 parts flying through the skies, printed on 3-D printers. At a commercial scale, 3-D printing enables manufacturers to quickly prototype new designs and build extremely agile production facilities.

How will 3-D printing and decentralized manufacturing impact your community’s sales taxes, industrial parks, and employment?

¹⁸ Aviva Hope Rutkin, “Report Suggests Nearly Half of U.S. Jobs are Vulnerable to Computerization,” *MIT Technology Review*, Sept. 12, 2013.

¹⁹ Elizabeth Royte, “What Lies Ahead for 3-D Printing?” *Smithsonian*, May 2013.

Global, Digital Currency

You've heard of bitcoin, right?

Bitcoin is a global, digital currency that has several highly desirable features:

- o It moves from sender to receiver instantly
- o It is hard to dupe the system due to its cryptography and open, public ledger (called the "blockchain")
- o It is cheaper than traditional payment systems because it is exchanged free of a central authority (like a central bank) or middlemen

Whether bitcoin survives as the world's first digital currency or not, the blockchain and related technology has the potential to transform how assets are transferred and fees are collected. The state of Vermont, for example, is undertaking a study to determine if blockchaining could be used for its general ledger²⁰. Banking²¹ and the music industry²² are also studying applications of the blockchain.

Carless Communities

Helsinki, Finland conducted research and found that the next generation "no longer considers cars as a distinctive social marker or object of emancipation."

As a result, they've set an ambitious goal: to eliminate private cars and create a public, on-demand mobility system by 2025. The system will operate through mobile apps, which will be used to book and pay for any multi-modal trip (bus, train, taxi, bicycle and car-sharing) within Helsinki in one click. While Helsinki's model may not work for all cities, the trend towards fewer next-geners buying cars is global, and future-ready cities will be prepared to mobilize citizens without private cars.

Infrastructure Overhaul

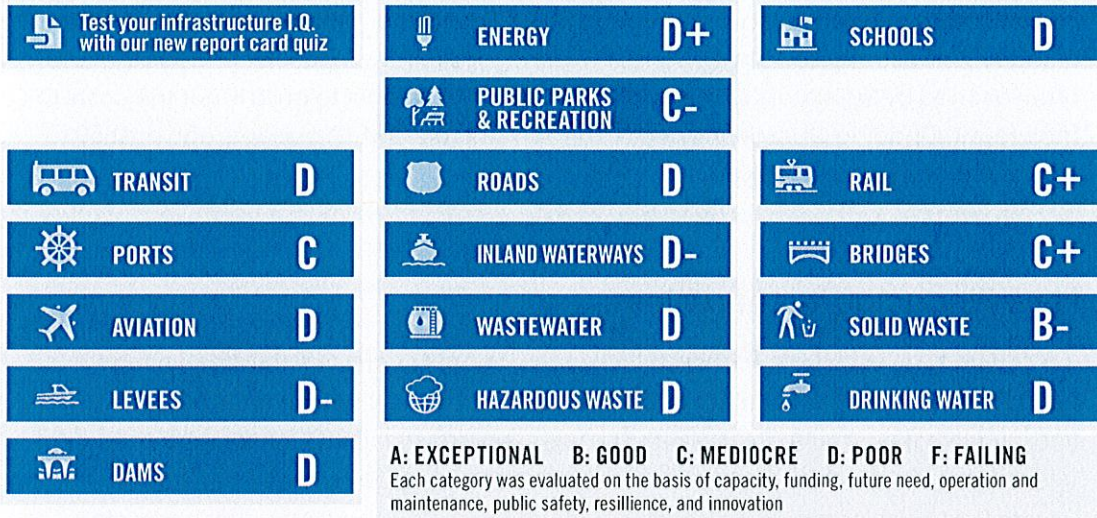
Every four years, the American Society for Civil Engineers grades America's infrastructure. In the 2013 Report Card, they looked at 16 infrastructure categories (see image) and gave an overall grade of D+. America's infrastructure is failing.

²⁰ Brian Cohen, "Vermont Considering Blockchain Tech for State Records, Smart Contracts," CoinTelegraph, August 5, 2015: <http://cointelegraph.com/news/115064/vermont-considering-blockchain-tech-for-state-records-smart-contracts>, accessed August 30, 2015

²¹ Heath Terry, Ryan Nash and Jake Siewert, "The Future of Finance," Goldman Sachs podcast, June 3, 2015: <http://www.goldmansachs.com/our-thinking/podcasts/episodes/7-30-2015-terry-nash.html>, accessed August 30, 2015

²² Gideon Goufriend, "How the Blockchain could disrupt the Music Industry," Billboard Magazine, August 5, 2015:

Figure 8. INFRASTRUCTURE GRADES



Source: American Society for Civil Engineers, 2013

"The costs of underinvestment in infrastructure are massive. Drivers in the United States annually spend 5.5 billion hours in traffic resulting in costs of \$120 billion in fuel and lost time. U.S. businesses pay \$27 billion in additional freight costs because of the poor conditions of roads and other surface transportation infrastructure. The electric grid's low resilience leads to weather related outages that cost the U.S. economy between \$18 billion and \$33 billion each year, on average. Due to continuing deterioration of water systems throughout the United States, each year there are approximately 240,000 water main breaks resulting in property damage and expensive service interruptions and repairs.

"Despite the high costs imposed by insufficient or rundown infrastructure, outlays for both capital investment and operations and maintenance (measured as a percent of GDP) made by all levels of government in transportation and water infrastructure have declined sharply in recent decades. The decline became sharper in recent years, particularly in public spending on drinking and wastewater projects, which declined by 23 percent from 2006 to 2013."

"Expanding Our Nation's Infrastructure Through Innovative Financing," U.S. Department of Treasury, Sept. 2014

This is a global phenomenon.

McKinsey estimates that it will cost \$57 trillion to build and maintain all the infrastructure needed worldwide through 2030. That is more than the total value of all of today's infrastructure. What's more, the price tags for new roads or bridges that are often pitched by legislators to the public include only the cost to build it, not the costs to maintain it. Ongoing Operations and Management (or "O&M") budgets can cost 50 to 67% of the original cost to build.

New Financial Partnerships

To fund the world's infrastructure—and to account for long lead times for planning and construction—new investors including insurers, pension funds, endowments and sovereign wealth funds that are entering the markets²³ while PPPs (Public Private Partnership) are aggregating a wider pool of global investors. For example, Denver's high speed rail included investors from Spain and China and Dallas light rail system is owned by Japanese investors.

This underscores other related trends and implications:

- o Global investment no longer flows primarily from the north (developed countries) to the south. "South-South" investment is becoming the new norm, e.g. India invests in Africa.²⁴
- o Many municipalities and states are turning to PPP's and other complex funding mechanisms to build public infrastructure. Unfortunately, these deals, while appearing to avoid tax increases, often end up costing the public more by guaranteeing investor profits far exceeding the cost of traditional tax-exempt financing. Governments often lack the expertise to use these new financial partnerships wisely.
- o Crowdfunding is being used to fund civic projects. Research shows that local government's embrace of this platform contributes to its success in serving the common good.²⁵

²³ "Infrastructure Financing: A Long and Widening Road." *The Economist*. May 22, 2014.

²⁴ Dr. Denis Braun, Executive Director of UNITAID, interview with PSA and Devex, <http://www.unitaid.eu/en/resources/press-centre/events/1184-trends-talk-innovative-finance-and-itspromise-for-global-health-2-april-2013>

²⁵ Davies, Rodrigo (2015). "Three Provocations for Civic Crowdfunding". *Information, Communication and Society*, 18 (3). Routledge. DOI: 10.1080/1369113X.2014.989878.

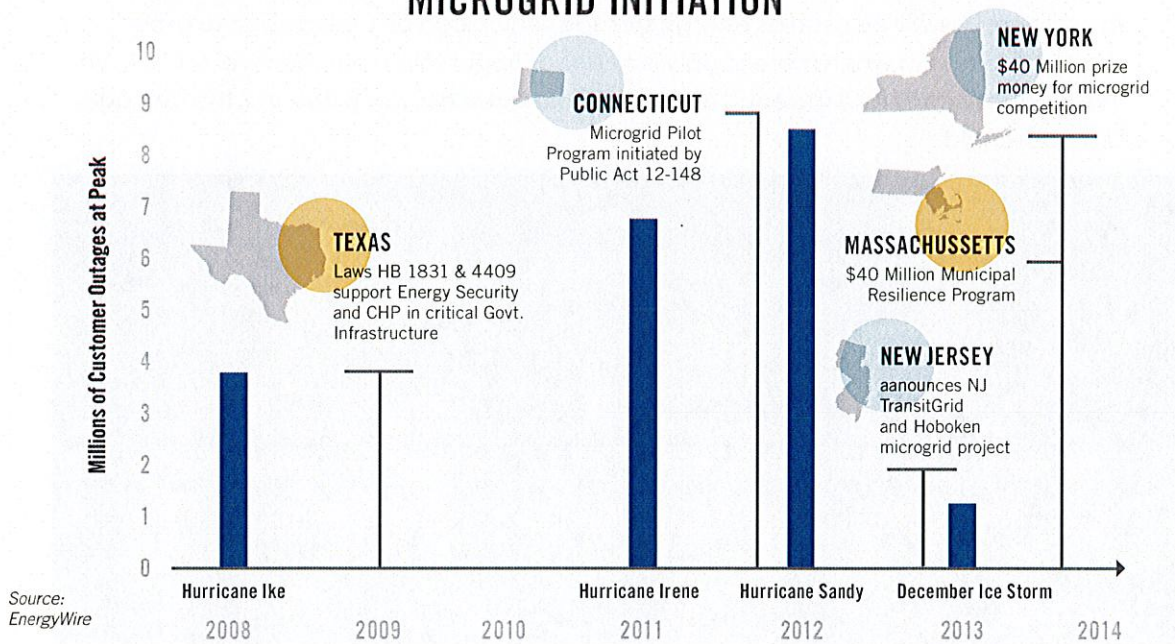
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Microgrids

Microgrids are self-contained energy grids that ensure a community has a reliable electric supply when access to their normal supply is disrupted, which could be caused by extreme weather events, physical, and/or cyber attacks. Microgrids ensure that a community has a few buildings that will remain operational no matter what; this gives residents the opportunity to come in for a warm shower, a warm meal, and will allow them to charge their phones and computers. We will see more microgrids in our communities because of four factors:

- ① State incentives²⁶
- ② Cheap electricity storage
- ③ The increased likelihood of super storms (see figure below)
- ④ The increased likelihood of a cyber attack.

FIGURE 9. TIMELINE OF NATURAL DISASTERS AND STATE MICROGRID INITIATION



Source: EnergyWire

²⁶ Collin Sullivan, "NY Awards 83 Grants to Create Community Microgrids," EnergyWire, July 9, 2015

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Off-Gridding

Local communities will generate more of their energy from renewable sources like wind and solar, or natural gas fuel cells. Local communities will also store more of their own electricity. In some locations, there will no longer be a shared electric grid. It is anticipated that for rural locations, it will be cheaper for the utility to install distributed generation (DG) with a storage device than to continue to maintain long distribution lines. Local municipalities will need to address how to ensure that low-income populations continue to have universal access to electricity – this may involve the municipalities subsidizing the installation of DG and storage in low-income households.

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Electric Vehicles

In the near term, we will see more electric vehicles (EVs) in urban areas. In the long term, the entire transportation fleet may switch to electric. It is anticipated that residents will charge their EVs at home at night. Public stations will be used only used to "top off" the battery during the day. Businesses may install charging stations so that employees can charge for free during the day.

In addition, EVs will be used as energy storage, which can be called upon to assist the electricity grid when more supply is needed. To put this in perspective, an 85 kWh Tesla battery can store the equivalent of almost three days of power for the average U.S. household.²⁷



The future role of the Electric Utility?

Due to distributed generation (DG) in many parts of the U.S., the role of community-owned or public utilities may significantly diminish. And when cost-effective energy storage is available, utilities' role will be minimized even further. It's possible that utility companies will try to buy or block cost-effective storage or on-site renewables to maintain viability.

²⁷ Peter Kelly Detwiler, "The Future Promise and Challenge of Applying Used EV Batteries as a Grid Storage Resource," *Forbes*, Sept. 26, 2014.

Water Recycling

Due to higher temperatures and water insecurity, in 20–50 years we won't be using drinking water to flush our toilets. We'll be recycling our gray water for use in our gardens and toilets, and flushing only sewage to the local wastewater treatment plant. This will require a change in many state and local plumbing laws²⁸, challenge infrastructure retrofit, pricing dynamics, impact on revenues, changes to water treatment protocols, and re-use/disposal of sludge as a resource."

Desalinization

As states and countries look for fresh water, many look to the oceans where 96 percent of our water lies. Currently, about 150 countries rely on "desalinization" to meet their fresh water requirements.²⁹ Until recently, the Middle East and especially Saudi Arabia were the world's leading technologists (and users), but soon China will surpass the Middle East in the volume of fresh drinking water generated by desalinization. California's new Carlsbad Desalinization Plant is coming online in 2016 and is gaining a lot of attention. This attention, coupled with the demand for fresh water, will attract new investors and inventors which will eventually drive down the cost.

Nanotechnology

Nanotechnology is a broad term that covers many areas of science, research and technology. In its most basic form, it means working with things that are small—really small; things so tiny that they can't be seen with a standard microscope.

"Everything, when miniaturized to the sub-100-nanometer scale, has new properties, regardless of what it is," says Chad Mirkin, professor of chemistry at Northwestern University. This is what makes nanoparticles the materials of the future. They have strange chemical and physical properties compared to their larger-particle kin. The thing that matters about nanoparticles is their scale.³⁰

²⁸ Grit Leipert, AC Martin and David Summers "First Graywater Recovery System Approved in the City of Los Angeles," GLUMAC.

²⁹ Faisal Wali, "The future of desalination research in the Middle East," *Nature Middle East*, Nov. 26, 2014

³⁰ Rebecca Boyle, "7 Amazing Ways Nanotechnology is Changing the World," *Popular Science*, November 14, 2012

Nanotech is used in everything from sunscreen to carpet stain resisters to medicine. Scientists working in the field estimate that it could have a transformative effect, not only on *what* is developed through nanotechnology— the new transformational products—but *how* we manufacture things. Atomically precise manufacturing, or “APM,” could replace enormous, exhaust-belching factories with cleaner, smaller and more agile supply chains. Think of it as highly precise 3-D printing in a box.

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Tech-Enabled Health Care

Health care is undergoing a transformation.
In the future ...



Patients may not have to visit their doctor for routine medical exams; wearable health monitors can share patient data directly with their health care team, and telemedicine delivered by phone or video chat could replace patient exam rooms.



Big data, or “bioinformatics” as they’re called in health care, will be used to discover more about diseases and effective treatments.



Patient health records can be shared between hospitals and emergency response teams, so that when the EMTs get to the patient (who may be unconscious), the EMTs know all the drugs the patient is taking, their health history, allergies, etc.



And as a countercurrent, doctors-in-training are being required to learn better bedside manner. Technology can do a lot to improve patient outcomes, but research also shows that caring personnel improve outcomes.³¹

³¹ John M. Kelley, Gordon Kraft-Todd, Lidia Schapira, Joe Kossowsky, Helen Riess, “The Influence of the Patient-Clinician Relationship on Healthcare Outcomes: A Systematic Review and Meta-Analysis of Randomized Controlled Trials,” *PLOS*. April 9, 2014

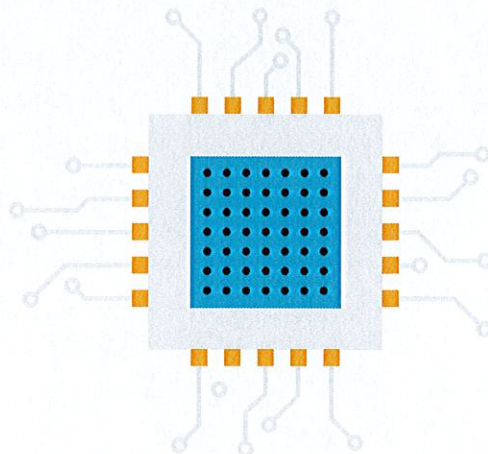
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Biomimicry

"I think the biggest innovations of the 21st century will be at the intersection of biology and technology. A new era is beginning."

- Steve Jobs

What can a pile of termites teach us about keeping our government buildings cool during the summer? Turns out, a lot. HVAC systems based on termite mounds are one example of biomimicry, the study of nature to solve human problems. The Eastgate Building in Harare, Zimbabwe was inspired by the natural design of termite mounds. The building has no conventional air conditioning, yet stays regulated year-round, using less than 10% of the energy of a conventional building its size. Local governments are also benefiting from the Lilly Impeller, which circulates municipal water tanks with minimal energy to prevent stagnation. Its design is based on the geometries repeatedly found in nature, which are known to reduce friction and drag.



Demographic Trends

By Jamie Verbrugge, City Manager, Bloomington, MN

Rapid demographic changes are occurring in our communities. The words "rapid" and "demographic change" do not typically occur together. Demographics are often a slow "drip-drip-drip" of change, akin to the story of the frog in the kettle: the water gets hotter and hotter and by the time the frog realizes it's cooking, it's too late to jump out. So it is with community demographics: the changes seem so gradual and then all of a sudden we look around and say, "Where did all these people come from?"

