EDJ
The IEDC
Economic Development Journal

734 15th Street, NW Suite 900 • Washington, DC 20005
Volume 17 / Number 3 / Summer 2018

Economic Development Leadership
Practice the Essentials to Recover Quickly in a Time of Crisis

Public-Private Partnerships
Delivering Civic Infrastructure through P3s

Economic Development after Dark
Making the Case for a Night Mayor

Aging as an Engine of Innovation, Business Development, and Employment Growth
Facilitating Age-Related Economic Development

Navigating the Site Development Process
Communities Prepare for Success in the Industrial Real Estate Market

Towards Creating a Stronger Relationship Between the Public Sector's Land-Use Planners and Economic Development Professionals
Establishing a Shared Understanding

INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

IT PAYS TO BE A MEMBER

The savings that membership brings on conference attendance, publications and member services more than covers the cost of membership. Member dues are prorated according to the organization or company type. Don't miss out on the value and savings of becoming an IEDC member. Join the premier economic development association today.

Call IEDC TODAY to sign yourself up as a member or to receive further membership information:
(202) 223-7800.
Or visit our homepage at www.iedconline.org.

INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL

INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL

ABOUT IEDC

The International Economic Development Council (IEDC) is the premier international association dedicated to leadership and excellence in economic development. IEDC can equip you with the tools and resources that are helping to shape economic development throughout the country and around the world. Our services include:

- *ED Now*, a twice-monthly newsletter
- *Economic Development Journa*l, a quarterly publication
- Improved access to resources and information
- Enhanced educational choices
- Stronger advocacy and access at the Federal level
- Expanded networks and alliances
- Industry-leader publications
- Expanded research and technical assistance
- An international presence

THE IEDC
Economic Development Journal

International Economic Development Council
734 15th Street, NW Suite 900 • Washington, DC 20005 • www.iedconline.org

Chair: Craig J. Richard, CEcD, FM
President & CEO: Jeffrey A. Finkle, CEcD
Editor: Jenny Murphy

Craig J. Richard, CEcD, FM
IEDC Chair

LETTER FROM THE CHAIR

dear colleague

September is always an exciting time of year for IEDC. It's when we are in the home stretch of organizing our Annual Conference, the biggest event of the year for economic developers and thought leaders in our field. I hope I will see you in Atlanta, because the host committee and IEDC staff have put together an incredible program of sessions, tours, keynote speakers, networking events and more, all under the theme of "Inclusive Economic Development: Fulfilling Dreams." You'll go home energized and equipped to drive inclusive growth in your community.

Also at the conference, we'll unveil one of the projects I'm most proud of initiating during my time as chair: a toolkit for championing economic development. What we do is a great story, and I want to help you tell it. All of us deeply understand the value and importance of economic development programs and services to our communities. But not everyone does – and opposition to our work can have lasting, adverse impacts on communities.

Economic developers will be able to use this toolkit to engage with naysayers – whether it's helping them understand the return on investment from incentives, or why sensitive business deals sometimes limit transparency. It will also help economic developers effectively communicate the tangible benefits of our work and highlight the connection between our actions and the creation of good jobs, livable wages, and prosperity.

September is also significant because we get to reflect on everything our volunteers and staff have accomplished so far this year. The Economic Development Research Partners program has been busy, releasing two new reports over the last several months. "The Changing Energy Landscape and Its Impact on Economic Development in America" examines the current state of key sources of energy and their impact on communities. "Future Ready: Preparing for Tomorrow's Economy," released in late summer, looks at trends that are upending entire industries and the nature of work itself, such as artificial intelligence, robotics, blockchain and more. Both reports are available on the IEDC website and are valuable resources to help economic developers understand the impacts of broader trends on our work.

On a more somber note, it was this time last year when hurricanes Harvey, Irma and Maria struck, bringing IEDC's economic recovery work into a new phase. Since then, with support from the U.S. Economic Development Administration, IEDC has sent dozens of volunteers to help communities in Texas, Florida, Puerto Rico, and the U.S. Virgin Islands with economic recovery efforts. These volunteers – professional economic developers from across the U.S. and Canada – have done everything from assessing business impacts to creating strategic action plans, advising on business retention programs and more.

While we have accomplished much, there is always more to do, and I am grateful for the opportunity to continue championing IEDC's work on behalf of communities and the profession.

Sincerely,

Craig J. Richard, CEcD, FM
IEDC Chair

The IEDC
Economic Development Journal

TABLE OF CONTENTS

PAGE 5

Economic Development Leadership 5

Practice the Essentials to Recover Quickly in a Time of Crisis

by Jason Ford, CEcD

Nearly a year ago, Houston and the Texas Gulf Coast was hit by Tropical Storm (Hurricane) Harvey, creating one of the largest flooding events ever to hit the US. The author shares important lessons learned from Houston's regional perspective in effective disaster response and the role that economic developers play in economic recovery.

Public-Private Partnerships 12

Delivering Civic Infrastructure through P3s

by Michael Catsi, CEcD, DFCP

Public-private partnerships (P3 or PPP) have been used since the 1990s to finance and procure infrastructure projects around the world. US governments are beginning to recognize the value of P3s and should learn from other countries and US success stories to engage with, and ensure, stakeholders understand the value of P3s in infrastructure delivery.

PAGE 21

Economic Development after Dark 21

Making the Case for a Night Mayor

by Allison Harnden

The nighttime economy has special needs and considerations to assure safety, reverse and prevent negative impacts, and maximize economic benefit to the community. Mayors, business districts, and city councils worldwide are appointing "night mayors" and night economy managers to nurture and guide this booming economic sector.

PAGE 43

Aging as an Engine of Innovation, Business Development, and Employment Growth 32

Facilitating Age-Related Economic Development

by James H. Johnson, Jr., Allan M. Parnell, and Huan Lian

Older adults will drive U.S. population growth over the next quarter century. Aspiring entrepreneurs and existing business enterprises that recognize the propitious opportunity to drive innovation by creating products and services that promote successful aging and create age-friendly communities can potentially shape U.S. economic and employment growth in the foreseeable future.

Navigating the Site Development Process 43

Communities Prepare for Success in the Industrial Real Estate Market

by Beth H. Land, CEcD

The industrial real estate market across the United States continues to tighten, making it difficult for communities to attract new jobs and investment. This article looks at how four different communities navigated the site development process, and their success stories. The article also offers key steps and considerations for starting the site development process.

Towards Creating a Stronger Relationship Between the Public Sector's Land-Use Planners and Economic Development Professionals 48

Establishing a Shared Understanding

by Todd J. Poole, EDFP, MPA

This article shares the author's perspective on typical challenges that can arise between land planners and economic development professionals and how these challenges can be overcome.

IEDC News 30

IEDC Calendar of Events 31

INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

economic development

LEADERSHIP

By Jason Ford, CEcD

INTRODUCTION

The financial, social, and human costs of disasters are increasing at alarming rates (https://www.ncdc.noaa.gov/billions/). As economic development leaders, we are trained to manage countless aspects of wealth attraction, job creation, and community and workforce development strategies to promote strong, resilient economies. More frequently, though, our roles are expanding and becoming more important due to the increase in the size and frequency of disasters. Our response not only helps save lives and property, it also helps boost economic resiliency.

> "Our daily work as information- and relationship-brokers makes economic developers uniquely qualified to lead during times of crisis."

Houston's response to this 1,000-year flood event tells an extraordinary story of resilience.

THE BACK STORY

Nearly a year ago, Houston and the Texas Gulf Coast was hit by Tropical Storm (Hurricane) Harvey; yet, our region was just one of 16 national disasters in 2017 – catastrophic rain, flooding, fires, mudslides, tornadoes, hail, and freezes of historic proportions costing more than $1 billion each. Globally, we've seen earthquakes in Mexico, New Guinea and Taiwan, monsoons in Bangladesh, mudslides in Colombia, hurricanes in the Caribbean and more. Already in 2018, there have been at least three $1 billion disaster events.

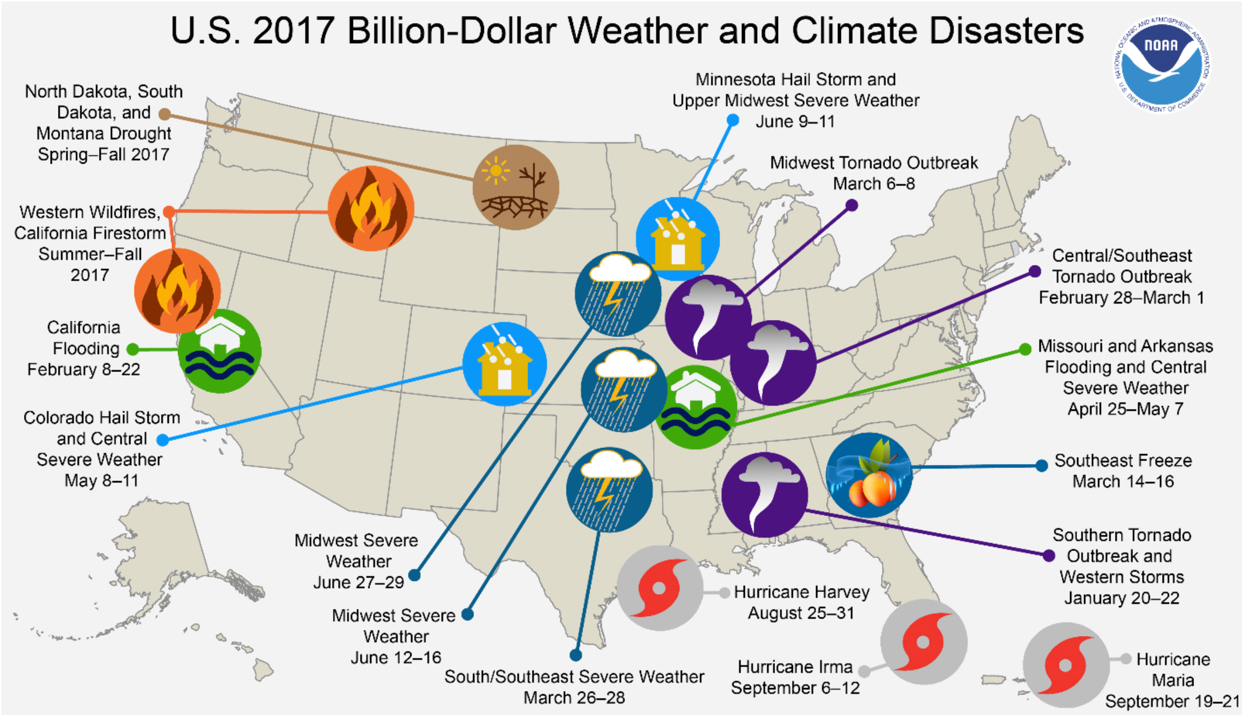
Unfortunately, economic development leaders often put off comprehensive disaster recovery planning as a simple trade-off to busy schedules, budget constraints, politics, or to work on more pressing projects. In Texas, we witnessed this first-hand shortly after Hurricane Harvey created the largest flooding event ever to hit the United States. The massive weather system dropped up to 51 inches of rain across 41 counties in six days – the largest single rain event in America. This equated to 27 trillion gallons of water, enough to fill 87,000 swimming pools. Fortunately for Houston, our economic recovery response was swift, boosted by peer communities, thousands of volunteers, public and private fundraising efforts, and IEDC.