I had the great fortune to work in a community that was forced – yes, forced – to confront these issues head on. Most people don't think of Minnesota as undergoing transformation, but Brooklyn Park, Minnesota experienced some of the most rapid demographic change in the country during the two-decade period of 1990-2010. Today, Brooklyn Park is a majority non-white community with more than 20% of its residents being born in a country outside the United States.

The wonderful thing about Brooklyn Park's diversity is its diversity; a cultural panoply more than black and white. It is infused with the richness of the immigrant experience from West Africa, Southeast Asia and Central America. But that richness wasn't recognized, and certainly not harvested, until we made an intentional effort to do so; a commitment to an "intended future" based on core values that acknowledged every individual's equal and intrinsic value.

Prior to making that commitment, community leaders – elected and appointed – were often befuddled when "best practices" didn't seem to have lasting impact, if any impact at all. Why? More often than not, we were doing things "to" people and not "with" them.

Adjusting to new demographic realities involves relationships, collaboration, and consultation. And in my experience, local government leaders' highest purpose is to serve as the facilitator and connector, to bring "diverse" people together, to find the common core. It is that imperative that compels the *Next Big Things*.

And in my experience, local government leaders' highest purpose is to serve as the facilitator and connector, to bring "diverse" people together, to find the common core. It is that imperative that compels the *Next Big Things*.

What is the city but the people?

- William Shakespeare, *Coriolanus*

There are two massive demographic headwinds impacting our communities: our *aging population* and our *diversifying population*. Trends related to these include:

Tribalism & Identity Politics

"Identity politics" are political arguments that focus on the interests and perspectives of specific groups. These groups can turn into movements or strong voting blocs.

Identity politics can deeply wound a community's sense of social cohesion; they can create an us-versus-them mentality that makes communities less resilient. On the other hand, when citizens feel that they belong, are heard, and represented within their communities, they're more likely to act in a way that values the commons.

As communities become more diverse, their resilience may be tested unless local governments work hard to make all citizens feel included and represented.

Structural (Youth) Unemployment

Due in part to the global talent pool (*Trend 35*) and the deep investments made worldwide to automate our factory floors and our lives (*See Trend 12, "Unmanning"*) we could be facing a 20-year period of structural unemployment.

Larry Summers writes in the 2015 Global Economic Outlook:

"If we look at the data on workers aged 25-54—the group we think of as the backbone of the workforce—the percentage of those who are not working has risen by a factor of more than three times over the course of my lifetime. If current trends continue it could well be that a generation from now a quarter of the middle-aged demographic will be out of work at any given moment."

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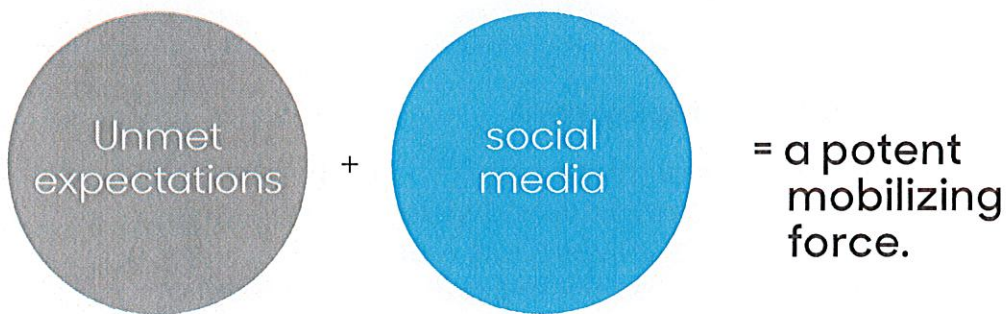
Civil Rights Spring

The Arab Spring. The Black Spring.

Paul Mason, Economics Editor for *The Guardian*, argues that at the heart of the social protests around the world is “the graduate without a future.” This ties to Trend 27: Structural Youth Employment, and gets at something deeper.

In *Arab Spring Dreams*, authors Nasser Weddady and Sohrab Ahmari give voice to the next generation, the group that sparked the Arab Spring. Although the anthology includes many different viewpoints, the book’s major theme is timeless and ties well to America’s Black Spring: a young generation aching for a better future, a future where civil rights, women’s rights, religious freedom and basic human dignity are upheld by their governments, who rule wisely and control police militarization.

Until that “better future” comes into view, expect youth-led revolts and uprisings like Occupy Wall Street or student protests like those in Quebec.



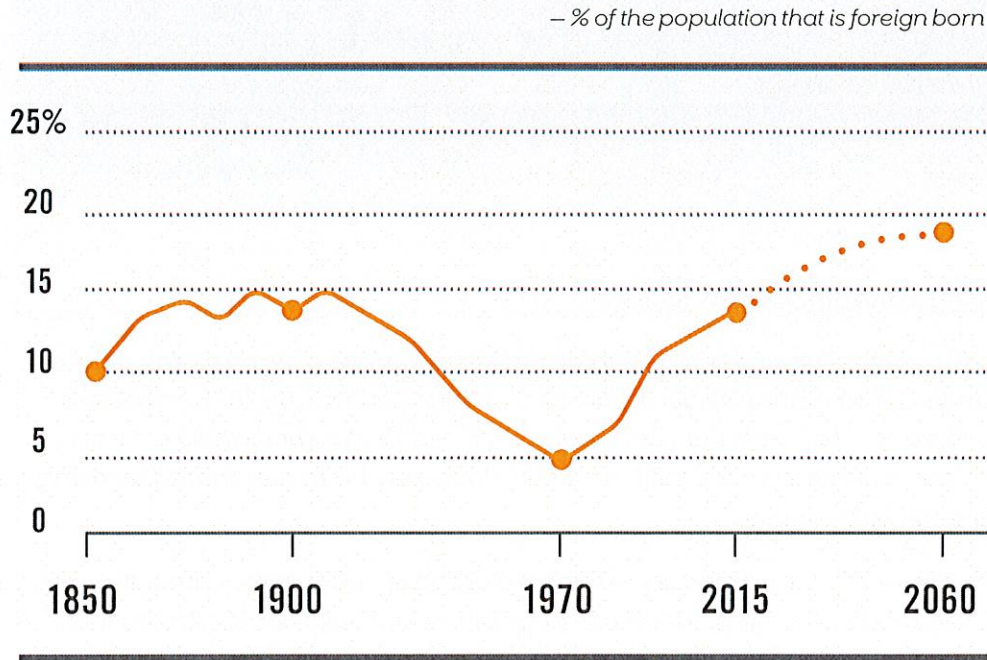
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Mass Migration

Whether due to conflict, climate change, natural disasters, or the desire to earn more, migration will continue to create dynamic population shifts for many communities. This trend may impact property or income taxes, and the costs of providing services. Mass migration can have a destabilizing force on both the community that's losing citizens and the one gaining citizens. Handled well, in-migration can also strengthen and revitalize communities. A community's approach is critical.

In the United States by 2060 it's estimated that 18% of the population will be foreign-born as the chart shows.

Figure 10. Foreign-Born Share of U.S. Population



Note: 'Foreign-born' are those born outside the United States and U.S. territories

Source: U.S. Census Bureau, "Historical Census Statistics on the Foreign-Born Population of the United States: 1850-2000" and 2014 population projections

Source: Pew Research Center

Middle Class Map

The global map of the middle class will continue to change in the next 20 years, affecting local governments in direct and indirect ways.

Overall, North America and Europe's share of the middle class will decrease to 7% by 2030, while Asia-Pacific's share will drastically increase from 28% in 2009 to 66% in 2030.

Chart 1. Size of the Middle Class by Region
(millions of people and global share)

	2009		2020		2030	
North America	338	18%	333	10%	322	7%
Europe	664	36%	703	22%	680	14%
Central and South America	181	10%	251	8%	313	6%
Asia Pacific	525	28%	1,740	54%	3,228	66%
Sub-Saharan Africa	32	2%	57	2%	107	2%
Central and South America	105	6%	165	5%	234	5%
Asia Pacific	1,845	100%	3,249	100%	4,884	100%

Source: Brookings Institution

According to the Brookings Institution:

"... By 2015, for the first time in 300 hundred years, the number of Asian middle class consumers will equal the number in Europe and North America. By 2021, on present trends, there could be more than 2 billion Asians in middle class households. In China alone, there could be over 670 million middle class consumers, compared with only perhaps 150 million today."³²

The local government impacts of the middle class have been well documented. Public health researchers Richard G. Wilkinson and Kate Pickett have demonstrated that a larger middle class and greater income equality is correlated to better health and social outcomes including lower rates of drug abuse, higher rates of education, lower rates of imprisonment, and greater social mobility.

³² Homi Kharas and Geoffrey Gertz, "The New Global Middle Class: A Cross-Over from West to East" from *China's Emerging Middle Class: Beyond Economic Transformation* (Cheng Li, editor), Washington, DC: Brookings Institution Press, 2010

31

Elder Expense

Many countries are facing a "Baby Boomer bulge," when the share of citizens over age 65 begins to increase. This puts immediate and direct pressure on local governments, which are expected to pay pension benefits to retiring public employees. It also puts pressure on national and state budgets.

In the U.S. for example, if there are no significant changes to entitlement spending (Social Security, Medicare and Medicaid), it will consume all of the federal budget by 2030.³³ This could create a serious financial hardship for communities, especially if they face decreasing revenues. (See trend 44 Fiscal Uncertainty).

But there's another issue at play: the retirement age. When social security was invented in the U.S., there were 14 employees supporting every retiree. Back then, people lived for a few years post-retirement, so the total amount of benefits paid was manageable. Fast forward to today when there are only two workers in the U.S. supporting every retiree...and retirees live longer. It adds up.

The expense of supporting a large, retired population could spell generational conflict, more dramatic changes to retirement ages, and/or restructuring of entitlements.

Figure 11. Population Aged 60 or Over

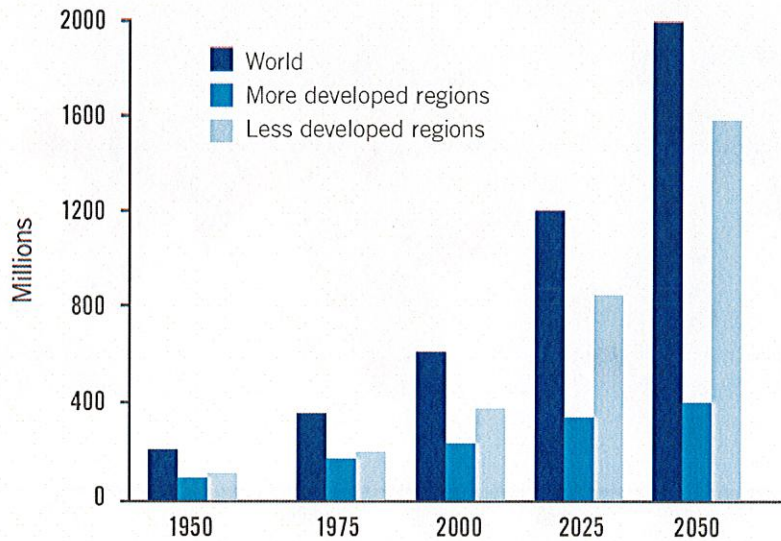


Figure 11: Source: United Nation, World Population Ageing 1950-2050

³³ Sean Gorman, Will Entitlement Programs and Debt Consume U.S. Budget in 2025? Politifact. April 23, 2012.

The Potential Support Ratio ("PSR") is the ratio of people aged 15–64 years old per one older person aged 65 years or over.

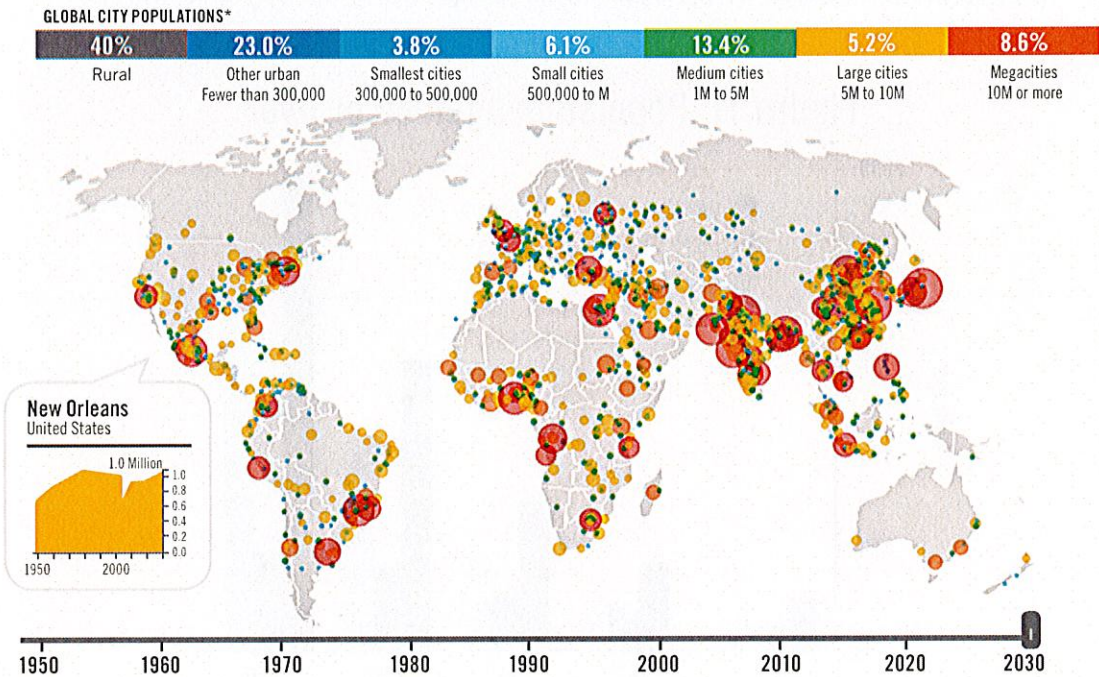
When Social Security was invented after the Great Depression, there were 14 workers supporting every retiree. The global PSR will fall from its current ratio of 9:1 (nine workers supporting one retiree) to 4:1 (four workers supporting one retiree) by 2050.

The ratio is worse in developed countries, and they will have less time to adjust.³⁴ Taken together, the increasing costs of supporting an elderly population and the decrease in the number of working-age people to support them may spell generational conflict or a restructuring of entitlements.



Urbanization: Mega & Mid-Sized

Figure 12. Growth in Urbanization



Source: The Economist

* Dataset comprises urban agglomerations with 300,000 inhabitants or more in 2014. Data are for countries existing in 2014, mapped on modern borders. Projections from 2014

³⁴ Ibid

³⁵ Daniel Runde, "Urbanization, Opportunity and Development," Center for Strategic and International Studies, January 6, 2015.

Rapid urbanization is at a crossroads; it will either result in greater economic prosperity or greater unrest.³⁵

Areas to watch for the prosperity/unrest drama include the mega-cities (over 10 M people) primarily in Asia and India.

But urbanization's opportunities aren't limited to mega-cities. In developed countries, the rise of "medium cities," especially those between one and two million people, will outpace the growth of larger urban centers, both in population growth and economic impact. Already in the U.S., mid-sized cities account for more than 70% of GDP.³⁶

This growth in mid-sized cities could cause greater fragmentation among already fragmented municipalities, at the same time as greater collaboration is needed to address environmental, transportation and economic development issues.

Rural v. Urban

As more people move to cities, a rural versus urban split may widen. As a response, politicians may adopt a "cities-are-the-enemy" approach to running for office and governing. Social scientist Katherine J. Cramer asks, "How do (rural) people perceive their economic interests and how do they connect these to policy and candidates?" After extensive research, Cramer found that there is a "rural consciousness."

She describes it in her book *Understanding the Politics of Resentment*:

"Many people in rural areas see themselves as rural people who live in a place that is routinely ignored by decision makers and the distribution of resources. In addition, they often see themselves as fundamentally different from urbanites in term of values and lifestyles. This results in an understanding of politics in which government (and public employees) are the product of anti-rural forces and therefore should be scaled back as much as possible."

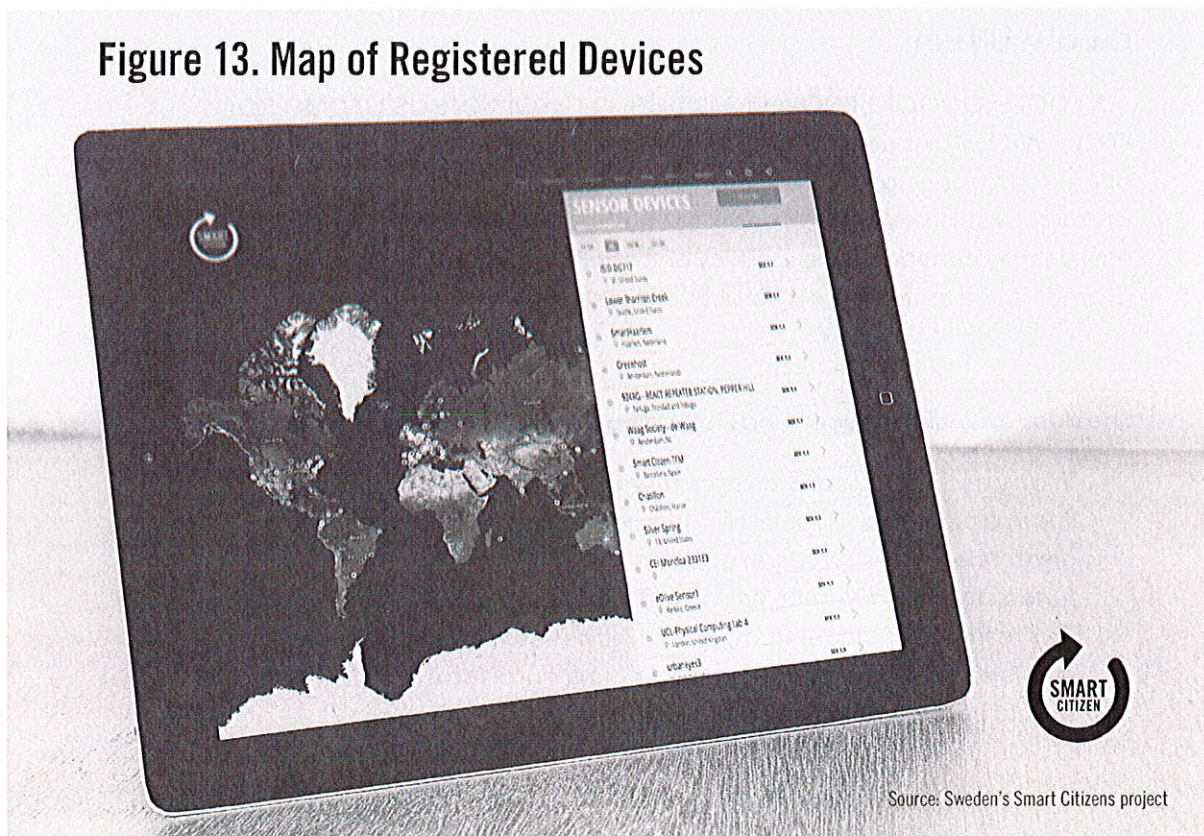
³⁶ Mathieu Lefevre, "The Mighty Metropolis," *The World Today*, February & March 2015.

Smart Citizens

As this project hit the press, many people understood “Smart Cities” as technology- and sensor-driven, the *hardware* that enables a city to collect and use data. But the *software*—the people side of cities—is just as important. “Smart Citizens” – those who can engage with technology to make their daily lives more convenient or to make their cities better—are now a focus for many progressive communities.

For example, Sweden’s “Smart Citizens” initiative puts citizens, technology and services together in a way that enables citizens to be more literate about city services, and more able to help solve problems. It’s a proactive way to give citizens control of the “internet of things” in a way that makes cities and their experience of them more humane and interactive.

Figure 13. Map of Registered Devices



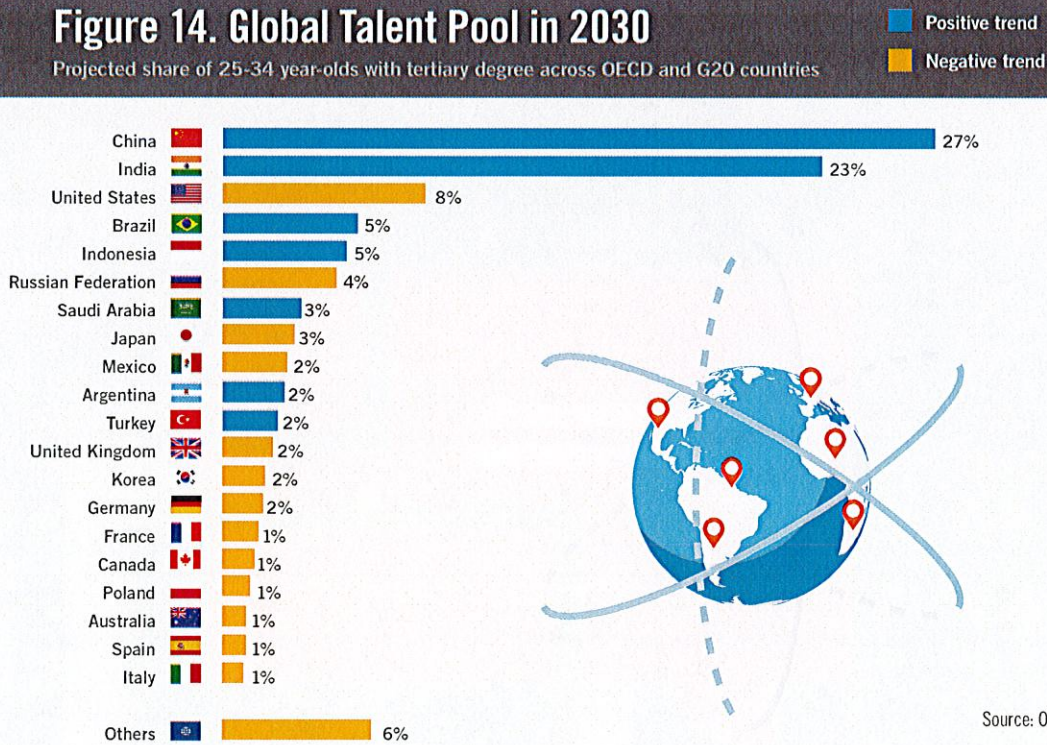
The map above is a screen shot that shows the number and locations of sensors that citizens have self-registered as of the date of this report. By sharing their devices and locations, citizens are opting-in to be alerted to important Helsinki news, and even, in the case of emergency, be called upon to help.

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Nomadic Workforce

Dubai's population includes only five percent naturalized citizens. The majority of its residents are expatriates from other countries. Dubai is working hard to become the kind of place that the world's smartest and most creative people want to live and work.

Figure 14. Global Talent Pool in 2030
 Projected share of 25-34 year-olds with tertiary degree across OECD and G20 countries



Source: OECD

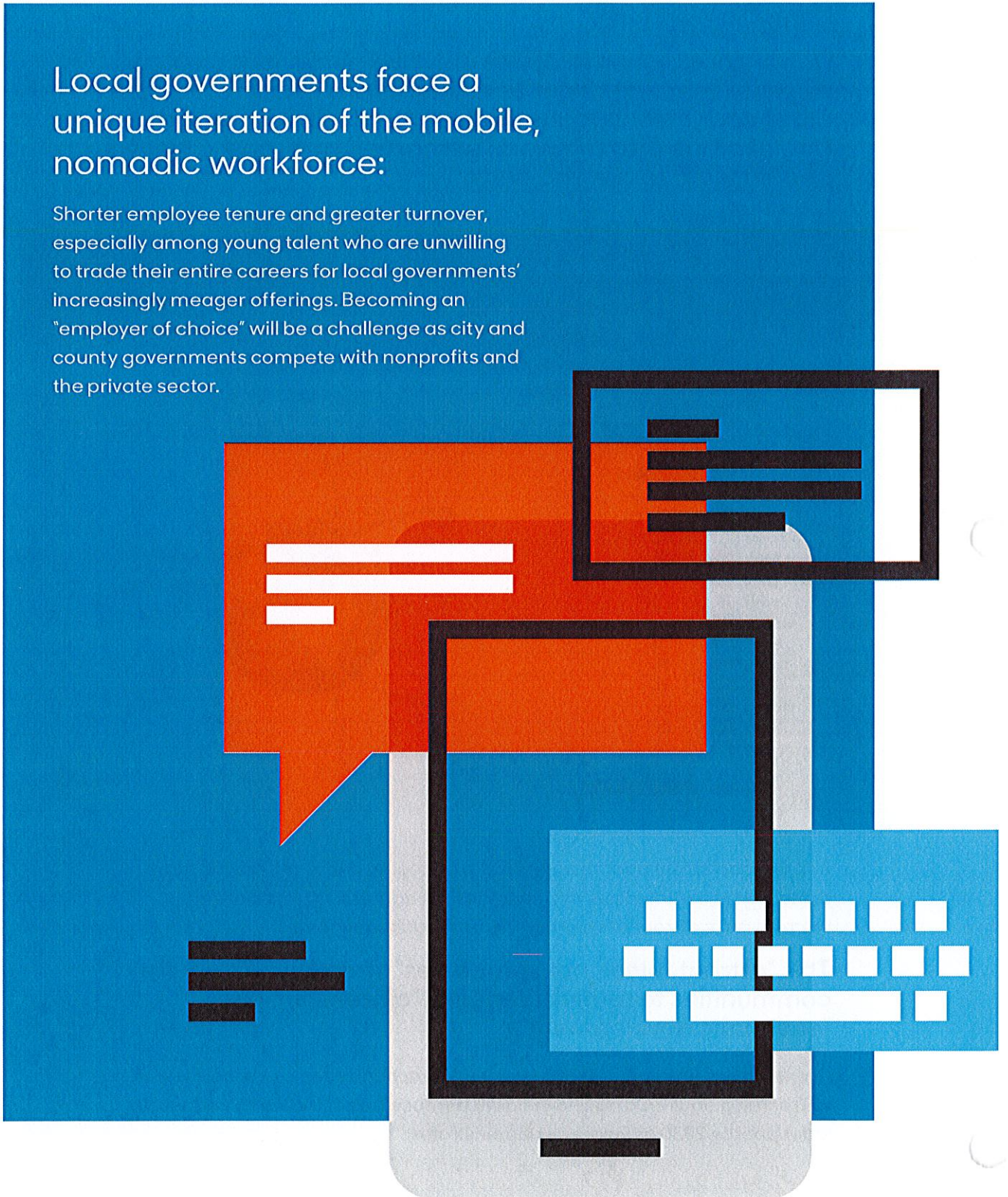
As the global talent pool becomes more educated and jobs become more digital, some communities and countries are aggressively positioning themselves to attract this highly skilled, nomadic workforce.

This “attract talent, not companies” strategy will require communities to rethink ideas like “citizenship” and “economic development”.

Communities and countries that want to attract and keep a nomadic workforce will recruit globally. China and India will produce half of the world's educated labor pool by 2030 as Figure 14 demonstrates.

Local governments face a unique iteration of the mobile, nomadic workforce:

Shorter employee tenure and greater turnover, especially among young talent who are unwilling to trade their entire careers for local governments' increasingly meager offerings. Becoming an "employer of choice" will be a challenge as city and county governments compete with nonprofits and the private sector.



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Hyper-localization

As a response to globalization, some communities are going hyper-local, inventing their own local currencies³⁷, creating time banks³⁸, creating their own hyper-local media sites³⁹, and getting off the grid.

Some examples include Ithaca, New York, which created its own currency. Ithaca dollars can be exchanged locally and are accepted at many local retailers. And in Madison, Wisconsin, over 2,500 residents trade services without exchanging money through the Dane County Time Bank. Every hour invested helping someone else is an hour members can extract for a service or good they want.



³⁷ *People Powered Money*, http://b3cdn.net/nefoundation/Odba46d13aa81f0fe3_zhm62ipns.pdf

³⁸ <http://timebanks.org/what-is-timebanking>

³⁹ See the *Columbia Journalism Review's* list of communities' hyper-local sites: http://www.cjr.org/news_startups_guide/online-news-websites/coverage/hyperlocal-news.php.

Governance Trends

Robert J. O'Neill Jr., Executive Director, ICMA

The International City/County Management Association (ICMA) recently celebrated our 100th anniversary. Now, we look to the next 100 years and consider what role local government will play; what will be the big ideas that will transform our communities into even better places to live, work, and play?

In the future, one thing won't change. Good government will continue to operate nearly invisibly to citizens, tackling the work that citizens can't do for themselves. When residents enjoy their parks, turn on their taps, drive over paved roads, and set out their garbage or recycling, they're benefiting from local government that works.

But behind the scenes, a lot will change.

For starters, federal and state budgets continue to be cut. This means that services that were once provided elsewhere will fall to local governments to sort out. City managers and elected officials will need to deliberate: what is important for our community? What should local government do? Who must we partner with? How do we pay for the services provided?

And we will have to innovate to be successful.

During the recession, we saw local government outsource services and re-engineer others. In the next twenty years, we'll see local governments use more and more innovative approaches to address their communities' challenges. They'll work more collaboratively with other cities and counties, to further leverage economies of scale. You'll see more partnerships between government, nonprofits, and the private sector. Because as our challenges get more complex, we need more nuanced responses, beyond the traditional boundaries of local government.

To meet the challenges, local governments will attract a new generation of workers who are motivated to take a fresh, bold look at how local governments run. We need their kind of thinking, and we need to make room for them. But the fact is, the next generation won't be attracted by inflexible organizations and rigid structures. There is no such thing as job security in local government right now, and pay and benefits have been cut or frozen in many communities. So we'll need to attract and engage the next generation by emphasizing our original charter: to do meaningful work that enhances the lives of citizens. And if we can also arm them with great technology, cutting-edge initiatives and training, and professional development, all the better.

I believe good government is important. And I believe that the next twenty years will be a period for local government to shine. The public is with us; trust in local government is at nearly record highs. If we can maintain the public trust through ethical behavior, transparency, engagement, performance, and accountability while also working with new partners on new initiatives, we'll be able to look back from 2036 and say, "We tackled the *Next Big Things*."

37

Declining Federal Government Effectiveness

"The main political challenge of the next decade will be fixing government."

– John Micklewait and Adrian Wooldridge, *The Fourth Revolution*

The "layer cake" of government that most current city and county administrators grew up in—where the federal government has the money, states have the power, and cities have the problems—has been cut into pieces.

In the developed world, national governments have less money or are going broke, many states and provinces have become ideological battlegrounds, and cities...well, cities still have problems. (*But the local level also holds the greatest promise, See Trend 38: Trust in Government*).

Have federal governments and their international alliances overrun their effectiveness, i.e. will the EU hold together, do organizations like the G20 matter, will the partisanship that has Washington, D.C. in gridlock remain?

While national governments continue to work mightily to solve the world's most pressing problems, their relevance continues to decrease. National governments are "failing" in the eyes of their citizens, who see them as remote and removed. Or as one city manager explained,

"Nations don't have residents. Cities do."

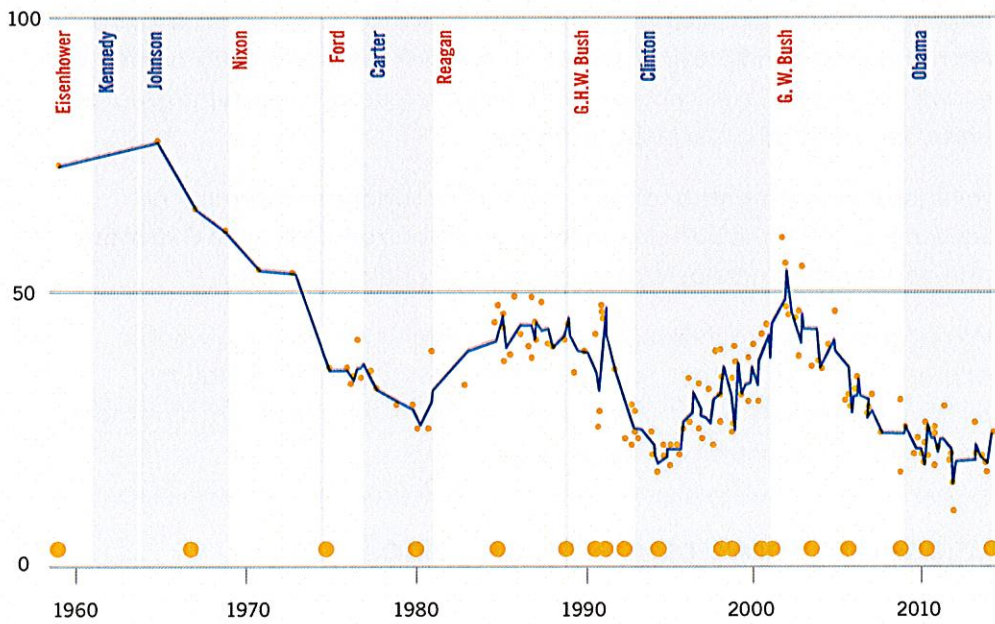
Another indicator that federal governments are losing relevance compared to their local counterparts: international growth companies are abandoning country strategies and implementing city strategies instead.

Trust in Government

Trust in the national government is at an all-time low in the United States.

Public Trust in Government: 1958-2014, Pew Research Center

Figure 15. Trust in U.S. Government



Source: Pew Research Center

How did we get here?

Messages from the Executive branch may help explain it:

"Government cannot solve our problems, it cannot set our goals, it cannot define our vision. Government cannot eliminate poverty or provide a bountiful economy or reduce inflation or save our cities or cure illiteracy or provide energy. And government cannot mandate goodness."

- Jimmy Carter, State of the Union Address, 1978

"Government is not the solution to our problem; government is the problem."

- Ronald Reagan, Inaugural Address, 1981

"The era of big government is over."

- Bill Clinton, State of the Union Address, 1995

"I trust people;
I don't trust the federal government."