At the onset of the storm, public rescue resources became strained in Texas. But with such a strong outpouring of support from neighbors and heroic rescues by the Cajun Navy and Tennessee Volun-

Jason Ford, CEcD, is Vice President of Regional Economic Development, Greater Houston Partnership (jford@houston.org)

PRACTICE THE ESSENTIALS TO RECOVER QUICKLY IN A TIME OF CRISIS

In 2017, our region was just one of 16 national disasters across the globe. Due to the increased size and frequency of disasters, the role of economic development has expanded and become more important. Nearly a year ago, Houston and the Texas Gulf Coast was hit by Tropical Storm (Hurricane) Harvey, creating one of the largest flooding events ever to hit the United States. Houston's response to this 1,000-year flood event tells an extraordinary story of resilience. In this article, I will share important lessons learned from Houston's regional perspective in effective disaster response and the role you play in economic recovery.



This map depicts the general location of the 16 weather and climate disasters assessed to cause at least one billion dollars in direct damages during 2017.

Source: NOAA's National Centers for Environmental Information (NCEI)

teers, our priority as economic developers soon shifted to economic recovery and flood resiliency. Houston's economic recovery process jump-started immediately with help from peer EDOs from Louisiana, New Jersey, Tennessee, and Galveston (Texas). Despite the 1,000-year flood event, the Houston region still finished as the #2 region for business relocations and expansions in 2017.

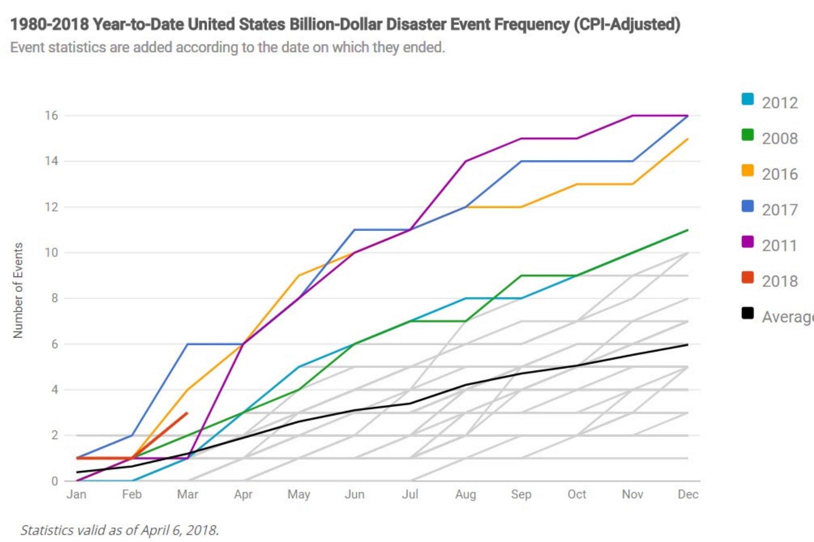
While dozens of communities and public officials showed extraordinary leadership in the Texas Gulf Coast, in this article I will share lessons learned from Houston's regional perspective in disaster response and economic recovery. Many of these lessons were experienced and shared with Houston by our peer EDOs. A special thank you goes to the city of Houston and Harris County, the team at IEDC, Galveston Economic Development Partnership, Greater New Orleans Inc, the Nashville Chamber of Commerce, and McDaniel Strategy Ecosystems. We also share gratitude for guidance from FEMA, EDA, and SBA among others.

PREPARE YOUR DISASTER RECOVERY PLAN NOW

When a crisis strikes, there may be little to no time to prepare a new disaster recovery plan or identify recovery resources for funding and planning. Staff and volunteers are likely to be preoccupied with helping their families, friends, and neighbors with little time to craft a new plan or identify resources needed urgently by businesses and residents. Or, your organization may have spent months drafting a disaster recovery plan, but your materials are not accessible when disaster strikes. Despite those challenges, you may still be sought as a critical information provider in your community to swiftly confirm what resources are available and make connections for those in need. Fortunately, a robust national network of disaster recovery experts is a computer click or phone call away.

When my phone rang on the morning of August 29, 2017, I was almost too busy to answer the line. My house was filled with multiple families of flooding evacuees who sought a dry, safe place from Hurricane Harvey.

As I answered the line, I heard a familiar voice on the other end: "Jason, this is Jeff Finkle calling from IEDC. I know you're probably tremendously busy right now,



This graphic shows the month-by-month accumulation of billion-dollar disasters for each year on record.

Source: NOAA's National Centers for Environmental Information (NCEI) but get a pen and paper handy. I'm about to walk you through the first three steps of your economic recovery."

PREPARE FOR THE PERFECT STORM

As cliché as it sounds, the potential for the perfect storm really exists. Access to electricity, natural gas, clean water, fuel, and internet and phones can go down in a hurry, making it difficult for your response teams and staff to get back to work. This was true for Hurricane Harvey, where wind and heavy rains knocked out more than 90 cell towers, power lines and related communications equipment for several days. In Puerto Rico, many residents and businesses in rural areas impacted by Hurricane Irma were still "off the grid" eight months later. Electricity was out for months, and once restored, power across the entire island was again interrupted in less than a year, making recovery especially difficult.

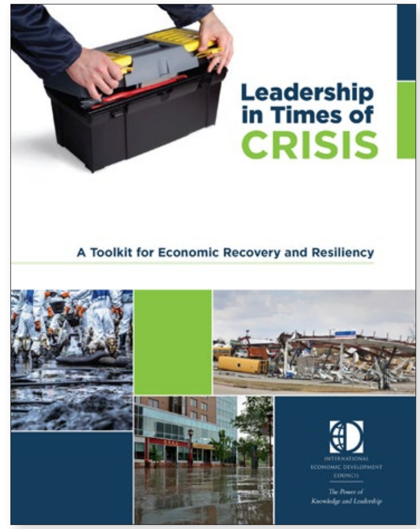
Lesson Learned: The Perfect Storm exists, especially for interrupted communications.

Even the largest, most modern and urbanized areas are susceptible to major interruptions in communications. Having at least one pair of satellite phones for top leaders in your organization can help ensure critical communications are not interrupted in the organization. In Houston, tropical force winds and rains knocked out more than 90 cell towers, power lines, and related communications equipment centers for several days during Hurricane Harvey. With limited connectivity to more than 150,000 people across the region, many families found themselves with limited ability to communicate with family, friends, and first responders. Many families and businesses with internet-based TV experienced delays in news and weather updates. Even simple text messages were sometimes delayed for hours as networks jammed.

Hurricane Harvey dropped up to 51 inches of rain across 41 counties in six days – the largest single rain event to ever hit the United States.

Lesson Learned: Be prepared to work "offline."

To ensure you and your team are always prepared for a crisis, print multiple copies of your disaster and economic recovery plan along with *IEDC's Toolkit for Leadership in Times of Crisis*. Save a hard copy at work and a hard copy at home in case roads are impassable or electricity/internet is down. Save printed lists of important contacts and critical resources. Download electronic copies to your mobile phone, tablet, and computers both at work and at home to share with others. For EDOs without a disaster recovery guide or list of resource providers, IEDC and peer communities can provide real-world templates to help you quickly prioritize the most important steps toward economic recovery.



Visit RestoreYourEconomy.org to download invaluable leadership resources and tool kits for times of crisis, including IEDC's Toolkit for Leadership in Times of Crisis.

During the height of the storm, electricity and internet outages were widespread for days, many local file servers were inaccessible, and communications networks were jammed. Fortunately, IEDC was able to share tool kits, bridge important contacts at federal agencies, and immediately began executing a funding plan to maximize federal and state resources.

Greater New Orleans, Inc. also shared templates and proactively reached out to host a phone call for Houston leaders to hear lessons learned from Hurricane Katrina. This helped the Greater Houston Partnership and its allies to rapidly adjust our plan and publish a *Recovery Resources Guide* for regional allies, businesses, and economic developers. Numerous local and regional agencies, including the city of Houston and Harris County, set up parallel websites to share recovery resources from emergency responders, charities, federal, state and local agencies.

IT'S NEVER TOO EARLY TO START EXECUTING

Economic developers are responsible for keeping their economies healthy, but during crises, economic activity may slow down or even halt if major employers and small businesses are impacted. EDOs can help minimize negative economic impacts by ensuring employers have access to working utilities, clear roadways, and a sufficient workforce.

The same is true for access to medical treatment centers, triage areas, and supply staging centers. Disruptions in supply chains and access to labor can quickly disrupt business operations – leading to job losses, lost incomes, and reduced public revenues. Keeping retailers up and

Houstonians at all levels joined together to mount an extraordinary volunteer effort. NRG Center opened their doors to 10,000 as a county-wide mass shelter.

The Partnership hosted a series of small business recovery events, providing practical advice and tool kits to hundreds of small and medium sized businesses.

running can also promote a faster recovery for communities, residents, and businesses that need access to materials and supplies. By swiftly documenting impacted companies, jobs, housing, and other infrastructure, communities can maximize requests for funding and other resources from federal, state, and other agencies.

Lesson Learned: Make business connections before, during, and after disasters.

When warning signals emerge, begin contacting your resources network early to confirm mobile numbers and primary points of contact, especially among large employers, utility and transportation providers, and emergency operations support. During pre-disasters and regular BRE visits, employers may be more willing to reveal important suppliers and partners when they know you have their best interests in mind. This is a practice long-embraced by the Louisiana Economic Development Business Expansion and Retention Group, CenterPoint Energy, Entergy, and in recent years the Corpus Christi Economic Development team as well.

In Houston, the Greater Houston Partnership began a call and text campaign to allies before Harvey hit and again immediately after the storm to assess damages and needs. Online surveys were also sent to more than 12,000 contacts within hours of peak flooding to determine what resources were needed and on what scale.