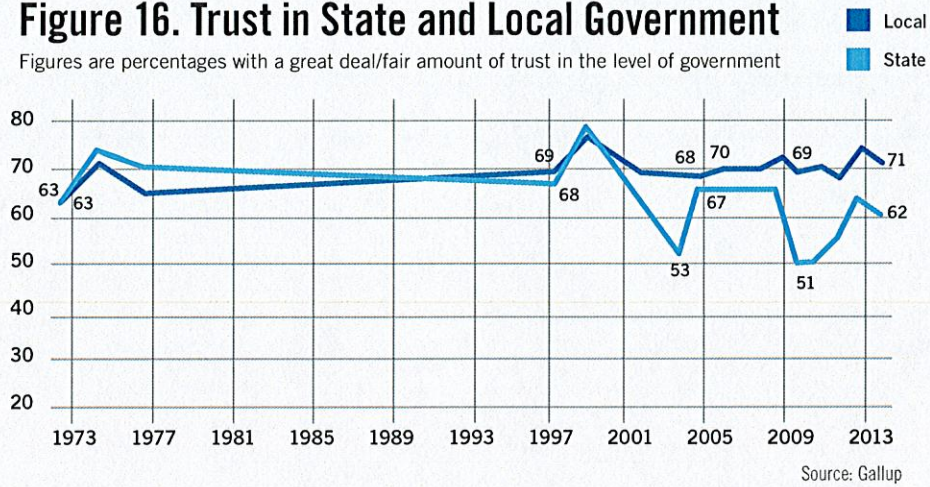
- George W. Bush,
Presidential debate v. Al Gore, 2000

"Change doesn't come from Washington. Change comes to Washington."

- Barack Obama, DNC speech, 2008

Figure 16. Trust in State and Local Government

Figures are percentages with a great deal/fair amount of trust in the level of government



Trust in local government creates a competitive advantage for those local governments with the vision and ambition to reinvent and become more relevant to citizens. Research shows that trust between citizens and their government is an important and independent predictor of support for government policies, more important than partisanship or ideology alone.⁴⁰

To maintain the public’s trust, future-ready communities must pay close attention to political trust and social trust, which operate together *and* seem to be mutually reinforcing:

Political trust



transcends partisanship; it “happens when citizens appraise the government and its institutions, policy-making in general and/or the individual political leaders as promise-keeping, efficient, fair and honest.”⁴¹ Political trust depends on legitimate policy-making.

Social trust



refers to citizens’ confidence in each other. Communities with greater social trust have more cohesion and are more resilient.

(See Trends 26, 28, 29, and 31 for key trends related to social trust.)

⁴⁰ Peri K. Blind, “Building Trust in Government in the Twenty-First Century, presented in Vienna Austria, 2007.

⁴¹ Ibid.

City-to-City Collaboration

In the absence of leadership at the national or state levels, local governments are taking matters into their own hands, e.g. the Mayor of London announced the "London, England Visa" program, which would enable the City to authorize Visas for the brightest and best, part of a talent strategy that works around Members of Parliament and the national government.

City leaders are also increasingly forming their own global or regional coalitions to address their most pressing issues, e.g. the C40 includes forty of the world's largest cities committed to mitigating climate change. They tackle joint research projects, share best practices, and have committed to each other to reduce carbon emissions.

These types of issue-based, city-to-city collaborative networks are already reaping rewards for members and may supplant traditional professional state or national associations.

"I talk more with the mayor's office in Barcelona than I do with my own state and national representatives."

– Jim Keene, City Manager of Palo Alto, California.

VUCA Leadership

A common term used when training military leaders is "VUCA," an acronym for Volatile, Uncertain, Chaotic and Ambiguous. This is precisely the environment that local government leaders are inheriting as tax revenues fall, staff retire or leave early, citizens' expectations increase, and more of the "problems" in society fall to local governments to solve. This VUCA environment is not likely to diminish soon, and local leaders can either bury their heads and try to continue to make things work, or they can embrace this opportunity to reinvent local government.

Nathan Bennett and G. James Lemoine suggest that each of the four conditions in VUCA require their own, appropriate response.

The following chart, although designed for corporations, offers some insight about how leaders in any domain can approach complexity, volatility, ambiguity and uncertainty, based on how much is known about a situation and how well you can predict the results of your actions⁴⁴:

Figure 17. How Leaders In Any Domain Can Approach Complexity, Volatility, Ambiguity And Uncertainty



⁴⁴ Nathan Bennett and G. James Lemoine, "What VUCA Really Means for You," *Harvard Business Review*, January-February 2014.

The Delphi panel that advised *The Next Big Things* was exceedingly mindful of this VUCA environment and identified several areas where greater leadership from local government could make a large, long-term difference in the lives of citizens.

These include:



Design a 50-year plan for the community. Fifty-year time horizons are appropriate for some of the greatest challenges to our communities. They also allow us to amortize costs over a longer time frame, and shift the conversation from "How will this impact me?" to "How will this impact my grandchildren?" It may also mitigate "NIMTO" (Not in my term in office) thinking among electeds.



Embracing innovation and instilling an innovation mind-set among staff, thereby reframing the culture of government from a culture of compliance to a culture of innovation.



Intentionally minding "the gap" between the political will for change and municipal government's ability to administer it.⁴⁵



A critical challenge for local government leaders is to recruit and retain qualified leaders at every level. Research shows that in the U.S., Caucasian administrators are out of touch with the levels of satisfaction among African Americans. Specifically, Caucasian administrators estimate that African Americans are satisfied with government services, while African Americans report dissatisfaction.⁴⁶

⁴⁵ John Nalbandian at the University of Kansas has written extensively about this: https://webapps.icma.org/conference_Handouts/handouts2014/Nalbandian-Political%20Astuteness.pdf

⁴⁶ Mark D. Adbury and J. Edward Kellough, "Representative Bureaucracy," *Journal of Public Administration and Research*, November, 2007.

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Citizen Engagement

How do you engage citizens in rich discussions that have long-term importance to the community?

Over the next twenty years, next-generation citizens will become the majority of our citizens. They don't "show up" to place-based events in traditional ways. Citizen engagement—how it's planned, executed, incorporated and measured— will be key.

Innovations are being tested in local governments around the world and cities are sharing their best practices widely. Future-ready communities will experiment with a broad range of citizen engagement techniques.

42

Direct Democracy

In the age of social media and real time digital communication, some residents are calling for more direct democracy. In the U.S., the use of ballot initiatives is a traditional form of direct democracy, but the development of new technologies has expanded the possibilities. Experiments with participatory budgeting, for example, have blossomed from cities in Brazil, to countries around the world. In the U.S., this has included Chicago, New York, Boston, San Francisco, St. Louis, and Vallejo and Long Beach, CA



According to Karen Mossberger and Yonghong Wu, technology can make it easier to create conditions for direct democracy – providing information and participatory opportunities, including the use of social media or online town halls to discuss issues, and platforms to rank or rate ideas, which have been used by some cities in their budgeting processes.

43

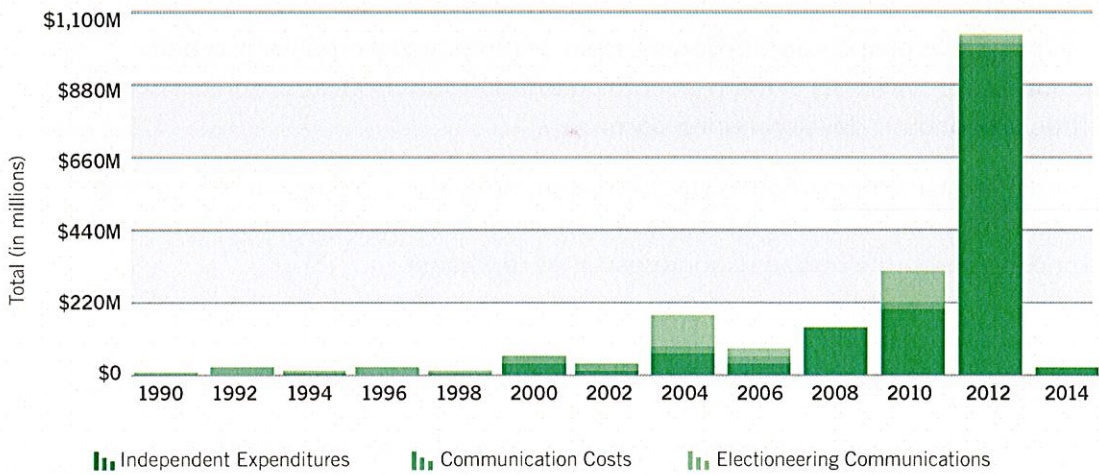
Corporate and Special Interest Influence

"There are two things that are important in politics. The first thing is money, and I can't remember what the second one is."

– Mark Hanna, 19th Century Industrialist and US Senator

In January 2010 the Supreme Court issued *Citizens United*, which allows companies and unions to make unlimited contributions to pay for political ads and other election tools. Since then, concerns about the ruling's impact on public policy began to escalate. More money is now flowing into elections as the following chart shows.

Figure 18. All Money Flowing Into Elections



Source: The Sunlight Foundation

And there is at least a corollary connection between corporate political donation and payoffs. The Sunlight Foundation reports:

"After examining 14 million records, including data on campaign contributions, lobbying expenditures, federal budget allocations and spending, we found that, on average, for every dollar spent on influencing politics, the nation's most politically active corporations received \$760 from the government. The \$4.4 trillion total represents two-thirds of the \$6.5 trillion that individual taxpayers paid into the federal treasury.

"Of the 200 corporations we examined, we could sum the financial rewards for 179. Of those, 138 received more from the federal government than they spent on politics, 102 of them received more than 10 times what they spent on politics, and 29 received 1,000 times or more from the federal government than they invested in lobbyists or contributed to political committees via their employees, their family members and their PACs."

The results aren't limited to the federal level.

Of the 200 largest corporate donors, state and local governments awarded subsidies to 174 (87%) of them, according to Good Jobs First, an organization that tracks economic development programs.

And there's another mitigating factor: redistricting. Many argue that redistricting allows incumbents to choose their voters, further entrenching political interests, and the corporate and special interests they represent.



Is your community ready to handle more corporate contributions in a way that maintains the public trust (Trend 38)?

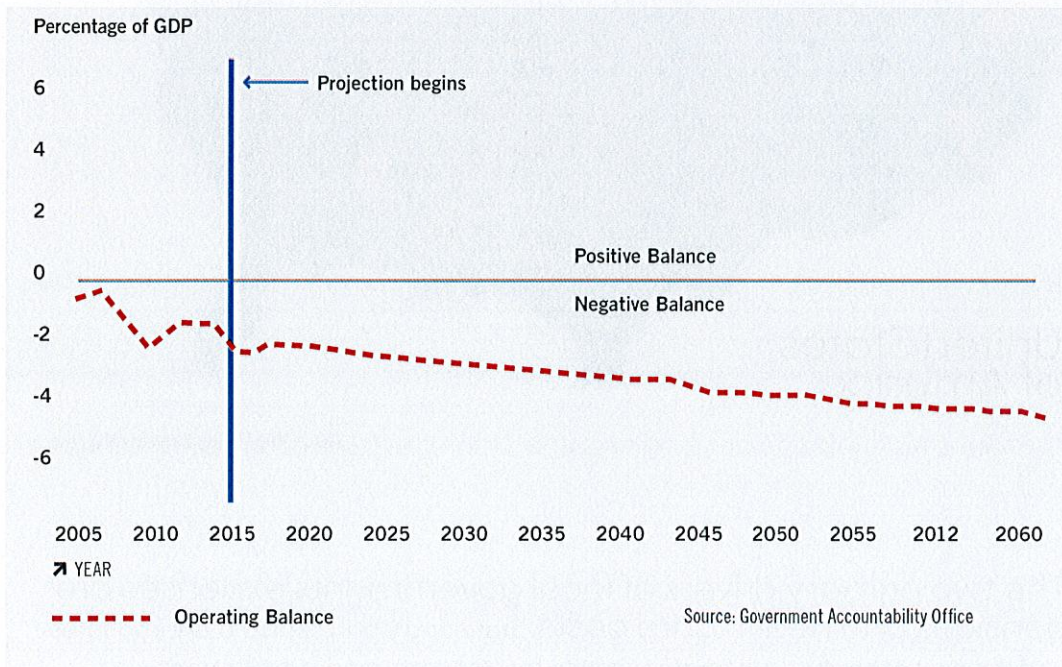
44

Fiscal Uncertainty

As nations and states transfer more responsibilities to local governments, we have the challenge of "too little money chasing too many needs."

The U.S. Government Accountability Office (GAO) predicts that, "at current rates total tax revenues for the (state and local government) sector would not return to the 2007 historical high until 2058."⁴⁷

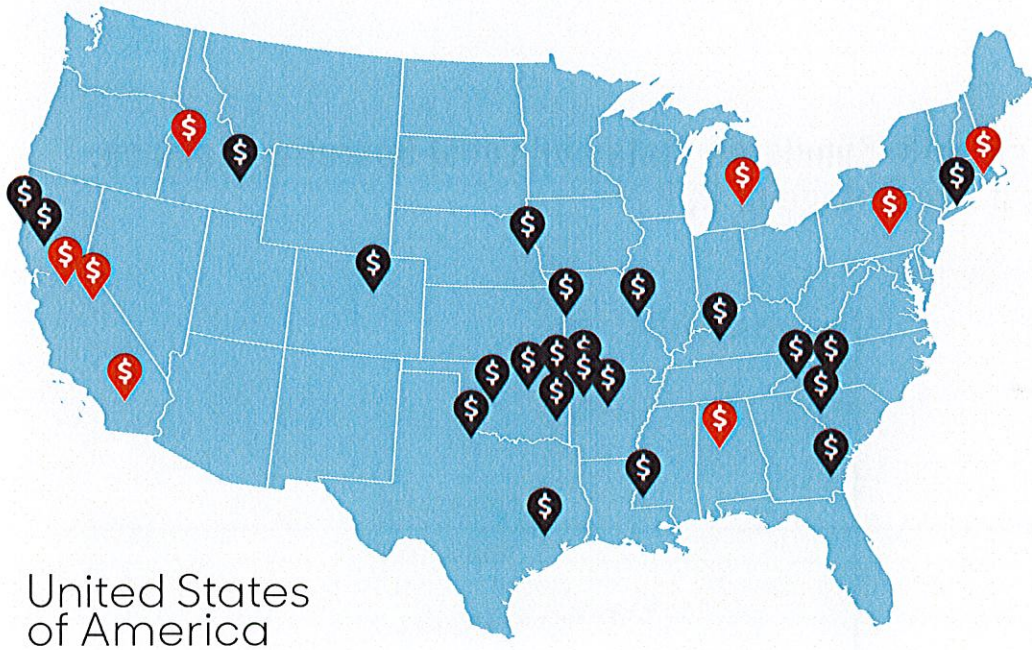
Figure 19. Simulated State and Local Operating Balance, as a Percentage of GDP



⁴⁷ State and Local Governments' Fiscal Outlook, 2014 Update, Government Accountability Office.

Some local governments in the United States are overwhelmed by debt. Nine cities, towns and counties (in red on the map below) have filed for Chapter 9 bankruptcy since January 2010. The cities in black indicate utility authorities or other municipalities.