Despite media coverage that showed the entire Houston area under water, it was quickly discovered that just 10 percent of major employers were disrupted; most were back online in less than a week. With the impact mostly on small business and residences, we shifted recovery efforts to infrastructure and small business programs.

To firm up Houston's economic development prospects pipeline, the Partnership shared prepared talking points and statistics with business expansion and relocation prospects, site selectors, and brokers to bolster Houston's story of resiliency. Just six weeks after the storm, a Houston delegation of regional and state allies resumed business development missions out of state to share Houston's story of resiliency and to attract investment in target industries. Suffice to say, only two out of 120 prospects backed out of their site selection plans. Today, Houston has a larger prospect pipeline than before the storm.

UNDERSTAND YOUR ROLE DURING RESPONSE AND RECOVERY

The role of economic developers may change significantly during various phases of a disaster. Public agency leaders are often responsible for disaster ***response***, managing triage or search and rescue in public safety and public health. During crises, economic developers may work at phone banks or play active roles in securing the personal safety of family and staff.

However, as the community shifts into ***recovery*** mode, economic developers will also find that our daily work becomes more important. Economic developers often serve as trusted, reliable sources of information, and that role increases dramatically overnight. Our personal and professional networks tend to be very large, giving us easy access to business and civic leaders, especially in times of crisis. With well-honed problem-solving skills, economic developers can serve as valuable matchmakers to help businesses and residents alike.

Lesson Learned: Empower staff to make a difference.

During a disaster, many organizations may be closed, including your offices. Since the intrinsic nature of economic development is to help others, finding volunteer opportunities to empower staff keeps them focused on making a positive impact. This provides a rewarding experience that benefits your community.

The Greater Houston Partnership closed offices for an entire week during Hurricane Harvey. All non-critical staff were offered paid time-off with options to handle their own recovery needs or volunteer to help others. The volunteering option was overwhelmingly positive. Several teams of staff volunteers organized shifts to assist thousands of displaced residents at the adjacent convention center-turned-shelter.

Lesson Learned: Convene stakeholders as soon as possible to share recovery resources and contacts.

Find the appropriate organization to convene the civic and business leaders in a non-partisan manner. In most areas, it may be the Chamber of Commerce, the economic development agency or a similar group with deep and wide contacts across business and government.

In Houston, state and local leaders quickly agreed that the Greater Houston Partnership – with more than 1,000-member firms – was best suited to convene disaster recovery experts with economic development leaders across Texas. Just two weeks after Hurricane Harvey, the Partnership, along with IEDC, the Texas Economic Development Council, CenterPoint Energy, and the Texas Governor's Office, hosted a best-practices summit for more than 100 statewide stakeholders, including competing communities. The event provided a platform for allies to share funding opportunities and recovery resources and hear perspectives from peer EDOs impacted by similar events in Nashville, New Orleans, and New Jersey.

The summit expedited direct access to top disaster recovery leaders from FEMA, EDA, SBA, and IEDC. In addition, the Partnership also hosted a series of small business recovery events, which provided practical advice and tool kits to hundreds of small and medium sized businesses in areas such as access to capital, retaining and attracting customers, rebuilding, and resiliency planning.

Just two weeks after Hurricane Harvey, the Partnership, along with IEDC, the Texas Economic Development Council, CenterPoint Energy, and the Texas Governor's Office, hosted a best-practices summit for more than 100 statewide stakeholders, including competing communities. The event provided a platform for allies to share funding opportunities and recovery resources and hear perspectives from peer EDOs impacted by similar events in Nashville, New Orleans, and New Jersey.

Lesson Learned: Leverage social media to amplify your reach.

In today's "me now" culture, social media is often one of the most used tools for information gathering during disasters and times of crisis. As Harvey-recovery resources were gathered with contacts, guides were published online and promoted using Twitter, Facebook, and LinkedIn. When federal, state and local agencies posted critical new information, updates were retweeted, liked and shared to help further expand the reach over several months.

Houston's Innovation Corridor will establish the region as a world-leading hub for innovation and entrepreneurship.

Houston launched multiple innovation programs, including Houston Exponential, that are now driving a radical new approach to regional economic development in Houston.

To Houston's benefit, the Partnership's online posts were shared with an existing *Houston Image Coalition* of more than 100 marketing and communications contacts with thousands of followers interested in promoting Houston. For Hurricane Harvey, hundreds of digital ambassadors, partner agencies, and volunteers shared #HoustonStrong rescue stories, recovery resources, and helped to globally elevate Houston's brand of resiliency. Stories in Wall Street Journal™, Time™, and countless other journals left a positive image of Houston's response to one of the most catastrophic floods to hit the U.S.

Tech leaders and startups also used social media and created new civic-tech apps to find and assist evacuees and flood victims. The new apps were used in Florida and Puerto Rico weeks later – gaining national acclaim in government tech circles.

In hindsight, a unique social media hashtag could have been created to specifically share recovery resources and help followers and evacuees find information more quickly.

Lesson Learned: Leverage business and community networks to maximize your impact.

There was an incredible outpouring of support for Hurricane Harvey victims as dozens of charities began collecting millions of dollars in donations and money. With so many options, the Greater Houston Partnership lent its brand as a reliable source of information to recommend three charities most likely to impact those in need. By focusing its direction and leveraging a network of more than 12,000 contacts and 120 of the region's top business executives, the Partnership helped amplify donations. As a result, more than $100 million was raised just by one of the local Houston charities cited by the Partnership and the mayor, among others.

EXPECT THE UNEXPECTED

It's important to keep your team workloads balanced to support economic recovery efforts while reserving some staff capacity for unexpected inquiries and projects. Less than two weeks after Hurricane Harvey recovery was underway, another storm hit: the RFI for Amazon HQ2 was announced, and a media storm surged.

Preparing a response for Amazon required a special team of regional leaders and project managers to collaborate on strategy, messaging, sites, incentives, and proposal content. Amid Hurricane Harvey and Project HQ2, one of the most experienced economic development leaders also left due to a family emergency. Throughout all those challenges, at least one project manager served as a reserve staffer to maintain 'business as usual' requests and help advance dozens of existing projects in the pipeline. Simultaneously, countless meetings and calls were held to accelerate the economic recovery process.

Despite all the uphill challenges, Houston unified on multiple fronts to submit a comprehensive economic development proposal for HQ2. Although Houston was not selected as a finalist for HQ2, the community rallied behind the concepts conceived for the Amazon proposal, and Houston leaders swiftly launched multiple innovation programs that are now driving a radical new approach to regional economic development in Houston.

Lesson Learned: Shift your priorities for maximum impact.

It's easy to get caught up in advancing existing funded priorities or find yourself buried in the politics and bureaucracy of the economic recovery process after a disaster. Countless stakeholders have differing objectives and goals which get magnified during the economic recovery process. Take a few weeks to re-evaluate the community's most pressing needs with a group of vested stakeholders to assess your organization's roles and priorities. Be willing to shift your own priorities for maximum impact, even if it goes against your current strategic plan.

With nearly $90 billion in flood resiliency and economic recovery funding at stake, the Greater Houston Partnership convened the top civic and business leaders after Hurricane Harvey to candidly discuss a potential transition from discrete development districts to multi-county regional flood resiliency and recovery efforts. This required a board-level shift in priorities, despite a recently adopted organizational strategy. New committees and task forces were created to identify the region's most important

Take a few weeks to re-evaluate the community's most pressing needs with a group of vested stakeholders to assess your organization's roles and priorities. Be willing to shift your own priorities for maximum impact, even if it goes against your current strategic plan.

Source: Houston Downtown Management District

The Astros and the city of Houston became intertwined more than ever before in the wake of Hurricane Harvey, culminating in the team's World Series victory.

infrastructure projects, align political leadership, lobby for state and federal funding, and find common goals while selecting projects that would be most impactful to future flood resiliency and regional economic prosperity.

There are countless ways your day can start and end during your economic recovery. The key is to maintain your flexibility to quickly pivot on strategies and tactics that realign your short-term and long-term priorities for maximum impact and stakeholder collaboration.

IF THERE'S ONE FINAL LESSON HOUSTON LEARNED, IT'S THIS: GIVE PEOPLE HOPE

The world watched on live TV how Houston responded before, during, and after a crisis. During the midst of Hurricane Harvey recovery, the owner of the Houston Astros

There are countless ways your day can start and end during your economic recovery. The key is to maintain your flexibility to quickly pivot on strategies and tactics that realign your short-term and long-term priorities for maximum impact and stakeholder collaboration.

rallied his team to extraordinary levels with a simple new team patch to wear on their jerseys. Community support for the Astros went into the stratosphere as the #HoustonStrong hook inspired the Astros to win the World Series with an unprecedented level of community support. To win the pennant, the Astros needed the city, and the city needed the Astros. The Astros #EarnedHistory.

In your own crisis, find a positive focal point to rally the community and help smooth away the daily pain points that businesses and residents may be facing. Maybe it's a festival, a hometown hero, a new performing arts center, or a youth sports team. With good fortune, your community will never have to respond to a disaster, but if it does, I hope your pennant and patches shine as brightly as Houston's as you turn negatives into positives by applying lessons learned and preparing for your future.

public-private

PARTNERSHIPS

By Michael Catsi, CEcD, DFCP

INTRODUCTION

The procurement and financing of public infrastructure and facilities has remained little changed in decades. The process is well articulated and the players clearly defined. In the US, to procure and finance public facilities has required not much other than a Request for Proposals (RFP) for the design of a facility, then another RFP for construction. The financing has been a mix of tax-exempt municipal bonds, tax receipts, and state or federal appropriations and grants. This is known as the design-build model with a variation to this being the design-bid-build model which consolidates the above process into one RFP. This article explores an alternative methodology drawn from experiences in several countries including the US, Britain, and Canada.

Traditionally public-private partnerships (P3) have been used for horizontal infrastructure, such as roads, bridges, tunnels, transit systems, utilities, etc., but in recent times there has been a dramatic rise in the use of P3s for vertical infrastructure. This is resulting in schools, student and military housing, hospitals, municipal buildings, court houses, and prisons being procured and financed using the P3 model.

In the UK in the early 1990s, traditional government financing was beginning to show its limits both in terms of execution and in terms of finance. In order to provide an alternative mode of infrastructure financing, the government introduced the Private Financing Initiative (PFI) in 1992. The PFI was "a means of harnessing the private sector's management skills and commercial expertise, to bring discipline to the delivery of public infrastructure. The overall aim of the policy was to achieve better value for money for the taxpayer by ensuring that infrastructure projects were delivered on time and on budget, and that assets were well maintained."[1]

The use of PFI expanded considerably after 1996 and the framework surrounding it has evolved significantly in the UK. They are today part of an integrated framework and are considered a choice, among others, on how to procure infrastructure.[2] As with all new innovative systems not all went well initially, and while there were issues, the government did not see them as reasons to cancel the program but showed resolve in improving it. "The global financial crisis which began in 2007 presented PFI with difficulties because many sources of private capital had dried up. However, because of banks' unwillingness to lend money for PFI projects, the UK government now had to fund the so-called 'private' finance initiative itself. Private Finance 2 (PF2) replaced the PFI as the government's preferred approach to public-private partnerships in 2012. PF2 represents a revised and more efficient approach to PFI that seeks to learn from and improve on previous procurement experience."[3]

Michael Catsi, CEcD, DFCP, is director of business development and communications for the Alaska Industrial Development and Export Authority. (mcatsi@aidea.org)

DELIVERING CIVIC INFRASTRUCTURE THROUGH P3s

Public-private partnerships (P3 or PPP) have been used since the 1990s to finance and procure infrastructure projects around the world. Traditionally, P3s were used for horizontal infrastructure including roads, bridges, and transit. More recently, P3s have been used to finance vertical infrastructure such as civic buildings, student housing, prisons, and hospitals. The advantages of P3s include private-sector innovation, the transfer of risk, and whole lifecycle considerations which generally create more value than government financed projects. US governments are beginning to recognize the value of P3s and should learn from other countries and US success stories to engage with, and ensure, stakeholders understand the value of P3s in infrastructure delivery.

As of June 2017, 39 states, the District of Columbia, and Puerto Rico have enabling laws for public-private partnerships. Enabling legislation is widely viewed as a vital component for successful P3s.

Since this experiment in the UK, many countries have adopted the same or similar policies and tools to innovate their delivery of public infrastructure. Starting in the 1990s, there have been over 220 P3 (public-private partnership) projects that have been initiated in Canada and can be categorized by breaking them up into sections; wave one and wave two of P3s. The first wave of P3s was initiated between the 1990s and early 2000s. The outcomes of the first wave as a whole did not meet the public interest and complaints revolved around topics such as complex concessions, lack of transparency and accountability, high private financial costs, and so on. In 2002, British Columbia created the "Capital Asset Management" policy, with a framework that was adopted by other provincial governments and spread across the country. The provincial governments lead the P3 initiative in the second wave, using it to initiate projects such as healthcare facilities, justice facilities, roads, and bridges.[4]

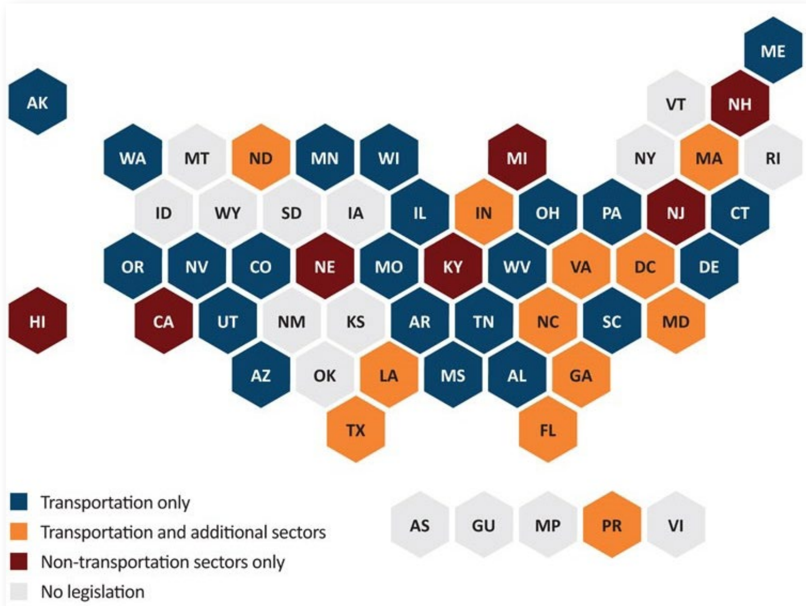
In 2009, Prime Minister Steven Harper created PPP Canada, a crown corporation (a state owned enterprise), to oversee the government's commitment to P3 infrastructure development. In November 2017, the Canadian government announced its intention to dissolve PPP Canada because it had fulfilled its mandate of creating a strong P3 market in Canada and that many provinces have similar agencies – such as Infrastructure Ontario and Partnerships BC – that help structure P3 projects.

In the US, PPPs have played a much less prominent role in the development of transportation infrastructure. The USDOT is the federal agency with the most impact on P3s, with an annual budget of $74 billion. It controls vast amounts of funding while reigning over regulatory controls in areas which impact P3s. The USDOT is the closest thing states and territories have to a ministry of infrastructure or an infrastructure bank – two critical institutions in countries with successful P3 cultures.[5]

As of June 2017, 39 states, the District of Columbia, and Puerto Rico have enabling laws for public-private partnerships. Enabling legislation is widely viewed as a vital component for successful P3s. Enabling legislation establishes a framework from which the public and private sectors can operate to ensure the interests and goals of the public sector are met. States vary widely in their statutory approach to P3s, both in the scope of infrastructure included and the breadth of projects allowed.[6]

As more vertical projects, buildings and facilities, are being developed, state P3 legislation has been amended in several states and, in general, become more comprehensive. In doing so, state legislators must balance limitations of prescriptive legislation with the potential shortfalls of broad statutory language. This development has played out in some of the most active P3 states – Colorado, Texas, and Virginia.[7]

FIGURE 1. P3 ENABLING LEGISLATION IN THE UNITED STATES[8]



Traditionally public-private partnerships (P3) have been used for horizontal infrastructure, such as roads, bridges, tunnels, transit systems, utilities, etc., but in recent times there has been a dramatic rise in the use of P3s for vertical infrastructure. This is resulting in schools, student and military housing, hospitals, municipal buildings, court houses, and prisons being procured and financed using the P3 model. This article will explore this specific use of P3s. Figure 1 shows which states in the US have some form of P3 enabling legislation.

WHAT IS A PUBLIC-PRIVATE PARTNERSHIP?

Public-private partnerships is an often heard phrase which in most cases refers to a project or program that utilizes funding from both public and private sources. Unfortunately, this provides plenty of confusion when we talk about public-private partnerships in relation to a procurement and financing model for public infrastructure delivery. For the purposes of this article references to public-private partnerships only refer to the topic of this article, and generally they are referred to as P3 or PPP.

While there is no single accepted definition of a P3, a broad view of what they are is defined as:

> "A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility and remuneration is linked to performance.

This definition:

- Encompasses PPPs that provide for both new and existing assets and related services;
- Includes PPPs in which the private party is paid entirely by service users, and those in which a government agency makes some or all payments;
- Encompasses contracts in many sectors and for many services, provided there is a public interest in the provision of these services and the project involves

long-life assets linked to the long term nature of the PPP contract."[9]

At their core, public-private partnerships are an alternative procurement method in which a public agency partners with a private-sector entity in order to leverage private resources and expertise through the transfer of risk. P3s are agreements that allow private companies to take on traditionally public roles in infrastructure projects, while allowing the public sector to continue to ensure accountability to the public.[10]

Under the P3 structure, the relationship between the public and private partners extends far beyond the design/build period to include the costs of operating and maintaining the facility or asset (including maintenance and energy consumption) over a period corresponding to its useful life. This "life cycle cost" structure gives the private sector partner an added incentive to design, construct, operate, and maintain the facility in the most efficient and cost-effective manner during the term of the P3, while still complying with the technical performance standards established by the public sector partner.[11]

In addition, it is critical to understand what P3s are not, in order to ensure that the public has the information they need to make informed decisions. Much of the opposition and hesitancy to their use for public infrastructure delivery are directly due to the lack of understanding of the basic features of a P3 transaction by public officials and the general public. In many cases, the public assumes that there is no cost to the public sector for these projects and there is often a public outcry when the public entity makes payments to the concessionaires. It must be made very clear that P3s are not free. They are purely a different delivery model for public infrastructure and the public entity is responsible for the full payment of the project, as it would be under the traditional project delivery method.

P3s are not a silver bullet, and are not the answer to every project. Every project must be evaluated on its suitability for a P3 and in many cases it will be found that the traditional method is the appropriate delivery model. (See Example 1: traditional P3 model)

Another issue that brings out local opposition is the misconception that a P3 is the privatization or sale of a public asset. Many get concerned that the public entity is selling off or privatizing assets that it owns and now the private sector concessionaire is making a profit from what was once a public asset. A P3 is not an asset sale; the public entity always retains ownership of the property, and is always in control through a set of comprehensive agreements covering construction, financing, operations, maintenance, and handback requirements.

For P3s to be successful, public entities must first educate themselves, understanding what P3s are and are not. In addition, it is critically important to ensure that the

EXAMPLE 1: TRADITIONAL P3 MODEL – UC MERCED 2020 PROJECT, MERCED, CALIFORNIA

In 2012, UC Merced was facing financial trouble and uncertainty like many universities affected by the recession. At a time when state investment was nearly non-existent, the youngest UC campus was asked to double enrollment--a goal that required doubling their physical capacity on a fast-approaching timeline. Out of this challenge, an innovative delivery model was born. The UC Merced 2020 Project is the first of its kind: an ambitious $1.3 billion P3 expansion of the campus to be completed in phases over four years, then privately operated for 35 years after that.

"Merced went down this path to build what we could afford to maintain…This is a huge problem for all universities. Those deferred maintenance liabilities or the need to repair facilities in the future are as much an unfunded liability as pensions in healthcare. To remain durable, it's essential to answer questions about maintenance up front," says Daniel Feitelberg, Vice Chancellor for Planning & Budget. The model enables UC Merced's civil and social infrastructure to last the test of time, achieving good building performance throughout their life cycles.

Within the 2020 Project, the design and configuration of the site – its component programs, buildings, open spaces and amenities – are employed to blur distinctions between living and learning, to break down traditional disciplinary and cohort silos, and to foster interaction among students, faculty, staff and the community. The thoughtful mix and distribution of programs along with diverse open space experiences, recreational amenities, as well as health and wellness facilities prioritizes whole student growth.

The project will be financed through a combination of bonds issued by the UC system, campus funds, and privately placed bonds and equity arranged by Plenary Properties Merced (PPM). Merced will make predetermined progress payments to Plenary during construction, and once the buildings are available for use, performance-based availability payments will be paid to cover the remaining capital costs, operations, and maintenance.