Figure 20. Municipal Bankruptcies Map

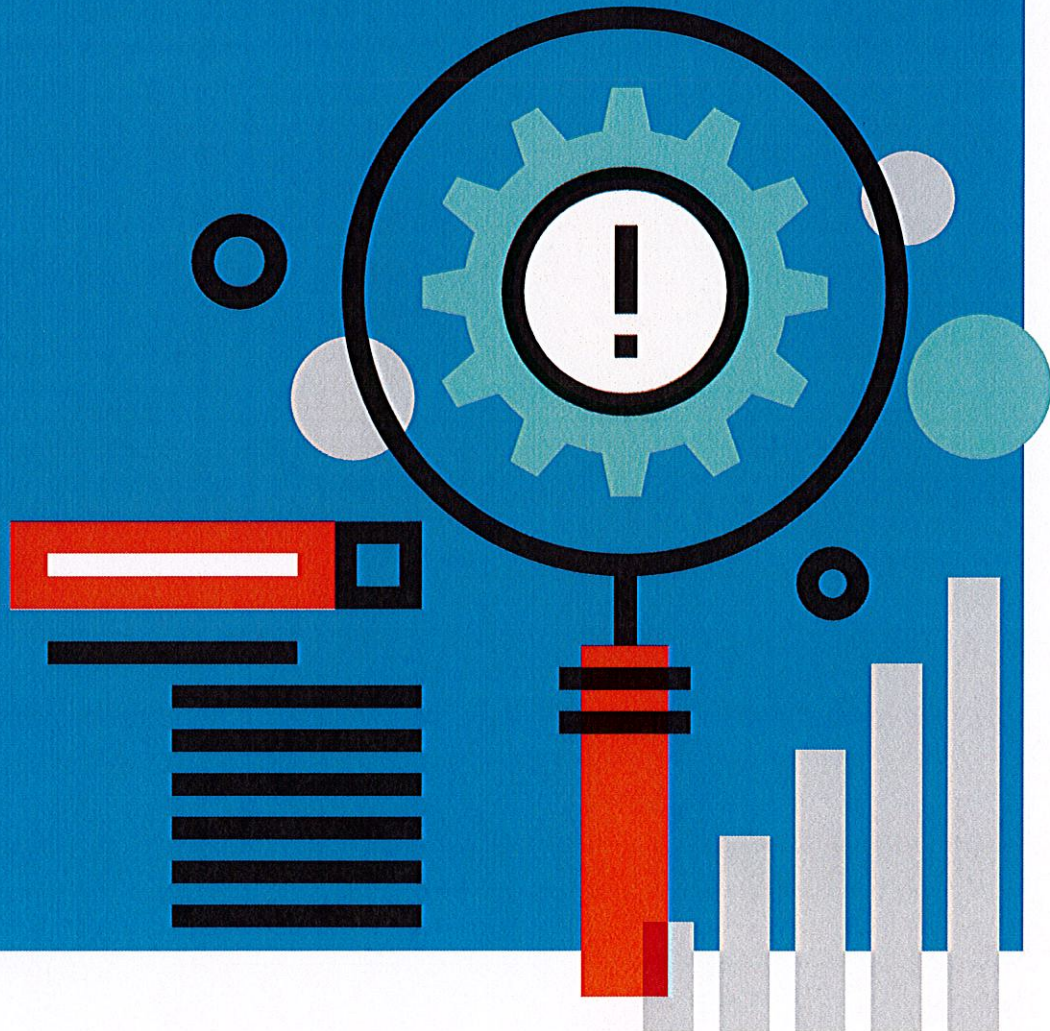


Source: Mike Maciag, Governing Magazine

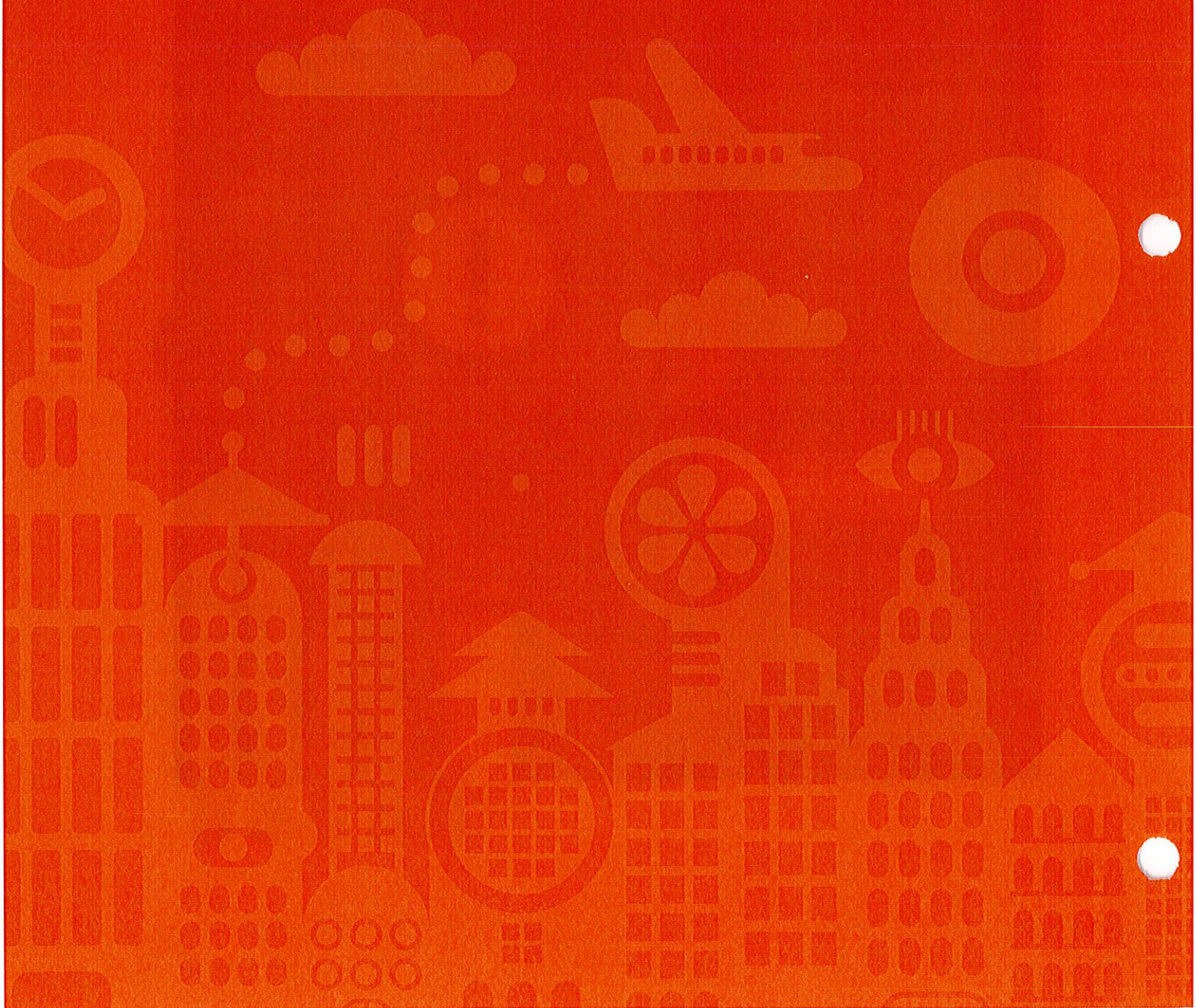
The two primary drivers of local governments expenses are pensions and health care costs. State and local Medicaid expenditures and the cost of health care compensation for state and local government employees and retirees generally grow at a rate that exceeds GDP, which runs local budgets deeper and deeper into trouble. Many cities and counties rely on their state governments to grant them authority to address their local fiscal uncertainty. States must therefore be responsive to their communities' needs and avoid a one-size-fits-all solution.

The GAO estimates that:

"...closing the fiscal gap would require action to be taken today and maintained for each year equivalent to an 18 percent reduction in the state and local government sector's current expenditures. Closing the fiscal gap through revenue increases would require action of similar magnitude through increases in state and local tax revenues. More likely, closing the fiscal gap would involve some combination of both expenditure reductions and revenue increases."



III. FOUR FUTURE SCENARIOS



In the previous section, we shared forty-four trends that could impact your community. By sorting them based on their certainty and impact, in The Big Sort activity (See Section V), you see where your community's vulnerabilities are, and where you might need to focus.

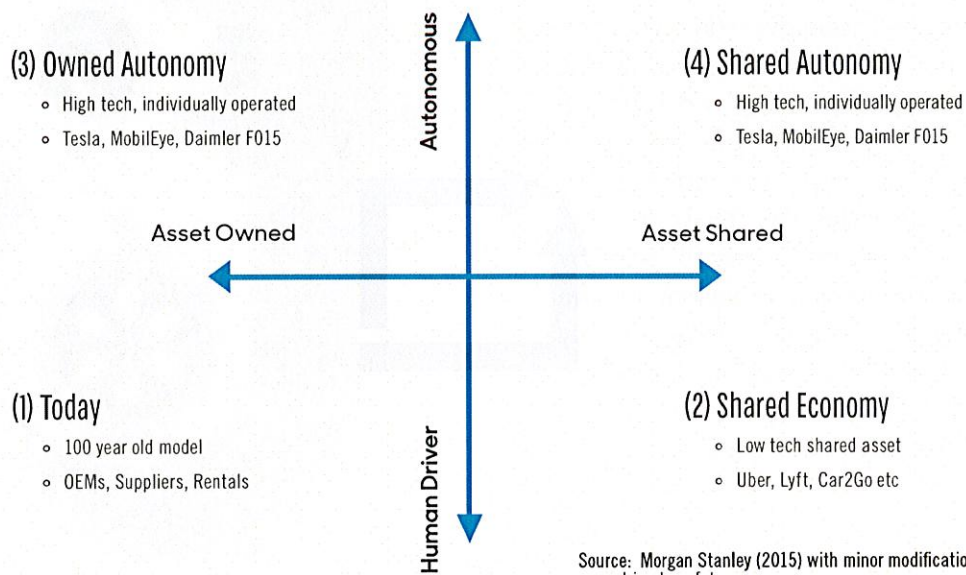
But what will the future really be for your community?

Truth is, there is not one, single future for your community.

Your community will be impacted by multiple external events that are beyond your control –like a hurricane or a decision by a major employer to bring thousands of new jobs to your community. We call these “outside-in” events, because they start outside your control and impact your community.

Your community will also be impacted “inside-out” – by the decisions and actions your community takes, or doesn’t take, that will impact its future.

For example, take the issue of cars. Will we continue to drive our own cars, or have driverless cars? Will our cars be self-owned, or shared assets? This map points to four possible futures. Any of them, or a combination, could exist in the future. Public policy can nudge these futures (outside-in) but human choice (inside-out) should also be considered:



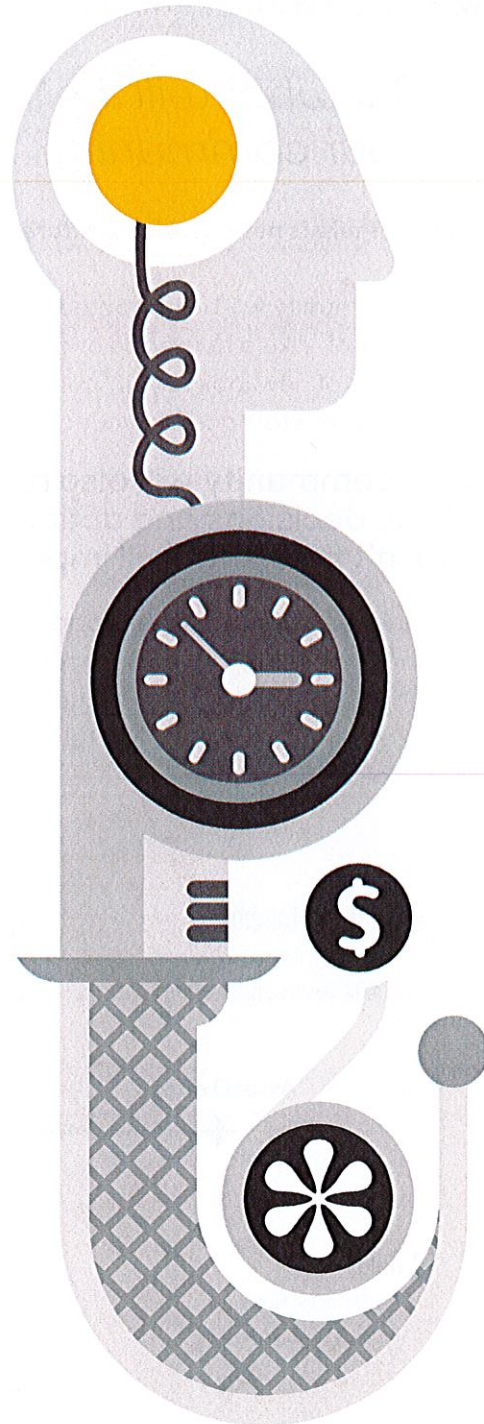
Here, we summarize four plausible scenarios for communities through 2035. Three of the scenarios have accompanying animations; download or view them: transformgov.org.

SCENARIO ONE:

THE OFFICIAL FUTURE

It assumes that local government, the electorate, electeds and trends will continue on their current trajectories.

The largest impacts come from increased population (in-migration from the South where water is scarce), 3D printing and robotics, which both shrink the traditional workforce, but also cause new cottage industries to spring up, and the eventual death of Baby Boomers, which drives down the population, but also drives up city revenues, because the city no longer has to pay retiree Boomer pensions or health care.





SCENARIO TWO:

NOMENTUM

Nomentum is the story of Laurel County, which won the 2016 award for "Most Innovative Community"

due to its progressive government, embrace of technology, and high citizen engagement. After its award, Laurel County attracts lots of young families and new companies. Unfortunately, Laurel continues to tout its "best place to live" credentials long after its "innovative" reputation runs dry. Laurel fails to see the signs that global competition is impacting its major employers, and withdraws major technology investments after one failed implementation attempt for a core system. "It's better to be safe than sorry" is the mantra of the

County Supervisor. As their employers downsize and quality of life diminishes by 2026, a group of "Boomerang" residents (folks who moved away to finish college, but returned in the wave of in-migrants after the 2016 award) band together and start to raise hell. The story ends in 2036 when the county supervisor faces a run off election with one of the Boomerangers, a young woman who is supported by many of the community's most progressive citizens, and promises that Laurel can re-earn its "innovative" reputation.

SCENARIO
THREE:

WE'RE NOT GONNA TAKE IT

This scenario builds on the income and class disparities affecting so many of our communities.

..

and then a natural disaster hits, affecting the "have" and "have not" parts of town very differently. The disaster highlights the inequities within the community and results in a lawsuit brought against the city by disenfranchised citizens. The lawsuit is settled in the residents' favor and as part of the settlement, the City must agree to more inclusive processes and more equitable services. At the same time, a new City Manager is hired, who grew up in the city and is committed to making changes. He takes major steps to ensure the city is equitable for all. "We're Not Gonna Take It" shows how the next generation may help resolve our communities' most divisive issues.



SCENARIO
FOUR:

DEMOCRACY V.3.0



This is the most tech-enriched future.

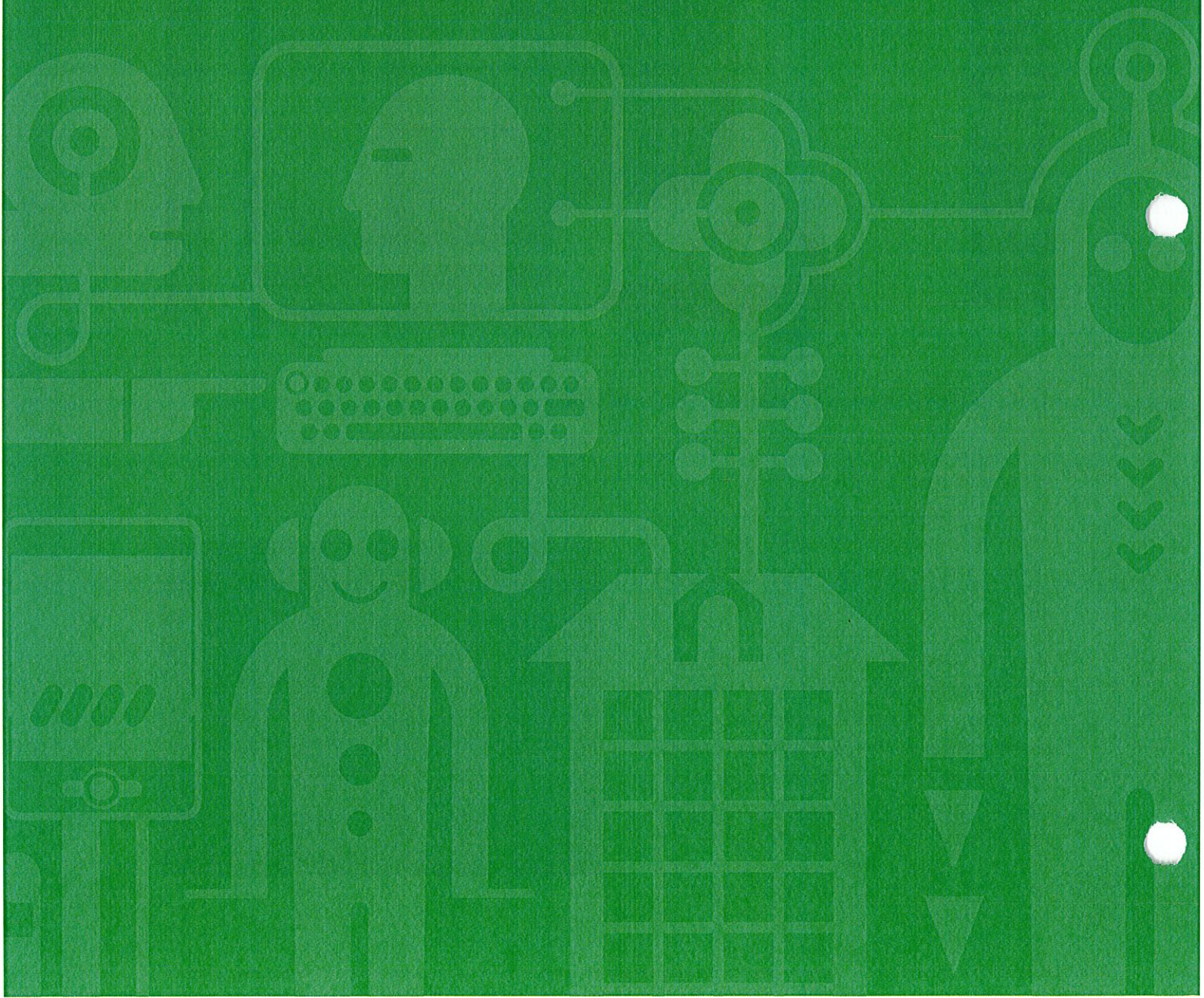
It tells the story of autonomous vehicles, tech-driven education, the fragility of our electric and telecommunications network, and the possibilities of privatization. The climax of the story occurs when citizens realize how much impact corporations have on education and "public" services; citizens revolt in protest, throw out all of their elected councilwomen and men and transform to a high-tech direct democracy. Direct democracy is fun for awhile; citizens receive alerts on their tablets and smart phones to vote on key municipal decisions. And initially, participation is high and many other cities

copy this model. But eventually, decision fatigue sets in and citizens wonder if direct democracy, although possible, is worth it.

Will any of these scenarios come completely true? Probably not.

But elements of these scenarios may come true in many communities, including yours. The purpose of building scenarios based on trends is to see how things could play out over time, and where the pitfalls and opportunities are.

IV. PUTTING IT TO WORK



If you're here, you're committed to making change happen. We've sorted the following suggestions into Basic, Intermediate, and Transformative solutions to address *The Next Big Things*.