Sources:

Higher Ed Facilities Forum (2017), https://info.higheredfacilitiesforum.com/blog/inside-uc-merced-p3-expansion

University of California Merced, https://merced2020.ucmerced.edu/masterplan

SIDEBAR 1: BENEFITS OF A P3

ON-TIME | ON-BUDGET DELIVERY

Experience with P3s, both globally and in North America, shows that using this approach consistently delivers infrastructure on-time and under budget, and exceeds quality expectations.

COST CERTAINTY

A P3 contracting approach provides owners with cost certainty not only for the development of the asset but also during operations, and maintenance over the 20+ year contract term.

ACCOUNTABILITY

The public sector looks to the P3 concessionaire to be the single point of accountability for all aspects of delivery, including finance, operations, and maintenance.

GREATER INNOVATION

By incorporating the design and delivery considerations through a P3 approach, and initiating the procurement before all project elements are fixed, the partners work as a team in a competitive procurement to optimize project performance standards and outcomes, thus greatly enhancing the public asset through private sector innovation.

LIFE-CYCLE MAINTENANCE

The P3 concessionaire, who not only designs and builds the asset, but provides operations and maintenance over the 20+ year contract term, uses an integrated, life-cycle approach to optimize asset performance over the long term.

ACCELERATED DELIVERY

Because of integrated delivery and single point of accountability, P3s can deliver assets much sooner than traditional design-bid-build approaches.

PUBLIC OWNERSHIP AND CONTROL

With P3s, the public agency never loses ownership or control of the asset, and the P3 contract guarantees the condition of the asset upon delivery and at the end of the contract term.

EFFECTIVE RISK TRANSFER

The transfer of risk from the public to the private sector is a key advantage of a P3. The private sector can best bear cost, schedule, integration and performance risks which can be cost effectively transferred from the public sector.

JOB CREATION & ACCELERATED DELIVERY

P3s create jobs in the local economy. By accelerating the delivery of critical infrastructure improvements and providing private financing, P3s enable the public sector to bring more projects to market simultaneously. The result is accelerated job creation and a strong job market over time.

PAYMENT FOR PERFORMANCE

With P3s, the concessionaire receives payments based on the asset's availability and performance. This can be directly through revenues generated by the project or through an assessment of its availability, based on outcome indicators and performance standards agreed to in the contract documents.

Source: Association for the Improvement of American Infrastructure, *Public Private Partnerships in Infrastructure: A Guide to Successful P3 Evaluation and Delivery*. https://aiai-infra.info/assets/brochure/AIAI-GuideToP3s.pdf

public is well informed as to the benefits and limitations of P3s and clearly articulated that they are not free nor are they the privatization or sale of a public asset. (See Sidebar 1)

FIGURE 2. SERVICE DELIVERY SPECTRUM.[12]

Figure 2 shows the spectrum of infrastructure delivery types from traditional public delivery (Design-Bid-Build, Construction Management at Risk, Progressive Design Build, and Design-Build), to the range of public-private partnerships (Energy Savings Performance Contracts, Operations & Maintenance, Lease-Develop-Operate, Design-Build-Operate-Maintain, and Build-Operate-Transfer) to the full privatization of public assets.

Figure 3 (next page) shows the continuum of risk sharing between the public and private sectors. The Design-Build is a traditional project delivery mechanism where the public sector retains most of the risk associated with the project, while DBFOM sees the private sector taking on the majority of the risk.

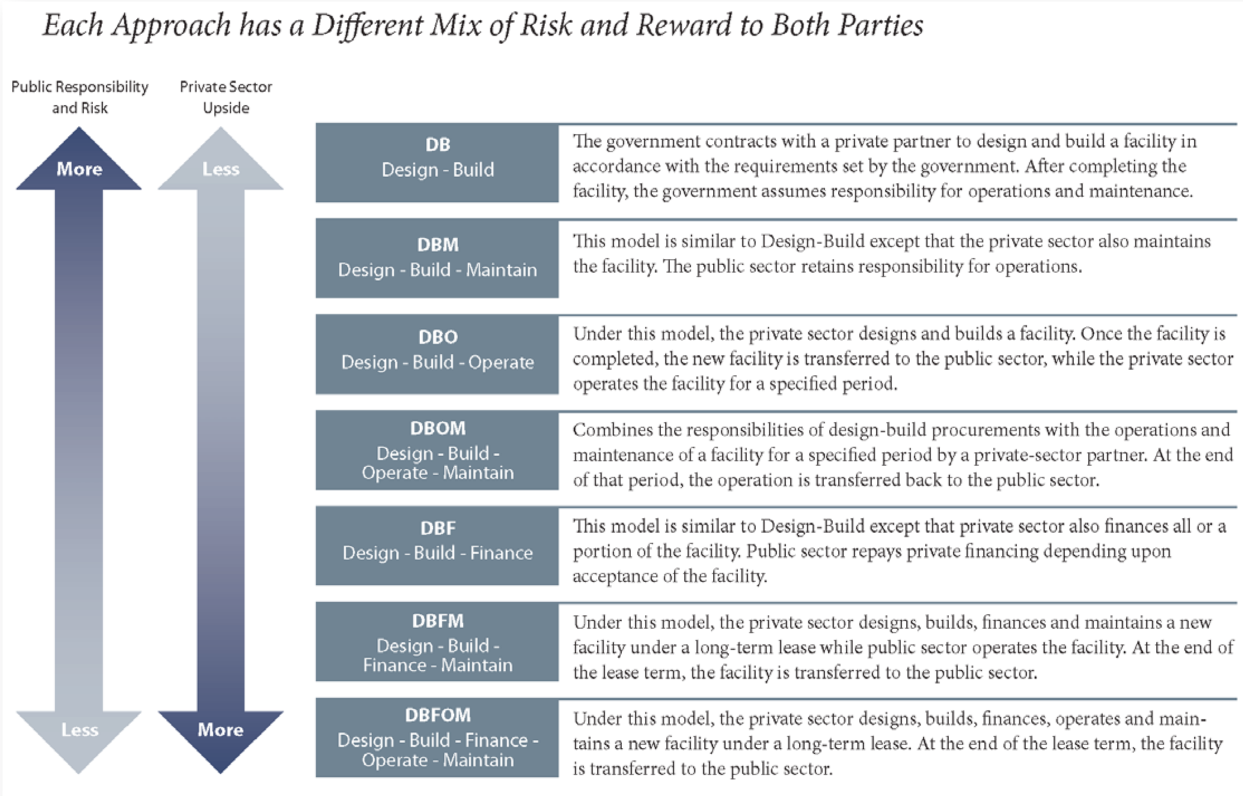
WHY USE A P3?

The traditional model uses an RFP process to solicit bids and generally the lowest bidder is the one to design and/or build the project. The emphasis for the public entity is minimizing the upfront cost of a project because this is the most obvious cost to focus on and the most scrutinized part of the process. For the bidder, the emphasis is on delivering enough project to meet the stated needs but at a price that under bids other respondents, not necessarily the best project based on whole life criteria.

This may be one of the largest failings of the traditional method. When the whole lifecycle cost of a project is taken into consideration, we find that up to approximately 30 percent of the cost is in the design and construction. This leaves up to 70 percent of the cost of the project, the operations and maintenance (O&M), not being considered in the project's evaluation. Using a P3 allows the whole lifecycle costs to be incorporated into the design and construction of the project because the concessionaire has the long-term responsibility of the O&M at an agreed upon level. The concessionaire's financial benefits are tied to the performance and condition of the facility.

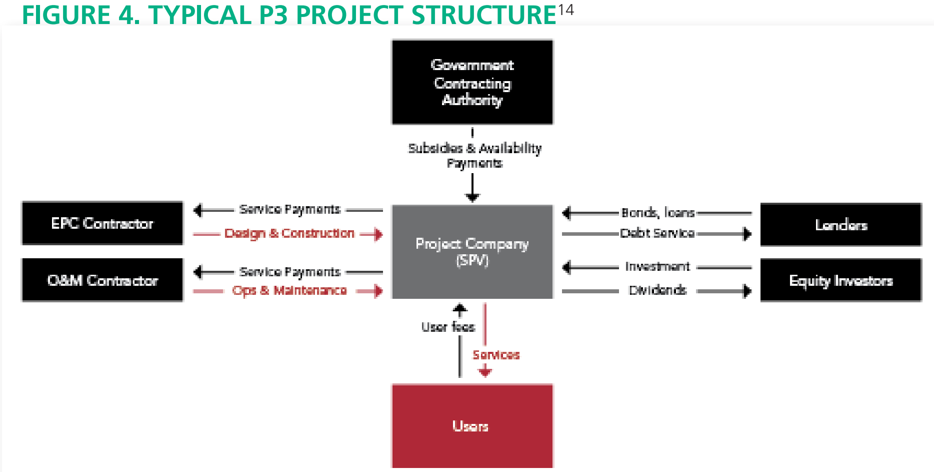
Given that the concessionaire is tied to the project for 30 to 50 or more years, it is in their best interest to design and construct a project that not only meets the public entity's requirements but that its O&M is affordable for the long-term. This dynamic is often described as low bid versus best value by proponents of P3s. By accepting higher costs for some aspects of a project, the public sector may realize increased overall value throughout the life

FIGURE 3. RISK SHARING CONTINUUM OF P3s.



of the project.[13] Figure 4 shows a simplified transaction structure of a P3 project, outlining the relationship and roles of each entity.