Basic Solutions

1. Determine your community's resource threats and opportunities

Resources are most closely tied to human existence and are therefore the most important to your community. As you review the *Resource Force Trends 1-6*:

- o Which Resource trends will have the greatest impact on your community? Will the affect be positive or negative?
- o How is your community responding to these trends?
- o What else is needed? By whom? By when?
- o If your community will be impacted by these trends but has not responded to them, have you designed a likely scenario for your community and shared it with your electeds and community leaders?
- o If you already have responses to these trends, how can you extend or strengthen your response? For example, if you have a climate change plan, how can you broaden its impact, e.g. requiring departments to adopt climate change plans; requiring vendors to have climate change plans; setting more ambitious targets; etc.

2. After Resources, what are your next areas of greatest vulnerability?

Considering the other three of the Four Forces—Technology, Demographics, and Governance—where is your community most vulnerable?

- o Does your community have plans or scenarios to address these vulnerabilities? If not, why not?

- o What other information do you need to know, to develop responsible plans in any of these areas?
- o Who else needs to be involved? How can they help?

3. Invest in leadership development – for electeds and staff

Local governments are facing a series of unprecedented changes, from frail budgets to climate change. We can't assume that ordinary citizens who get elected will be well equipped to handle these new realities, or the disruptive changes that may come.

Future-ready communities should invest in training their electeds on the most important issues facing the community, and in processes related to VUCA leadership. In Austin, TX the new city council went through several months of "deep dive" trainings on a series of topics that the Mayor and City Manager deemed as critical. Whenever possible, staff should be included in these trainings and trainings should be the highest quality possible.

4. Collective Procurement

To handle revenues carefully, many communities already coordinate their purchasing through a central purchasing department or work through a consortium like the UK's Local Government Procurement Network or the United States' US Communities Consortium.

- o How can this be extended to other areas like information technology, maintenance, and professional development, to scale savings event further?

5. Strengthen community networks

The RAND Institute has shown that resilient communities are those that have multiple ties between individuals, public, private, nonprofit and civic sectors.

When disaster strikes, local governments that have high-trust relationships with organizations outside the bureaucracy rebound the most quickly and completely.

- o Map your networks. What formal and informal community networks and relationships do you have? How strong are these connections? Are they strong enough to handle a community disruption?
- o What connections are needed? How could you develop, expand and enhance them?

6. Be a place for all people

As we saw in the Demographics section (*Trends 26-35*), communities can be torn apart by factions and tribes, which decrease social trust and trust in government (*Trend 37*). To address this potentially destabilizing force, local governments must intentionally work to be a place for all people.

Some ideas to get you started:

- o Provide "Bias Awareness" training for all employees, to help them understand their unconscious bias and how to address it;
- o Make connections and specifically invite taskforce members or community volunteers who are not "the usual suspects," i.e. young professionals, Hispanic Chamber of Commerce, Urban League, senior coalitions, nonprofit leaders, etc.
- o Increase your community engagement. Chattanooga, Tennessee set a goal to engage one million people in its regional future. It wasn't just about soliciting input; engaging the public actually changed the tone of the community and the relationship between the public sector and its residents.⁴⁸

⁴⁸ Read more: <http://www.governing.com/cityaccelerator/blog/4-important-lessons-from-40-years-of-civicengagement.html>



Intermediate Solutions

7. Interdisciplinary, Innovative Local Government

When Woodrow Wilson wrote his seminal 1887 essay "The Study of Administration," cities and counties were smaller and more homogenous, the middle class was larger (there were fewer disparities), and issues were less complex,

Wilson's siloed and specialized administration regime made sense in the 1880s. But it is inadequate today. Today's issues, like the declining middle class, can't be solved in a single department. Does it belong in "economic development," "workforce development" or should it be shuffled to the Department of Education?

Future-ready cities are taking two approaches to tackling their communities' thorniest issues:

- o Innovation Teams. Cities like Decatur, Georgia and Palo Alto, California are using Innovation Teams to break down departmental silos and use interdisciplinary groups to address some of their communities' most vexing challenges.⁴⁹
- o Convening broad community stakeholders to address cross-community issues. For example, in Fort Lauderdale, Florida, the city is working with a consortium of governments to assemble transportation stakeholders and identify "first principles" for a regional transportation plan.

8. Broaden your definition of Sustainability

Can a community be considered truly "sustainable" when its middle class has shrunk by half and most households are not earning a living wage? What if its fastest growing demographic groups are not receiving adequate education?

⁴⁹ Learn more about the Alliance for Innovation's Innovation Academy: http://transformgov.org/en/learning/innovation_academy

These questions are at the heart of a global movement to broaden the definition of sustainability beyond the traditional environmental components to include economic and social justice factors.

- o Does your community have a scorecard to report on its environmental, social, and economic sustainability goals?
- o Is your community working in consortium with other communities to share best practices and deepen its sustainability outcomes?

9. Develop contingency plans for both rapid growth and rapid decline

There is not one, single future for your community. Population in your community can change due to natural disaster, climate change, or economic opportunity. Future-ready communities have contingency plans in place.

Facilities like *Arizona State University's Decision Theater* are wonderful resources to help you envision the real world impacts of significant shifts in population.⁵⁰ The benefit of doing contingency plans is that it shows the strength or weakness in existing systems, and enables you to "practice" with a new possibility.

10. Balance the community's focus on growth with quality of life

To attract *and keep* citizens, communities must be inclusive and have the assets and amenities residents enjoy. And as technology advances, the mobile, nomadic workforce (*Trend 35*) will be able to work anywhere. What will make them choose your community?

Perhaps what the "Nomentum" scenario teaches us more than anything is that quality of life isn't accomplished one year, and then completed. Quality of life requires ongoing maintenance, and even measurement. How does your community measure quality of life?⁵¹

⁵⁰ Learn more about Decision Theater: <https://dt.asu.edu/>

⁵¹ NEX T Generation Consulting offers a free quality of life measurement and visual: <http://www.nextgenerationconsulting.com/how-to-measure-quality-of-life/>



Transformative Solutions

11. The Fifty-Year Plan

Development of a 50-year plan would help local governments achieve their maximum potential.

A fifty-year plan enables a city or county to make long-term investments in much-needed infrastructure, and do so in a way that feels appropriate to the time horizon. A fifty-year plan enables residents to think about their choices as their grandchildren and great grandchildren will see them. And perhaps most important, a fifty-year plan gives a community a set of guiding and enduring principles that can better withstand term-by-term political pressure.

12. Invest in Strategic Foresight

Strategic Foresight is a professional process to help a community assess trends, explore possible futures, and determine its future vision. Strategic Foresight was used to develop *The Next Big Things*.

Here are several ways future-ready communities can employ the power of Strategic Foresight:

- o Conduct a trend analysis and scenario development workshop like the one offered in the premium version of this report.
- o Have a member of your staff trained in Strategic Foresight, and deploy them throughout the city (and community) to conduct foresight processes for departments and community stakeholders. The University of Houston offers a five day intensive certificate program in Strategic Foresight.⁵²
- o If you are an Alliance member, join the Future-Ready Cities Consortium.
- o Monitor. Trends do not remain static and future-ready communities will review their trends on a regular basis and adjust their plans as necessary.

⁵² Learn more: <http://www.uh.edu/technology/programs/professional/foresight/>

13. Invest in Open Government and Smart Citizens

The wisdom of crowds teaches that all of us are smarter than any one of us. By sharing community data and engaging your citizens – digitally and through “old school” methods – you receive a raft of community benefits that outweigh the hassle:

- o You engage citizens (*Trend 41*)
- o You leverage the benefits of open government and community solutions (*Trend 10*)
- o You deepen trust (*Trend 38*)
- o You facilitate social cohesion, and may breakdown tribalism (*Trend 26*)

14. Reinvent local government

Why does local government exist, really? How has its purpose shifted since your city or county was founded? What should the role of government be for the next generation?

The benefits of reinventing local government include:

- o Offering a more relevant mission and vision that will enable you to attract and keep great talent who are aligned with your purpose;
- o Re-energizing the electorate;
- o Recreating an organizational framework that enables you to redefine or restructure programs and departments so they can be more valuable, more effective...and more beloved
- o Eliminating programs that will not be needed in the future, or can be done more effectively by other stakeholders

The threat is that if local governments *don't* reinvent how they work, what they offer, and why they exist, others will do it for them.

We are entering the city century. We must lead this effort, or we will be led.

V. PREMIUM TOOLS AND RESOURCES

 #NBT

V. PREMIUM TOOLS AND RESOURCES

The free version of this document does not include Section V. Members of the Alliance for Innovation or those who've paid for the premium version of the report have access to this section.

Section V includes three activities to help communities put The Next Big Things to work, and become future ready. The activities are the Big Sort, Designing Community Scenarios, and a Foresight Workshop, which includes the previous activities in one, day-long whiz-bang workshop.

Please visit transformgov.org for more information about membership or to purchase the premium report.



The following methodologies were used to inform The Next Big Things:

- o Dr. Charles Grantham conducted a Delphi Panel including dozens of subject matter experts to determine local government’s possible futures.

- o A team led by Rebecca Ryan conducted a literature scan to determine what else was being written about and studied regarding the future of cities, counties and local government. Most of those resources are listed below. If you would like to receive a Drop box link to many of the original materials in this library of resources, please email rr@nextgenerationconsulting.com.

- o A team of experienced and emerging City Managers worked alongside international architects, futurists, and innovators to develop the scenarios for the future of communities.

The following books and articles were used to inform The Next Big Things:

Aylett, Alexander. 2014. "Progress and Challenges in the Urban Governance of Climate Change: Results of a Global Survey." Cambridge, MA: MIT.

.....
Hement, Drew, and, Anthony Townsend, eds. 2014. "Smart Citizens." Manchester, UK: Future Everything Publications

.....
National Intelligence Council. 2008. "Global Trends 2025: A Transformed World." Washington, D.C. ISBN 978-0-116-081834-9.

.....
Tuttle, Johanna Nesseseth. 2012. "Private-Sector Engagement in Food Security and Agricultural Development." Washington, D.C.: Center for Strategic and International Studies.

.....
Centers for Disease Control and Prevention. 2013. *The State of Aging and Health in America 2013*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services.

.....
Tuttle, Johanna Nesseseth and Kristin Wedding. 2012. "Will Food Prices Drive Insecurity?" Washington, D.C.: Center for Strategic and International Studies.

.....
Tuttle, Johanna Nesseseth and Anna Applefield. 2012. "The U.S. Drought." Washington, D.C.: Center for Strategic and International Studies.

.....
Smith, Lawrence C. *Four Forces Shaping Civilization's Northern Future*. 2011. New York City: Plume.

Fountain, Henry. "Researchers Link Syrian Conflict to a Drought Made Worse by Climate Change." *New York Times*. March 2, 2015.

National League of Cities. "The Ten Critical Imperatives Facing America's Cities." 2013. Washington, D.C.

Price, Gareth, et. al. "Attitudes to Water in South Asia." 2014. London, England: Chatham House, *The Royal Institute of International Affairs*.

Woolridge, Adrian. "Test Tube Government." *The Economist*. December 6, 2014.

Edmiston, Kelly D. "State and Local E-Government Prospects and Challenges." *American Review of Public Administration*, Vol. 33 No. 1. March 2003, 20-45.

Office of Economic Policy. 2014. "Expanding our Nation's Infrastructure through Innovative Financing." Washington DC: US Department of the Treasury.

Desouza, Kevin C. and Akshay Bhagwater. 2014. "Technology-Enabled Participatory Platforms for Civic Engagement: The Case of U.S. Cities." *Journal of Urban Technology*, 21.4, 25-50, DOI 10.1080/10630732.2014.954898.

Broun, Denis. "Trends Talk: Innovative Finance and its Promise for Global Health." Interview with PSI and Devex, April 2, 2013.

Swindell, David, Stephanie Gerrestsen, and Mark S. Rosentraub. 2014. "The Jobs are Back, but Where? Implications for How Best to Pay for Local Government Services." *State and Local Government Review*, Vol. 46(4) 260-271.

Runde, Daniel F. 2015. "Urbanization, Opportunity, and Development." Washington, D.C.: Center for Strategic and International Studies.

Lefevre, Mathieu, and Ricardo Mastini. "The Mighty Metropolis." *The World Today*. February-March 2015.

Malmö Smart Citizen Services Network. 2013.

United Nations. "Population Challenges and Development Goals." 2005. New York: United Nations Department of Economic and Social Affairs, Population Division.

Cambanis, Thanassis. 2013. "Is Dubai the Future of Cities?" *The Internationalist*.

Wright, Bradley E., Donald P. Moynihan, and Sanjay K. Pandey. "Pulling the Levers: Transformational Leadership, Public Service Motivation, and Mission Valence." *Public Administration Review*. March–April 2012.

.....

Fernandez, Sergio and Hal GT. Rainey. "Managing Successful Organizational Change in the Public Sector." *Public Administration Review*. March–April 2006.

.....

Briffault, Richard. "The Local Government Boundary Problem in Metropolitan Areas." *Stanford Law Review*. May 1996.

.....

Warner, Mildred E. "The Future of Local Government: Twenty-First-Century Challenges." *Public Administration Review*. December 2010.

.....

Behn, Robert D. "The Big Questions of Public Management." *Public Administration Review*. July–August 1995.

.....

Kettl, Donald G. "The Transformation of Governance: Globalization, Devolution, and the Role of Government." *Public Administration Review*. November–December 2000.

.....

"A Long and Winding Road." *The Economist*. March 22, 2014.

.....

Runde, Daniel F., and Conor M. Savoy. 2014. "Resilience: A Critical Framework for Development." Washington, D.C.: Center for Strategic and International Studies.

.....

Ostrom, Vincent, and Elinor Ostrom. "Public Choice: A Different Approach to the Study of Public Administration." *Public Administration Review*. March–April, 1971.

.....

Bosworth, Barry, and Sveta Milusheva. 2011. "Innovation in U.S. Infrastructure Financing: An Evaluation." Washington, D.C.: The Brookings Institution.

.....

Cramer, Katherine J. 2014. "Understanding the Politics of Resentment: Rural Consciousness and Support for Small Government." Madison, WI: University of Wisconsin.

.....

Bradbury, Mar D., and J. Edward Kellough. 2007. "Representative Bureaucracy: Exploring the Potential for Active Representation in Local Government." *Journal of Public Administration Research and Theory, Inc.*

.....

Sommers, Cecily. 2014. *Think Like a Futurist: Know What Changes, What Doesn't, and What's Next*. San Francisco: Jossey-Bass.

.....

Mossberger, Karen, Caroline J. Tolbert, and Ramona S. McNeal. 2008. *Digital Citizenship: The Internet, Society, and Participation*. Massachusetts: MIT Press

"Ten-Year Forecast." Institute for the Future. 2014.
.....
Marien, Michael. "15 Global Challenges Facing Humanity." *Future Survey*
.....
Glenn, Jerome C., Theodore J. Gordon, and Elizabeth Florsecu. "2013-14 State of the Future."
The Millenium Project. 2014.
.....
Jacobson Ph.D, Robert, Douglas Bors, and Zern Liew. "Smart Citizens L.A." Bluefire
Consulting. June 1, 2014.
.....
Jacobson Ph.D, Robert. "Actualizing Smart Citizens in Pima-Tuscon." October 29, 2014.
.....
Lochocki, Timo. "Pegida Can be Tamed." *The World Today*. February-March 2015.
.....
Carter, Timothy. "Smart Cities: The future of urban infrastructure." BBC.
November 22, 2013.
.....
Hill, Dan. "On the smart city; Or, a 'manifesto' for smart citizens instead." City of Sound.
February 2013.
.....
"Data: A Foundation for Tomorrow's Cities." Computation Institute. November 25, 2013
.....
Gonzales, Gladys, Tom Miller, Gary Cain, Kelly Bearden, Lea Deesing, David Hutchins, and
Ted Smith. "Positioning your Community to Thrive: Technologies, Tips and Tools to Spur
Economic Development in Local Government." *Government Technology*. 2013
.....
"Some Elements of the Next Global Economic System: How Might These New Elements
Affect the Human Condition over the Next 20 Years?" The Millennium Project. 2010
.....
"Environmental Security Study: Emerging International Definitions, Perceptions, and Policy
Considerations." The Millennium Project.
.....
Jacobson Ph.D, Robert. "Smart Citizens' for Malmö, Sweden." *Atelier Tomorrow*.
December 9, 2013.
.....
"Millennium 3000 Scenarios." Millennium Project.
.....
Grantham Ph.D, Charles. "The robots are coming, the robots are coming..."
The Community Design Institute. 2015.
.....
"Millennium Project Scenarios: Global Normative Scenario." Millennium Project.

"Global Trends 2030: Alternative Worlds." The National Intelligence Council. November 2012.

Finger, C Thomas. "Global Trends 2025: A Transformed World." The Office of the Director of National Intelligence.

Kirby, Terry. "Getting Smart Cities Connected." *The Guardian*. 2014.

Hemment, Drew and Anthony Townsend. "Smart Citizens." FutureEverything Publications. 2013.

Kannan, P.K., and Ai-Mei Chang. "Beyond Citizen Engagement: Involving the Public in Co-Delivering Government Services". IBM Center for the Business of Government. 2013.

Townsend, Anthony, Rachel Maguire, Mike Liebhold, and Mathias Crawford. "A Planet of Civic Laboratories: The Future of Cities, Information, and Inclusion." Institute for the Future.

"Citizens Make the Future." 2013. Institute for the Future

Cambanis, Thanassis. "Is Dubai the future of cities?" *The Internationalist*. December 1, 2013.

King, Cheryl Simerll, Kathryn M. Feltry, and Bridget O'Neill Susel. "The Question of Participation: Toward Authentic Public Participation in Public Administration." *Public Administration Review*. July-August 1998.

Elgin, Duane S., and Robert A. Bushnell. "The Limits to Complexity: Are Bureaucracies Becoming Unmanageable?" *The Futurist*. December 1977.

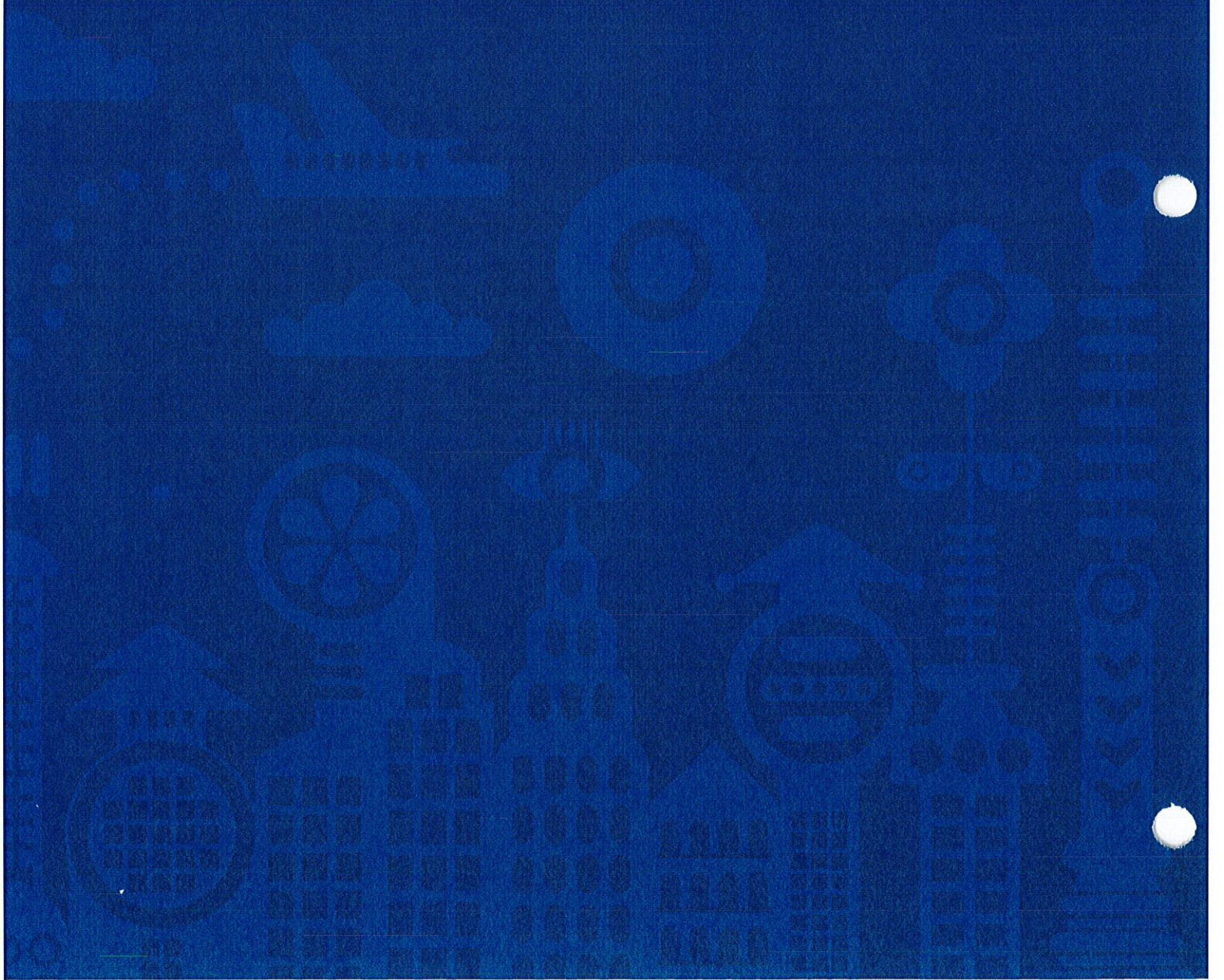
Lindblom, Charles. "The Science of 'Muddling Through'". *Public Administration Review*. 1959.

Bailey, Rob, Antony Froggatt, and Laura Wellesley. "Livestock - Climate Change's Forgotten Sector: Global Public Opinion on Meat and Dairy Consumption." *The Royal Institute of International Affairs*. December 2014.

Kassakian, John G. and Schmalensee, Richard, "The Future of the Electric Grid," 2011. Cambridge: Massachusetts Institute of Technology.

VII.

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The Alliance Board of Directors:

- o Paul Arevalo, City Manager, West Hollywood, CA
- o Darin Atteberry, City Manager, Fort Collins, CO
- o Michael Baker, Deputy Village Administrator, Downers Grove, IL
- o Kevin C. Desouza, PhD, Associate Dean for Research, College of Public Service & Community Solutions and Foundation Professor, School of Public Affairs Arizona State University
- o Charles M. Duggan, Jr., City Manager, Auburn, AL
- o Lee Feldman, City Manager, Fort Lauderdale, FL
- o Shannon Flanagan-Watson, (Board Vice-Chair), Assistant County Manager, Arlington County, VA
- o Elizabeth Fretwell, City Manager, Las Vegas, NV
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- o Jim Keene, City Manager, Palo Alto, CA
- o Tom Lundy, County Manager, Catawba County, NC
- o Peggy Merriss, City Manager, Decatur, GA
- o Terrence Moore, City Manager, College Park, GA
- o Karen Mossberger, Director, School of Public Affairs, Arizona State University
- o Robert J. O'Neill, Jr., Executive Director, ICMA

The Alliance Board of Directors:

- o Marc Ott, City Manager, Austin, TX
- o Clay Pearson, City Manager, Pearland, TX
- o Randall H. Reid, Southeast Regional Director, ICMA
- o Reina Schwartz, Assistant City Manager, San Pablo, CA
- o Garth Sherwin, City Manager, Lethbridge, AB, Canada
- o David Swindell, PhD, Director & Associate Professor, Arizona State University, Center for Urban Innovation
- o Jackson C. Tuttle II, (Retired), Former City Manager, Williamsburg, VA
- o J. Michael Wilkes, (Board Chair), City Manager, Olathe, KS

The Next Big Things Steering Committee

- o Thomas Bonfield, City Manager, Durham, NC
- o Kevin C. Desouza, PhD, Associate Dean for Research, College of Public Service & Community Solutions and Foundation Professor, School of Public Affairs Arizona State University
- o James Keene, City Manager, Palo Alto, CA
- o Peggy Merriss, City Manager, Decatur, GA
- o Robert J. O'Neill, Executive Director, ICMA
- o Daniel Ortiz-Hernandez, City Administrator, Kimball, NE
- o Marc Ott, City Manager, Austin, TX
- o Rebecca Ryan, President, NEXT Generation Consulting, Inc.
- o Reina Schwartz, Assistant City Manager, San Pablo, CA
- o Toni Shope, Strategic Initiatives Director, Alliance for Innovation
- o Karen Thoreson, President, Alliance for Innovation
- o Jackson C. Tuttle II, (Retired), Former City Manager, Williamsburg, VA

Delphi Panel Participants

- o Peter Bishop, Retired Associate
Professor of Strategic Foresight, University of Houston
- o Peter Block, Author, Consultant, and Speaker
- o Simon Farbrother, City Manager, City of Edmonton, AB
- o Ted Gaebler, Retired City Manager
- o Ben Hecht, President & CEO, Living Cities
- o Katy Simon Holland, President, Simon and Associates
- o Robert, Jacobson, Principal, Praxis Innovation by Design
- o Elizabeth Kellar, President & CEO,
Center for State and Local Government Excellence
- o Henry King, Innovation Strategist and Founder, King Innovation Group
- o Felicia Logan, Director of Leadership Development, ICMA
- o John Nalbandian, Professor, Public Administration, University of Kansas
- o Julia Novak, President, Novak Consulting Group
- o Robert J. O'Neill, Jr., Executive Director, ICMA
- o Ari Popper, Founder/CEO, SciFutures
- o Jim Spore, City Manager, City of Virginia Beach, VA
- o Sherry Weesner, Director of Projects, Scenic Houston

Forecasting Workshop Participants

- o Mark Aesch, Client Partner, TransPro Consulting
- o Dr. Peter Bishop, Executive Director, Teach the Future
- o Chase Carlile, Senior Budget Analyst, City of Mesa, AZ
- o Sam Feldman, Former Management Assistant II, City of Phoenix, AZ
- o Charlie Grantham, Founder, Community Design Institute
- o Michael Hodge, Architect, Rumblespring
- o Katy Simon Holland, President, Simon and Associates Consulting
- o Jimmy Jayne, County Manager, Navajo County, AZ
- o Peggy Merriss, City Manager, City of Decatur, GA
- o Karen Mossberger, Director, School of Public Affairs, Arizona State University
- o Marc Ott, City Manager, City of Austin, TX
- o Dominic Papa, Marvin Andrews Fellow, Arizona State University
- o Stephanie Smith, Assistant to the City Manager, City of Flagstaff, AZ
- o Brent Stockwell, Assistant City Manager, City of Scottsdale, AZ
- o Pam Weir, Management Analyst, City of Sierra Vista, AZ

Scenario Development Team

- o Dr. Peter Bishop, Executive Director, Teach the Future
- o Charlie Grantham, Founder, Community Design Institute
- o Katy Simon Holland, President, Simon and Associates
- o Kris Kluthe, Senior Motion Designer, Planet Propaganda



If you have questions about
The Next Big Things, please contact
the Alliance for Innovation.

Phone: 888.496.0944

Email: nbt@transformgov.org

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411 N Central Ave, Suite 400
Phoenix, AZ 85004

Phone: 888.496.0944
transformgov.org

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Eleven Signs a City Will Succeed



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JAMES FALLOWS

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SIGN UP

This article appears in the March print edition alongside the cover story, “Can America Put Itself Back Together?”—a summation of James and Deb Fallows’s 54,000-mile journey around America in a single-engine plane. More dispatches from their ongoing reporting trip can be found here.

BY THE TIME we had been to half a dozen cities, we had developed an informal checklist of the traits that distinguished a place where things seemed to work. These items are obviously different in nature, most of them are subjective, and some of

them overlap. But if you tell us how a town measures up based on these standards, we can guess a lot of other things about it. In our experiences, these things were true of the cities, large or small, that were working best:

1. Divisive national politics seem a distant concern. We first traveled during the run-up to the bitter midterm elections of 2014, then while the Supreme Court was ruling on same-sex marriage and Obamacare, and then as the 2016 presidential campaign was gathering steam. Given the places we were visiting, I imagine that many of the people we interviewed were Donald Trump supporters.

But the presidential race just didn't come up. Cable TV was often playing in the background, most frequently Fox News; if people had stopped to talk about what was on, they might have disagreed with one another and with us. But overwhelmingly the focus in successful towns was not on national divisions but on practical problems that a community could address. The more often national politics came into local discussions, the worse shape the town was in.

Chelsea Beck

2. You can pick out the local patriots. A standard question we'd ask soon after arrival was "Who makes this town go?" The answers varied widely.

Sometimes it was a mayor or a city-council member. Sometimes it was a local business titan or real-estate developer. Sometimes a university president or professor, a civic activist, an artist, a saloon-keeper, a historian, or a radio personality. In one city in West Virginia, we asked a newspaper editor this question, and the answer turned out to be a folk musician who was also a civic organizer. What mattered was that the question *had* an answer. And the more quickly it was provided, the better shape the town was in.

3. “Public-private partnerships” are real. Through the years I had assumed this term was just another slogan, or a euphemism for sweetheart deals between Big Government and Big Business.

But in successful towns, people can point to something specific and say, *This* is what a partnership means. In Greenville, South Carolina, the public-school system includes an elementary school for engineering in a poor neighborhood. The city runs the school; local companies like GE send in engineers to teach and supervise science fairs, at their own expense. In Holland, Michigan, the family-owned Padnos scrap-recycling company works with a local ministry called 70x7 Life Recovery to hire ex-prisoners who would otherwise have trouble reentering the workforce. In Fresno, California, a collaboration among the city, county, and state governments; local universities; and several tech start-ups trains high-school dropouts and other unemployed people in computer skills. The more specifically a community can explain what their public-private partnerships mean, the better off the city is.

Chelsea Beck

4. People know the civic story. America has a “story,” which everyone understands even if only to say it’s a myth or a lie. A few states have their guiding stories—California as either the ever-promising or the sadly spoiled frontier, Vermont as its own separate Eden.

Successful cities have their stories too. For Sioux Falls, South Dakota, that it’s just the right size: big enough so that people who have come from the smaller-town prairie can find challenge, stimulation, opportunity; small enough to be livable and comfortable. For Columbus, Ohio, which is several times larger than Sioux Falls, that it’s big enough to make anything possible; small enough to actually get things done. For Bend, Oregon; or Duluth, Minnesota; or Winters, California, that they are in uniquely attractive locations. For Pittsburgh, that it has set an example of successful turnaround. For Eastport, Maine, or Allentown or Fresno or Detroit, that they are in the process of turning around. As with guiding national myths, the question is not whether these assessments seem precisely accurate to outsiders. Their value is in giving citizens a sense of how today’s efforts are connected to what happened yesterday and what they hope for tomorrow.

Chelsea Beck

5. They have a downtown. This seems obvious, but it is probably the quickest single marker of the condition of a town. For a “young” country like the United States, surprisingly many cities still have “good bones,” the classic Main Street-style structures built from the late 1800s through World War II. In the mall-and-freeway decades after the war, some of these buildings were razed and many more were abandoned or disfigured with cheap aluminum fronts.

Most of the cities we visited were pouring attention, resources, and creativity into their downtown. The Main Street America project, from the National Trust for Historic Preservation, has coordinated downtown-revival projects in some 2,000 communities. Of the downtowns we saw, Greenville’s and Burlington’s were the most advanced, studied by planners around the world. But downtown ambitions of any sort are a positive sign, and second- and third-floor apartments and condos over restaurants and stores with lights on at night suggest that the downtown has crossed a decisive threshold and will survive.

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6. They are near a research university. Research universities have become the modern counterparts to a natural harbor or a river confluence. In the short term, they lift the economy by bringing in a student population. Over the longer term, they transform a town through the researchers and professors they attract: When you find a Chinese or German physicist in the Dakotas, or a Yale literature Ph.D. in California's Central Valley, that person probably works for a university. Research universities have become powerful start-up incubators. For instance: Clemson and the array of automotive-tech firms that have grown up around it in South Carolina, or UC Davis and associated agro-tech ventures. Riverside and San Bernardino were similar-size cities with similar economic prospects at the end of World War II. Their paths have diverged, in part because in the 1950s Riverside was chosen as the site of a new University of California campus.

7. They have, and care about, a community college. Not every city can have a research university. Any ambitious one can have a community college.

Just about every world-historical trend is pushing the United States (and other countries) toward a less equal, more polarized existence: labor-replacing technology, globalized trade, self-segregated residential-housing patterns, the American practice of unequal district-based funding for public schools. Community colleges are the main exception, potentially offering a connection to high-wage technical jobs for people who might otherwise be left with no job or one at minimum wage. East Mississippi Community College has taken people who were jobless or on welfare and prepared them for work in nearby factories that pay much more than the local median household income (for instance, some \$80,000 in the steel factory, versus a local median income of about \$35,000). Fresno City College works with local tech firms and the city's Cal State campus to train the children of farm workers (among others) for high-tech agribusiness jobs.

Obviously, this does not end inequality, and badly run community colleges can make things worse by loading students with debt without improving their circumstances. Nationwide, only about 40 percent of those who start at a public community college finish within six years. But we saw a number of schools that were clearly forces in the right direction. The more often and more specifically we heard people talk about their community college, the better we ended up feeling about the direction of that town.

8. They have unusual schools. Early in our stay, we would ask what was the most distinctive school to visit at the K-12 level. If four or five answers came quickly to mind, that was a good sign.

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The examples people suggested ranged widely. Some were “normal” public schools. Some were charters. Some emphasized career and technical training, like Camden County High School, in Georgia. Some were statewide public boarding schools, like the South Carolina Governor’s School for the Arts and Humanities, and the Mississippi School for Mathematics and Sciences. Some were religious or private schools. The common theme was intensity of experimentation.

9. They make themselves open. The anti-immigrant passion that has inflamed this election cycle was not something people expressed in most of the cities we visited. On the contrary. Politicians, educators, businesspeople, students, and retirees frequently stressed the ways their communities were trying to attract and include new people. Cities as different as Sioux Falls, Burlington, and Fresno have gone to extraordinary lengths to assimilate refugees from recent wars. The mayor of Greenville, South Carolina, asked us to listen for how many different languages we heard spoken on the street by business visitors.

Every small town in America has thought about how to offset the natural brain drain that has historically sent its brightest young people elsewhere.

The same emphasis on inclusion that makes a town attractive to talented outsiders increases its draw to its own natives.

Chelsea Beck

10. They have big plans. If I see a national politician with a blueprint for how things will be better 20 years from now, I think: “Good luck!” In fact, few national politicians even pretend to offer a long-term vision anymore. When a mayor or city-council member shows me a map of how new downtown residences will look when completed, or where the new greenway will go, I think: “I’d like to come back.” Cities still make plans, because they can do things.