FIGURE 4. TYPICAL P3 PROJECT STRUCTURE[14]



The delivery of big and complex public infrastructure projects in the United States under publicly run models is characterized far too often by construction delays, cost overruns, and longer-term performance failures. Even cost overruns of 10 or 20 percent – a level widely accepted as "success" – can compromise a government's ability to deliver its agenda and meet its communities' infrastructure needs. Contrast that with the record in Ontario, North America's most active P3 market. According to an independent report commissioned by Infrastructure Ontario in 2014, the region delivered 36 of 37 recent P3 projects under budget.[15]

OBJECTIVES OF A P3

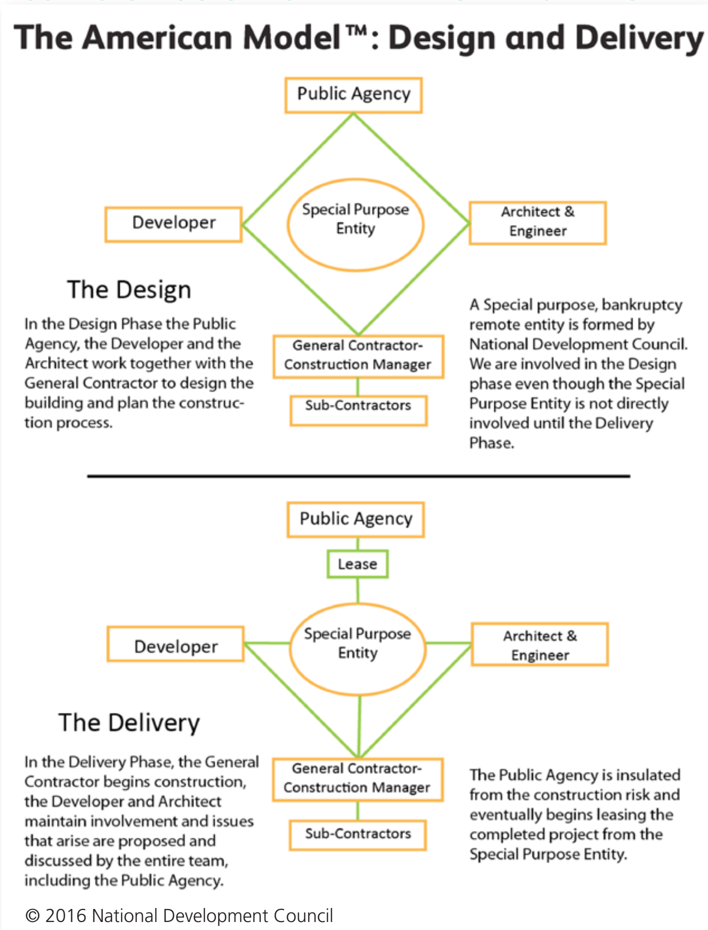
The primary objectives of using P3s to deliver projects include:

- Maximize up front capital formation, leverage existing revenue sources, or redirect public funding across more needed projects.
- Accelerate project delivery compared to traditional delivery methods with improved cost and schedule certainty, early in the design phase.
- Improve risk management by transferring a significant portion of the project risk to the private sector.
- Harnessing private sector innovation and efficiency early in the project's development. These innovations improve project quality and performance via:
  – Design and construction innovations
  – Performance standards
  – Long-term asset condition requirements
- Incentivizing cost savings throughout the lifecycle of project construction and operations through design innovation and asset management practices.
- Value for money – overall better value to public owner than traditional project delivery.[16]

THE AMERICAN MODEL

While the traditional P3 uses a mix of private equity and private and/or public debt, an American Model was developed to utilize a uniquely American opportunity. Public infrastructure in the US is generally financed though tax-exempt debt in the form of municipal bonds. This is a financial tool that is not available in many countries that support P3 development. The cost of equity in any project is higher than the cost of debt capital, therefore the less equity in a transaction, the lower the overall cost of capital. (See Figure 5)

FIGURE 5: STRUCTURE OF AN AMERICAN MODEL P3.[17]



The American Model was developed by the National Development Council to blend tax-exempt debt with private development expertise. The model works by setting up a not-for-profit owner/issuer of tax-exempt bonds, hiring a private developer, architect and general contractor and charging them with developing the facility. This development team is under contract to take construction and delivery risk. They are given the tools to do so, including incentives to build efficiently and to strict quality standards.[18]

After construction is complete, the facility is leased to the governmental client and then transferred to the client at no cost when the debt is retired. Rent, dictated by the lease, is set at the debt service plus operating costs. There is no operating profit nor disposition profit since the development team is not required to bring equity to the structure or take on operating risk. The development team earns a development fee commensurate with the development risk they take on and nothing more.[19] (See Example 2: American Model)

EXAMPLE 2: AMERICAN MODEL - RIVERSIDE COUNTY LAW BUILDING, INDIO, CALIFORNIA

The Riverside County Law Building located in Indio, California is a three-story, steel-frame county office building. Completed in December 2014, the 90,000-square-foot building houses the offices of the District Attorney, Public Defender, County Counsel, and staff members, as well as the County Law Library. The parking lot is covered with a state-of-the-art solar panel array, providing 25 percent of the building's electrical energy and shaded parking. Other green features include recycled content and low-emitting building materials, drought resistant landscaping, electric charging stations, and energy and water-saving features.

The County Law Building was delivered using the American Model Approach to public-private partnerships, the second project to use this model in California and the 37th nationwide. This innovative development model utilizes privately-issued tax exempt bonds to finance the construction of public infrastructure. The $38.6 million project was too small to be financed using the typical DBFOM model or International Model. Using the American Model allowed for Public-Private Partnership Delivery of a smaller scale project to a community that otherwise would not have been able to take advantage of the savings delivered by private sector expertise.

For this particular project, a not-for-profit affiliate of the National Development Council issued tax-exempt 63-20 bonds to finance all project costs. The not-for-profit owner then contracted a private sector development team to design and construct the facility, which provided price and schedule guarantees in return for incentives for reaching project milestones on schedule and for achieving project savings. By leveraging the efficiency of private-sector development techniques, the team was able to complete construction in just 12 months, four months ahead of schedule, and $4.2 million under budget. The savings was shared by the development team and Riverside County.

The building is currently occupied by county judicial staff and is operated by a private management firm contracted by the not-for-profit owner. The facility is leased to the county for a term of 30 years. At the end of the lease term or earlier if the county opts to retire the debt, ownership of the building will revert to the county.

Source: National Development Council. https://ndconline.org/story/riverside-law-building/

SIDEBAR 2: BEST PRACTICES - 7 KEYS TO SUCCESSFUL P3s

The following are to be considered "best practices" in the development of public-private partnerships (P3s). It is recognized that the methodology for implementation of P3s can vary, depending on the nature of a given project and local concerns. Given this, these are "best practices":

1) PUBLIC SECTOR CHAMPION:

Recognized public figures should serve as the spokespersons and advocates for the project and the use of a P3. Well-informed champions can play a critical role in minimizing misperceptions about the value to the public of an effectively developed P3.

2) STATUTORY ENVIRONMENT:

There should be a statutory foundation for the implementation of each partnership. Transparency and a competitive proposal process should be delineated in this statute. However, unsolicited proposals can be a positive catalyst for initiating creative, innovative approaches to addressing specific public sector needs.

3) PUBLIC SECTOR'S ORGANIZED STRUCTURE:

The public sector should have a dedicated team for P3 projects or programs. This unit should be involved from conceptualization to negotiation, through final monitoring of the execution of the partnership. This unit should develop Requests for Proposals (RFPs) that include performance goals, not design specifications. Consideration of proposals should be based on best value, not lowest prices. Thorough, inclusive value for money (VFM) calculations provide a powerful tool for evaluating overall economic value.

4) DETAILED CONTRACT (BUSINESS PLAN):

A P3 is a contractual relationship between the public and private sectors for the execution of a project or service. This contract should include a detailed description of the responsibilities, risks and benefits of both the public and private partners. Such an agreement will increase the probability of success of the partnership. Realizing that all contingencies cannot be foreseen, a good contract will include a clearly defined method of dispute resolution.

5) CLEARLY DEFINED REVENUE STREAM:

While the private partner may provide a portion or all of the funding for capital improvements, there must be an identifiable revenue stream sufficient to retire this investment and provide an acceptable rate of return over the term of the partnership. The income stream can be generated by a variety and combination of sources (fees, tolls, availability payments, shadow tolls, tax increment financing, commercial use of underutilized assets or a wide range of additional options), but must be reasonably assured for the length of the partnership's investment period.

6) STAKEHOLDER SUPPORT:

More people will be affected by a partnership than just the public officials and the private sector partner. Affected employees, the portions of the public receiving the service, the press, appropriate labor unions and relevant interest groups will all have opinions, and may have misconceptions about a partnership and its value to all the public. It is important to communicate openly and candidly with these stakeholders to minimize potential resistance to establishing a partnership.

7) PICK YOUR PARTNER CAREFULLY:

The "best value" (not always lowest price) in a partnership is critical in maintaining the long-term relationship that is central to a successful partnership. A candidate's experience in the specific area of partnerships being considered is an important factor in identifying the right partner. Equally, the financial capacity of the private partner should be considered in the final selection process.

Source: The National Council for Public-Private Partnerships, https://www.ncppp.org/ppp-basics/7-keys/

HOW DO YOU KNOW IF A PROJECT IS SUITABLE FOR A P3 TRANSACTION?

As stated earlier, not all projects are suitable for or best delivered through a P3 delivery methodology. In order to determine how a project should be delivered, public entities evaluate a number of criteria including:

- The capital investment required to develop, operate and maintain the project. P3 projects are typically more appropriate for larger projects that involve significant capital investment.
- Whether the public agency can afford to forego the revenues it would receive if it operated the project.
- Whether the public agency has or will have the funds to operate and maintain the project on a long-term basis.
- The technical and technological requirements of the project.
- Whether a private sector party may be a more efficient service provider.
- Whether operational controls can be established to monitor the private party to ensure the service is provided to the public as required. [20]

See Sidebar 2 for best practices in developing successful P3s.

VALUE FOR MONEY EVALUATION

The purpose of a Value for Money (VfM) analysis is to inform government's decision on whether to implement proposed projects as P3s or through more traditional forms of public procurement. To that end VfM analysis typically involves a combination of qualitative and quantitative analysis.[21]

Two key components of a VfM analysis are:

- Public Sector Comparator (PSC) - whole life cost estimate of traditional method of project delivery, including O&M costs. Detailed benchmark for comparisons.
- Shadow Bid – whole life cost estimate of alternative method of project delivery, including O&M costs.

Quantitative Assessment[22]

This assessment quantifies the total life cycle cost of PSC and Shadow Bid, including:

- Development phase and procurement costs
- Design and construction capital costs (CapEx)
- O&M costs (OpEx)
- Reconstruction and rehab costs (CapEx)
- Overhead costs - project management, administration and oversight
- Competitive neutrality adjustments e.g, for taxes
- Revenue deductions for user fee projects

This assessment starts with a base cost estimate, without contingency then:

- Identifies project risks
- Quantifies consequences for each risk by assigning low, most likely and high costs
- Estimates probability of each risk occurring
- Calculates value of each risk (consequence = probability x risk event)

Qualitative Assessment

This process assesses other important factors not captured by internalized project economics and depending on the owner objectives; these can have equal or greater importance than quantitative results. These analyses include project delivery timing, risk exposure and program certainty, and viability and achievability.[23]

The timing of VfM analysis in the process of developing a project is a trade-off between accuracy and availability of information. Many countries iterate the analysis typically with qualitative analysis taking place earlier in the process, while quantitative analysis comes later.[24] (See Figure 6)

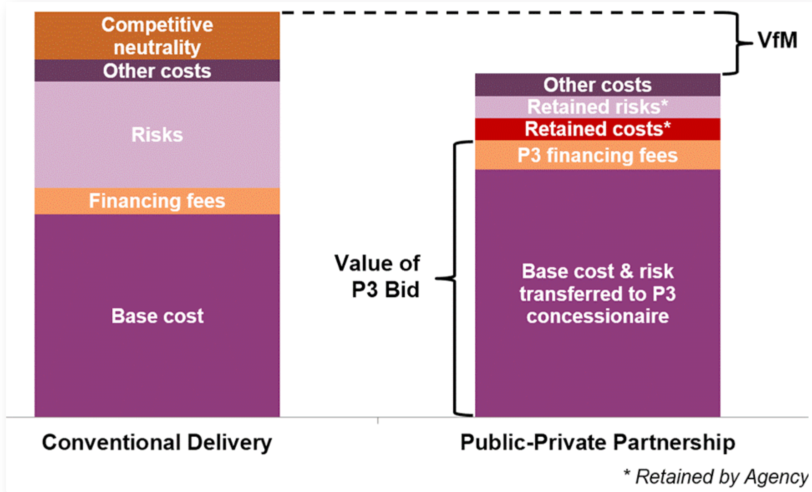
CONCLUSION

For decades the procurement and financing of public infrastructure and facilities had changed little. With the development of the Public Finance Initiative in the UK in the early 1990s, a significant paradigm shift had been made in approaching public infrastructure. As other nations began to emulate the PFI for their own infrastructure needs, the public-private partnership was born. As with any new innovation, the transition was not perfect, but with time, the process has evolved and continues to evolve which can be clearly seen in the development of PF2, the British Columbia "Capital Asset Management" policy, and the American Model.

While P3s are still a relatively new phenomenon in the US, they are becoming more widely accepted and used. Critical to the success of the program is the education of public officials and the general public regarding the nature of P3s, their benefits and costs. On the other hand, P3s are not a panacea for the country's infrastructure deficits as not all projects are appropriately completed using a P3 delivery model. A Value for Money analysis for each project will clearly show the best method for that project's delivery, and in many cases the traditional method will be the most appropriate.

There is nothing inherently wrong with the traditional method, but a P3 offers another option for infrastructure development that may provide an opportunity to build out a government's assets when the traditional system does not allow it. Hopefully P3s can influence the traditional method by placing more emphasis on the life cycle cost of the project, not just the upfront design and construction.

FIGURE 6: VALUE FOR MONEY ANALYSIS: PUBLIC SECTOR COMPARATOR VERSUS P3.[25]



For decades the procurement and financing of public infrastructure and facilities had changed little. With the development of the Public Finance Initiative in the UK in the early 1990s, a significant paradigm shift had been made in approaching public infrastructure. As other nations began to emulate the PFI for their own infrastructure needs, the public-private partnership was born.

ENDNOTES

1 HM Treasury (2012), A New Approach to Public Private Partnerships, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/205112/pf2_infrastructure_new_approach_to_public_private_parnerships_051212.pdf

2 OECD (2015), *OECD Review of Public Governance of Public-Private Partnerships in the United Kingdom*, December 2015 https://www.oecd.org/governance/procurement/toolbox/search/oecd-review-public-governance-ppp-uk.pdf

3 Service Works Global, https://www.swg.com/prodigal-son/

4 Siemiatycki, Matti (September 1, 2015). "*Public-Private Partnerships in Canada: Reflections on twenty years of practice*". Canadian Public Administration, 58 (3): 343–362

5 Dan McNichol (2013), The United States: The World's Largest Emerging P3 Market. American International Group, Inc. https://www.aig.com/content/dam/aig/america-canada/us/documents/insights/final-p3-aig-whitepaper-brochure.pdf

6 National Conference of State Legislatures (2017), P3 Infrastructure Delivery: Principles for State Legislatures, July 2017 http://www.ncsl.org/Portals/1/HTML_LargeReports/P3_Infrastructure_1.htm

7 National Conference of State Legislatures.

8 Ibid.

9 The World Bank, ADB, IADB. (2017), *Public-Private Partnerships Reference Guide, Version 3*. https://library.pppknowledgelab.org/documents/4699

10 JLL Public Institutions (2017), Eight crucial factors to consider before embarking on a public private partnership. http://www.us.jll.com/united-states/en-us/Documents/Higher%20Education/Eight%20Factors%20to%20Consider-JLL-2017.pdf

11 JLL Public Institutions.

12 Harvard Kennedy School (2017), "Tapping Private Financing and Delivery to Modernize America's Federal Water Resources". http://ash.harvard.edu/files/ash/files/hks_ashcenter_federal_water_resources_report_web.pdf

13 National Conference of State Legislatures (2017), *P3 Infrastructure Delivery: Principles for State Legislatures*, July 2017

14 The World Bank, ADB, IADB. (2017), Public Private Partnerships Reference Guide, Version 3. https://library.pppknowledgelab.org/documents/4699

15 https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/the-debate-over-private-infrastructure-financing-in-the-united-states

16 Nossaman, LLP (2011), *Public-Private Partnerships: Public Sector Objectives, P3 Delivery Models*, NGA/ NCSL/AASHTO Conference September 20, 2011. https://www.nga.org/files/live/sites/NGA/files/pdf/1109PUBLICPRIVATEKESSLER.PDF

17 National Development Council. https://ndconline.org/wp-content/uploads/2016/01/P3-Our-Approach-3.pdf

18 National Development Council, https://ndconline.org/wp-content/uploads/2016/01/P3-Our-Approach-3.pdf

19 National Development Council.

20 Practical Law Company, *Public Private Partnerships: Issues and Considerations*, https://content.next.westlaw.com/3-504-9995?transitionType=Default&contextData=(sc.Default)&__lrTS=20180527025021294&firstPage=true&bhcp=1

21 World Bank Institute (2013), *Value for Money Analysis - Practices and Challenges: How Governments Choose to Use PPP to Deliver Public Infrastructure and Services*.

22 Smith, Ken L. (2014), *Value for Money Analysis: Choosing the Best Project Delivery Method*. https://www.valueanalysis.ca/userfiles/16A%20-%20Ken%20Smith%20-%20Value%20for%20Money%20Analysis(1).pdf

23 Smith, Ken L., (2014).

24 World Bank Institute (2013).

25 Federal Highway Administration, Center for Innovative Finance Support, https://www.fhwa.dot.gov/ipd/p3/p3_training/p3_value_webinars/2_0/session_02/

economic development
AFTER DARK

By Allison Harnden

When think-tank Responsible Hospitality Institute offered a first of its kind Nighttime Management Academy training at their annual summit this year, they expected a handful of cities to participate – ones that were poised to hire a night manager or "night mayor." Instead, the training sold out with attendees from around the globe, signaling a growing trend of commitment to harnessing economic development after dark.

The Cultural District in Downtown Pittsburgh attracts theatre goers, diners, and music lovers of all ages.

The nighttime economy has special needs and considerations to assure safety, reverse and prevent negative impacts, and maximize economic benefit to the community. Mayors, business districts, and city councils worldwide are appointing "night mayors" and night economy managers to nurture and guide this booming economic sector.

Pittsburgh, PA, hired their first nighttime economy manager in 2014 and added a project manager this year to become what is now called the Office of Nighttime Economy. This article focuses on what a night manager does, the partnerships required to develop and manage the "other 9 to 5," and what to consider if your city is contemplating creating such a position.

WHAT IS THE NIGHTTIME ECONOMY?

To define nighttime economy, let's play word association. What do you think of when you hear "nighttime economy"? Most likely, bars, restaurants, and nightclubs were top of mind.

While these are the core of the industry, there are a host of businesses that complement them: music and live performance venues, cafes, hookah bars, vape shops, and game arcades – even fashion, fitness, and personal services like nails, hair, tanning, threading, tattooing and piercing.

There are also public space delights such as street entertainers, sidewalk vendors, food trucks, street events, and night markets.

Additionally, a vast network of commerce provides a support system to nighttime economy. Think wholesale suppliers of food, beverage and uniforms, as well as mobility providers: valet parking, pedicabs, and transportation network companies like Uber and Lyft.

The revenue and jobs generated by these industry facets add up to significant economic impact. Several cities have conducted economic studies of the nighttime economy. San Francisco's most recent

Allison Harnden is the Nighttime Economy Manager for the City of Pittsburgh. (Allison.Harnden@pittsburghpa.gov)

MAKING THE CASE FOR A NIGHT MAYOR

The nighttime economy has special needs and considerations to assure safety, reverse and prevent negative impacts, and maximize economic benefit to the community. Mayors, business districts, and city councils worldwide are appointing "night mayors" and night economy managers to nurture and guide this booming economic sector. Pittsburgh, PA, hired their first nighttime economy manager in 2014 and added a project manager this year to become what is now called the Office of Nighttime Economy. This article focuses on what a night manager does, the partnerships required to develop and manage the "other 9 to 5," and what to consider if your city is contemplating creating such a position.

study found that their nightlife industry generated $4.2 billion per year and New York's study revealed a $9.7 billion economic impact. (http://rhiweb.org/resource/economic/nyc.pdf)

Especially noteworthy are the symbiotic relationships between nightlife and related industry segments.

- Seattle's economic study of their music industry included nightlife venues.
- New York's report found residents spent $908 million on transportation, dining, and "pre-nightlife" activities before going on to nightclubs and bars.
- 48 percent of New York nightlife attendees made purchases of wardrobe, personal care, and accessories specifically to go out at night, totaling $693 million purchased in New York City stores.

Though Pittsburgh has not yet conducted a full blown economic impact study, the city anticipates one in the near future. However, initial data indicates the restaurant sector in Greater Pittsburgh currently generates over $3 billion, and earlier this year claimed the prize as the region's largest employer, providing 87,000 jobs.

THE PITTSBURGH STORY

When steel manufacturing in Pittsburgh closed down in the 1980s, the city lost half its population, which meant less tax revenue and decreased general fund for optimum city services. The Steel City found its resilience in large part from medical and educational institutions. The quality of life enhanced by these industries and revitalizing efforts of many other partners served to attract other sectors, such as the tech industry.

WHAT IS THE NIGHTTIME SOCIAL ECONOMY?