Chelsea Beck

11. They have craft breweries. One final marker, perhaps the most reliable: A city on the way back will have one or more craft breweries, and probably some small distilleries too. Until 2012, that would have been an unfair test for Mississippi, which effectively outlawed craft beers by setting maximum alcohol levels at 5 percent. Now that law has changed, and Mississippi has 10 craft breweries. Once-restrictive Utah has even more. A town that has craft breweries also has a certain kind of entrepreneur, and a critical mass of mainly young (except for me) customers. You may think I'm joking, but just try to find an exception.

ABOUT THE AUTHOR



JAMES FALLOWS is a national correspondent for *The Atlantic* and has written for the magazine since the late 1970s. He has reported extensively from outside the United States and once worked as President Carter's chief speechwriter. His latest book is *China Airborne*.

[Twitter](#) [Email](#)

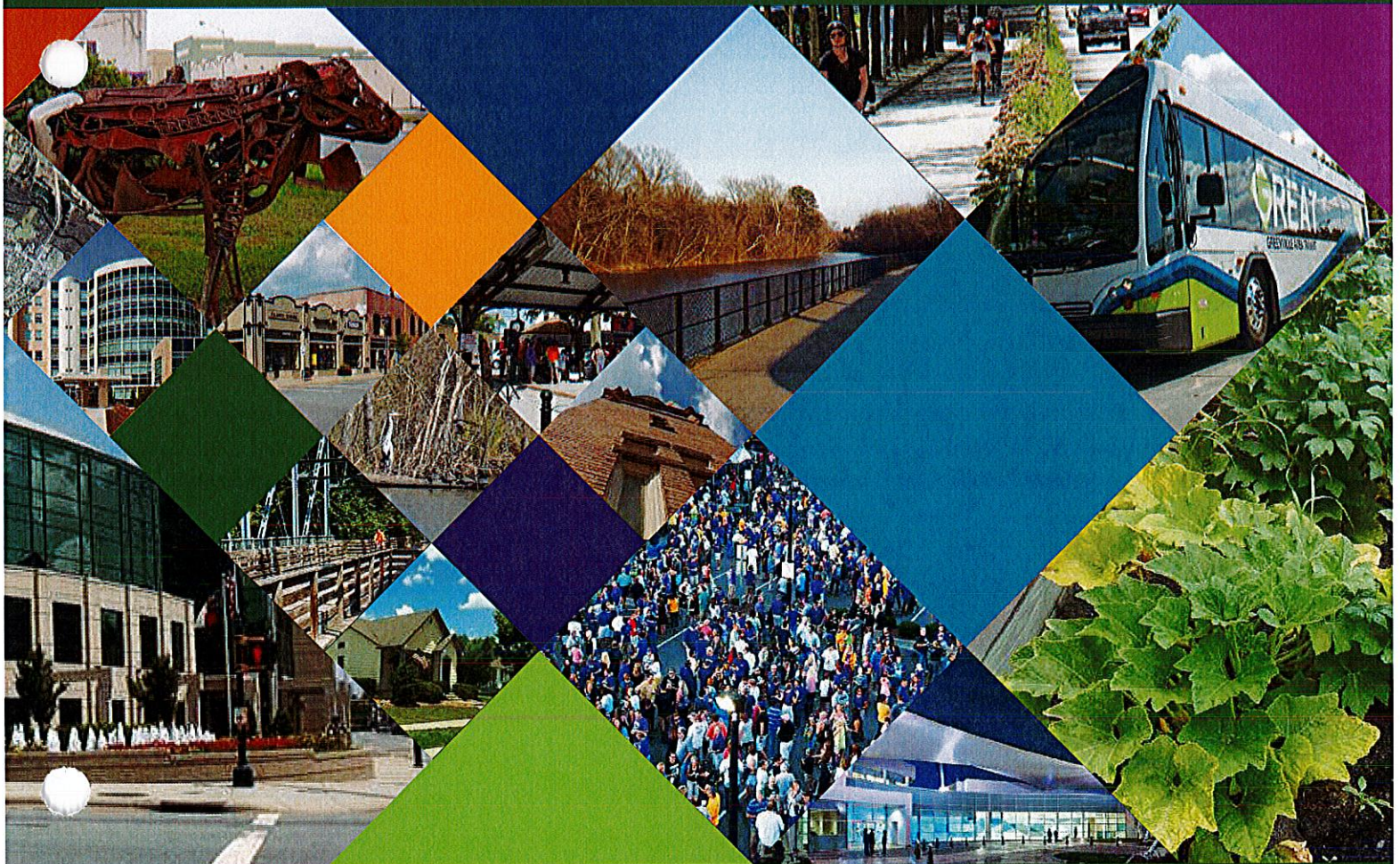


Horizons 2026

GREENVILLE'S COMMUNITY PLAN

August 23, 2016

Adopted by Greenville City Council on September 8, 2016



[Link to Supporting Data and Analysis
in Community Profile, 2015](#)

Vision Framework

An important component for every community plan is a vision statement. A vision statement should identify the broadly held public values and aspirations of citizens. Horizons 2026 includes a Vision Framework, which was developed from the public input provided in Phases 1 and 2 of this process. This Vision Framework is similar to the vision statement in the 2010 Horizons Plan in that it describes the long-term aspirations of the community. It is different because it does this in several separate statements for each of the plan's eight chapters. Following is a list of the eight policy chapters in this plan, along with the vision statement for each.

1 Building Great Places

Greenville will be home to active, vibrant, and distinct places that are linked through a high quality, walkable, and beautiful built environment. These places, including mixed use centers, neighborhoods, corridors, and employment districts, will build on Greenville's existing land patterns. They will provide new walkable and connected developments that enrich the distinct visual appearance of the city and foster a growing sense of pride, while conserving key natural areas.

2 Enhancing Mobility

Greenville's transportation corridors will provide accessibility to destinations throughout the city by complementing the built environment and offering well-connected, safe, and attractive travel networks for bicyclists, pedestrians, drivers, and users of public transportation. Compact development and street designs that serve all types of users will reduce automobile collisions and improve travel safety throughout Greenville. The city will be regionally accessible with an airport established as the primary hub for air travel in eastern North Carolina, exceptional interstate roadways, a navigable and inspiring built environment for visitors, and future planning for regional rail service.

3 Maintaining Fiscal Responsibility

Greenville will embrace a culture of transparency and fiscal responsibility in all aspects of city management. The city will foster business investments and collaboration through open governance and a business-friendly culture. Management of public facilities and services will focus on providing a high quality of life for residents, while also achieving fiscal responsibility. Physical planning efforts will grow the city's tax base sustainably and ensure the long-term efficient delivery of Greenville's high quality services.

4 Growing the Economic Hub

Greenville, a city that supports business development, entrepreneurship, and labor force training, will have high quality employment opportunities for an increasingly diverse population. The regulatory environment, business incentives, and partnerships will help to grow and sustain local companies, create an adaptive and well-trained workforce, and foster a thriving public education system. New jobs will emerge in a variety of locations throughout the city, including existing industrial parks, new well-planned employment centers, and urban mixed-use hubs. The city's high quality of life will help retain an well-trained and creative workforce.

5 Creating Complete Neighborhoods

Greenville will offer a variety of quality living options for its growing and increasingly diverse population, while supporting established neighborhoods and their existing residents. Complete neighborhoods will offer a variety of housing types, an integrated network of walkable and bikeable streets, access to transit, public schools, civic space in prominent locations, and proximity to grocery stores and neighborhood-serving commercial services needed by residents. With an assortment of high quality housing options that support a variety of income levels, neighborhoods will support multiple generations of families and ensure that someone can grow up, raise a family, and retire in the same neighborhood.

6 Fostering a Resilient City

Greenville will grow safely by protecting the city's natural water systems and managing development in hazardous areas. The city will be prepared for the impacts of powerful storms, and shifts in climate. It will grow sustainably by using design approaches that serve to minimize impacts on the natural environment. Conservation efforts will maintain the health of the Tar-Pamlico River and Neuse River watersheds, manage stormwater flows, and help to guarantee supplies of clean water for future generations. Greenville will have room for proven renewable energy initiatives, clean transportation opportunities, and green building technologies. Greenville will support nature not just in parks, yards, and open spaces, but along streets, in open lots, and atop buildings.

7 Growing a Healthy City

As the cultural and healthcare hub of eastern North Carolina, Greenville will offer residents and visitors, regardless of their income, the opportunity to maintain a healthy lifestyle. Residents will have access to community gardens, farmer's markets, and high quality grocery stores. Sidewalks, greenways, and bike lanes will promote active travel by connecting housing to jobs, recreation, healthy foods, and shopping. Parks will be destinations for active recreation. These benefits will be accessible by allowing aging residents, those with a physical disability, and visitors to the Health Hub of Eastern North Carolina to participate.

8 Growing Together

Greenville will be a place where people and organizations work together to achieve a vitality and character that cannot be accomplished without purposeful coordination and collaboration. This is a community rich with resources and leadership. Multiple governmental jurisdictions, institutions, organizations, and businesses have worked over the years to contribute to the success and unique character of the City of Greenville. Relationships and partnerships will continue to evolve in a way that moves the community forward, Growing Together.

Sustainability Themes

Planning for sustainability is the defining challenge of the twenty-first century. Sustainability is an important theme of this plan and is central to addressing the long term challenges and opportunities of the community. Sustainability is the ability to sustain and improve the current quality of life and the ecosystems on which it depends for this and future generations. This plan identifies eight themes concerning the sustainability and resilience of Greenville. Each theme is identified below:



Interwoven Equity

Recent decades have shown improvements in economic, health, and quality of life conditions for less privileged people throughout the Southeast. Disparities continue to exist, however, for minorities and children growing up in low income households. The theme of interwoven equity aims to create a city where fairness and equity are provided for in the housing services, health, safety, and livelihood needs of all citizens and groups in Greenville.



Resilient Economy

Regional and global economies have shifted over the past decades in unpredictable ways. More than ever, communities are expected to prepare for the unexpected by building a high wage job base and adaptable job training programs. This plan works to ensure that the community is prepared to deal with both positive and negative changes in its economic health, and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.



Strong Fiscal Responsibility

Shrinking budgets increase the importance of long term fiscal responsibility. Greenville strives to ensure that policies and projects consider the long term fiscal impacts in addition to short term benefits.



Livable Built Environment

This plan strives to achieve a livable built environment where land use, transportation, housing, energy, and infrastructure work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.



Affordable Cost of Living

One of Greenville's many assets is its relatively affordable cost of living with regard to daily household expenses. Maintaining and improving a long-term affordable cost of living continues to be an important sustainability theme within this plan.



Harmony with Nature

This plan works to ensure that the natural environment and ecosystems on which we depend are protected, that the Greenville community protects itself from increasingly volatile weather events, and that the community seeks ways to reduce its reliance on finite natural resources.



Healthy Community

Our living environment impacts our health and well-being in many ways. Some residents may lack opportunities for exercising, accessing healthy foods, or obtaining care. As the city grows, we strive to improve the health of the entire community.



Responsible Regionalism

Regional coordination is key to responsible growth and efficient long-term planning. This plan works to ensure that local policies and projects account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region to the greatest extent possible.

How the Vision Framework Addresses Our Sustainability Themes

The following matrix describes the connection between the vision framework and each of the sustainability themes. Although the sustainability themes are addressed in every chapter, the matrix denotes the more direct connections between them. The goals within each chapter identify relevant sustainability themes.

Sustainability Themes:



Horizons 2026 Vision Framework:

								
1	Building Great Places	+	+	+	+	+	+	+
2	Enhancing Mobility	+	+	+	+	+	+	+
3	Maintaining Fiscal Responsibility	+	+	+		+		+
4	Growing the Economic Hub	+	+	+	+	+	+	+
5	Creating Complete Neighborhoods	+	+	+	+	+	+	+
6	Fostering a Resilient City	+	+	+	+	+	+	+
7	Growing a Healthy City	+	+		+	+	+	
8	Growing Together		+	+				+

Horizons 2026 Big Ideas

Greenville stands at an important time in its history. The city has the opportunity to harness the potential of its status as the regional economic, educational, health, and cultural hub of Eastern North Carolina to improve the overall quality of life in the city. To do this, it will require focused efforts to enhance the community to make it more attractive to investors and to future residents. This community plan sets out five big ideas for the city to help it realize the vision of becoming a premier North Carolina community that offers a high quality of life to its residents and workforce.

1. Improve Built Environment Quality and Choices

- Establish a new approach for managing land use that also addresses community character
- Improve design and increase options for new types of neighborhoods and commercial centers
- Encourage and enhance future development in Uptown

2. Support a More Walkable and Livable Community that Promotes Health and Safety

- Provide new development approaches that support walkable, mixed use developments
- Enhance the transportation system to improve safety and mobility for all modes of travel

- Continue efforts to provide recreational amenities that support healthy behaviors

3. Capitalize on Economic Strengths through Focused Public Investments and Efforts

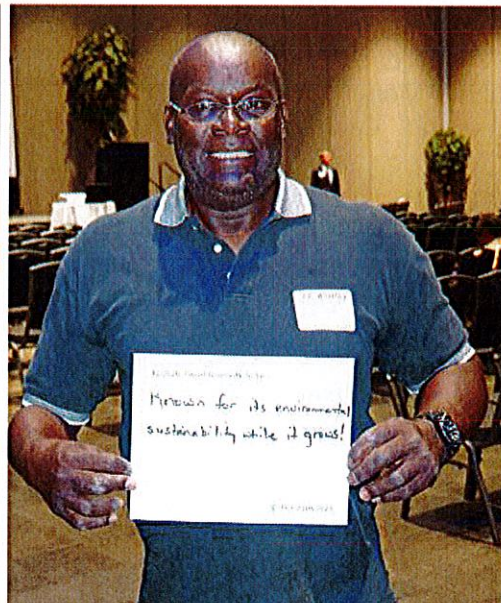
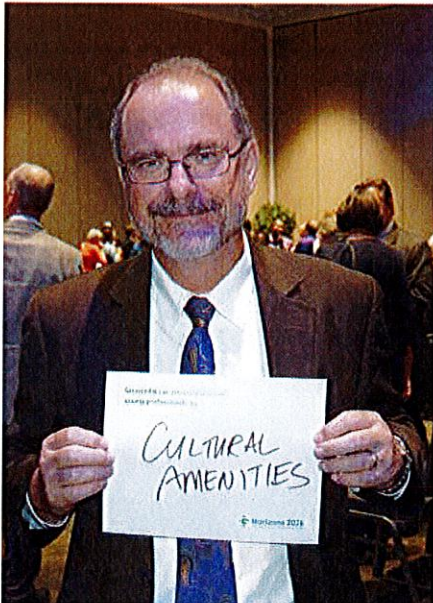
- Leverage economic development potential within the Medical District, within and around the ECU millennial campus, and in the future Southwest Bypass corridor
- Continue Uptown Greenville reinvestment, including connections to adjacent neighborhoods and activating areas near the Tar River

4. Undertake Fiscally Efficient Ways of Managing and Serving Growth

- Encourage infill and redevelopment to maximize the use of existing public infrastructure
- Use a Tiered Growth approach to help guide annexation and capital investment decisions

5. Collaborate with Community Partners to Achieve a Higher Quality of Life in Greenville

- Support cross-jurisdictional planning for areas of common interest, such as the Southwest Bypass corridor
- Improve information and identify opportunities to coordinate and collaborate with community partners and neighboring jurisdictions to realize regional potential



By 2026, I Want Greenville To Be...

Attendees who turned out for the Workshop for Our Future contributed their ideas for what Greenville should be.

Horizons 2026 Action Plan

To achieve the city's big ideas, it will need a clear plan of action for implementation over the next 10 years. This Horizons 2026 Community Plan includes an action plan for implementation that addresses the priority initiatives to undertake over the next 10 years, and secondary initiatives that can be accommodated during that timeframe as resources and staff capacity are available. This action plan should be used when making annual updates to the city's Strategic Plan and when updating the city's Capital Improvement Program (CIP). The priority actions should be reinforced by actions in the Strategic Plan and investments in the CIP.

Priority Actions:

1. 1.1. Adopt Mixed Use Zoning Districts
2. 1.4. Adopt Mandatory Design Standards in Uptown
3. 1.9. Develop Corridor Development Standards
4. 5.7. Develop Strategy to Address Overdevelopment of Peripheral Apartment Complexes
5. 4.2. Create an Incentive Program for Development and Redevelopment
6. 1.5. Implement the Dickinson Avenue Corridor Study
7. 8.1. Establish Arrangements for Information-Sharing
8. 1.8. Develop an Historic Preservation Plan
9. 7.3 Update Development Regulations to Require Open Space / Park Space as a Part of New Neighborhoods
10. 7.4. Support Personal and Community Gardens
11. 3.1. Develop a Fiscal Impact Analysis Model for Evaluating Proposed Annexations and Capital Projects
12. 2.4. Convene Transit Providers to Foster Coordination
13. 6.2. Develop a Green Energy Plan
14. 7.8. Develop an Iconic Pedestrian Bridge that Connects North of the River to Uptown
15. 1.7. Redevelop Properties Along First Street.
16. 6.4 Implement Greenville's Watershed Master Plans
17. 5.8 Develop Strategies to Stabilize and Revitalize the University Neighborhood