Restaurants	Parking
Cafes	Taxi
Bars	Uber/Lyft
Nightclubs	Pedicabs
Nightlife	Valet
Theatre	Food Suppliers
Dance	Alcohol Distributors
Special Events	Uniform Companies
Concerts	Menu Graphic Design
Street Entertainment	Marketing/PR
Food Trucks	Bartenders
Sporting Events	Cooks
Cinema	Servers
Live Music	Hosts
Tattoo	Ushers
Hookah	Musicians
Fashion	Promoters
Beauty Services	

As a facet of nighttime economy, destination nightlife is most likely to cause negative impacts on neighboring residents. The visiting patrons, usually younger in age and not being invested in the area, tend to be less mindful of how their behaviors cause disturbance and disruption to the area and its residents. These impacts, in general, occur closer to bar closing time. Therefore, when compared to more dining-focused districts, late night destination nightlife nodes are saddled with the most impact.

All along, the hospitality industry was steadily and quietly swelling to accommodate the social needs of all these industries. Also feeding the growth of the hospitality industry was the presence of over 80,000 students, an age bracket that frequents nighttime food, beverage, and entertainment businesses at least three times per week.

Sociable cities have been characterized as having hospitality zones, defined as concentrations of businesses that nurture social relationships. Pittsburgh is a city of neighborhoods, 90 of them to be exact. They are peppered throughout 58 square miles. Of those 90, ten have developed more popularity as socializing hubs. Half of those hubs comprise the most dense or intense socializing uses which one might consider as hospitality zones: South Side, Lawrenceville, North Shore, Downtown, and Oakland.

While these communities have become centers for social activity, the intensity and nature of the activity in each differs. Downtown is the center of cultural arts and, like most cities, the gathering place for celebration of holidays, free speech events, and sports wins. Its socializing micro-economy feeds downtown day workers but also has a synergistic relationship with evening performing arts and special events.

North Shore is where the football and baseball stadiums are located, so economic activity here is also more event-driven. Oakland generally serves the medical and education institutions. Lawrenceville and South Side have evolved into destination nightlife.

Of the 507 alcohol licenses issued in Pittsburgh's 90 neighborhoods, 27 percent are located in South Side and Lawrenceville, two neighborhoods dense with longtime homeowners and an influx of younger renters and home buyers. New experiences continued to crop up, drawing night socializers on weekends not just from the city, but from the suburbs and beyond, even West Virginia and Ohio.

As a facet of nighttime economy, destination nightlife is most likely to cause negative impacts on neighboring residents. The visiting patrons, usually younger in age and not being invested in the area, tend to be less mindful of how their behaviors cause disturbance and disruption to the area and its residents. These impacts, in general, Rooftop Concert Photo Courtesy of Rene Rosensteel

Survey respondents associate the term "Sociable City" with moments of surprise, delight, and discovery.

occur closer to bar closing time. Therefore, when compared to more dining-focused districts, late night destination nightlife nodes are saddled with the most impact.

Over time, late night socializing in Pittsburgh shifted from the Oakland neighborhood and the Strip District where it was once popular to the current destination, South Side. Several issues complicated the situation: The South Side Local Development Corporation dissolved due to lack of support, along with its Main Street program. Without their guidance, the business mix got top heavy with bars and nightclubs which attracted large numbers of patrons, some of whom were noisy, messy, and disruptive. Without a business improvement district, city services were not sufficient enough to maintain safety and cleanliness. Like most cities, code enforcement, street maintenance, and trash collection did not happen beyond 5pm Monday through Friday. Without someone to coordinate all the players to manage "life at night," the commercial district suffered from a negative perception.

City Council President Bruce A. Kraus had been raising the warning alarm for some time. As it reached a tipping point, residents joined in to advocate for action. In 2012, through Kraus' leadership, the city's Planning Department commissioned an assessment of Pittsburgh's nighttime economy by the Responsible Hospitality Institute, a non-profit nightlife think-tank.

The study engaged a wide swath of stakeholders who weighed in on a collection of recommendations titled "The Pittsburgh Sociable City Plan." One of the recommendations was to create a new position within the city, a nighttime economy manager. The first manager was hired in 2014; this year a project coordinator was added, doubling the effectiveness of what is now the Office of Nighttime Economy.

A MAP WITHOUT A NAVIGATOR IS JUST A MAP

Pittsburgh's Sociable City Plan is a blueprint to capture opportunities in the nighttime economy such as nurturing a music economy and generating revenue to maintain nightlife infrastructure through the South Side Parking Enhancement District (see sidebar). It also highlights challenges that need to be addressed in order to get ahead of the impacts and harness the benefits.

Key to achieving the positive impacts is changing perceptions about the nighttime economy. To take a look at common perceptions about nightlife, let's return to our word association game and dig a little deeper: when asking "what words or characteristics are associated with 'nighttime economy'?" responses range but most often feature negative perceptions: drinking, noise, fights, and public urination. But when asked the same question regarding the phrase "Sociable City," the responses nearly write a vision statement: welcoming; walkable; well-lit; vibrant; diversity of people; variety of experiences; moments of surprise, delight, and discovery; visible presence of police; and connection and engagement with other people.

The question is: how does a city go about achieving such a vision? How can a city anticipate and prevent potential negative impact, and attain the benefits of a sociable city?

Cities worldwide are recognizing the need for a staff person to steward the evolution of their nightlife. In fact, five of the seven continents have cities with a night mayor or night manager, or are formally seeking to hire one. In the U.S., a handful of cities have committed to an intentional focus on issues and opportunities of economic development after dark, and created a job for a liaison between night commerce, the city, and community. Some cities call this position a night mayor. Some create a commission like New York has just announced. In Pittsburgh, the position is called nighttime economy manager.

As much as titles vary, so do the entities in which the function is housed, which include both public and private.

- The night mayor of Iowa City is employed by the Business Improvement District.
- San Jose's downtown manager, one of the earliest such appointments, is located in the city manager's office.

PARKING ENHANCEMENT DISTRICT: A SAFETY INITIATIVE DISGUISED AS A MOBILITY INITIATIVE

Up until recent years, steel mill workers lived on the slopes of the South Side neighborhood and used city-maintained steps to scale down the mountainside to work in the mills. On their way home, they would stop for a beer and maybe dinner in one of the neighborhood's bars on East Carson Street.

Today, that stretch of commerce still has bars, but the customer (and the person who serves them) comes with a car – many cars. Beyond a few small parking lots, there are roughly 650 on-street parking spaces on the 19-block stretch that constitutes the commercial corridor. While there are a couple of parking garages on the South Side, they are located at either end of Carson Street, a mile from the hub of late night activity.

As the South Side gained more and more popularity as a destination for younger late night patrons, they parked up the hill from the well-lit core, running the risk of victimization by assault and robbery as they walked through dimly lit side streets and dark alleys. Suburbanites unfamiliar with urban living and visitors from outside the region left items inside their cars within plain view, tempting criminals, causing a spike in vehicle break-ins as South Side's top crime. Police budgets spiked too due to overtime pay prompted by increased late night demand.

The sheer numbers of extra patrons meant more trash, yet numbers of receptacles and collection frequency had not transitioned to accommodate increased "life at night." In general, citizens should be able to expect that city services such as numbers of receptacles, trash collection service, power washing and police presence are delivered equally to all areas of the city. When a given area begins to attract more users and impacts outweigh the base level of service, commercial concentrations often opt for a Business Improvement District.

As volunteers, existing entities and community organizations did not have capacity or mission to deal with managing growth of the heightened needs of this intensely used commercial corridor. Recommendations were made that the city could create a Parking Enhancement District (PED).

The short term goal was to motivate patrons' and workers' parking and mobility habits towards well-lit and well-populated areas to keep them safe. The long range goal was to develop a funding mechanism to pay for services above and beyond what the city was able to provide, services and improvements that responded to the special needs of nighttime economy.

Until the PED's creation in 2017, parking meters were enforced only until 6pm. The process would involve extending meter collection hours past 6pm until midnight on Friday and Saturday only. The $1.50 per hour collected between those hours would be sequestered into a trust fund dedicated solely to improving the safety, maintenance, and infrastructure of nighttime use in the area within the PED boundaries.

A first step was to legislate Parking Enhancement Districts in general; to define them and the requirements to become one. The area had to have enough density of use, which was measured by a minimum of revenue generated by meters in the parking area. It was determined that the nighttime economy manager would accept applications and coordinate key stakeholders, including the Parking Authority; City Council; and the Mobility and Infrastructure, Municipal Budget, Public Safety, and Public Works departments.

Second came adjusting Residential Permit Parking (RPP). The Parking Authority, Councilman Kraus, businesses, and residents collaborated to craft an approach to adjust residential permit parking hours to match the PED hours. The goal of this was to discourage parking in less active residential side streets and motivate patrons to stay where there were more eyes on the street and reduce crimes of opportunity.

The idea of a PED had been discussed for years during the Responsible Hospitality Institute assessment and the drafting of the Sociable City Plan. The business community had already provided input via the roundtable focus groups and through the Sociable City implementation workgroups.

Concerns were voiced that paid parking would drive customers to other commercial neighborhoods. Questions were raised about how to reduce vehicles on E. Carson Street without reducing customers? How do we save upfront parking for customers, rather than employees?

The mayor was adamant that during a pilot period a free parking option be available too. So, a park and ride system called the South Side NiteRider was developed. The Parking Authority offered free parking at a lot across the river with a five-minute shuttle ride to the hub of action. Medical institutions provided sponsorship due to their interest in reducing DUIs and patron injuries.

Photo Courtesy of Lamar Advertising

Lamar Outdoor Advertising helped promote a free park & ride for customers and nightlife employees.

Shifting the mindset, especially around parking, is a slow culture change. Public education was crucial. A communications campaign was designed with creative direction donated by advertising experts at Brunner Creative. Lamar Outdoor Advertising donated ad space on bus shelters and billboards.

A 30-day grace period stepped up the public notice. For four weekends an "Oops Card" and a citation for $0.00 was placed on every car parked on Carson Street to inform patrons that soon they'd have to feed the meter, the benefits to feeding the meter, and of the free parking and NiteRider shuttle. The mayor's community affairs team reminded businesses and distributed window posters and links to ssNiteRider.com to post on websites and on social media.

Simultaneous to this process, rideshare was ascending which prompted a re-ordering of infrastructure to accommodate Lyft, Uber, and other platforms. A five-block area carved out to expedite pickup/drop off led to a happy unintended consequence of clearing the district 30 minutes faster. Earlier departure meant reduced disruption to residents and reduced police costs.

After one year, PED generated $220,000 in parking revenue. The city is currently re-investing back into the nighttime economy for safety and maintenance with the purchase of safety cameras, clean team ambassador service, and a litter vacuum dedicated to the nightlife district. Public Works has shifted some day staffing to weekend nights to clean up after bar closing time. As more night customers used Uber, Lyft, and others, the park and ride numbers decreased such that NiteRider is used now only for South Side events. While the correlation cannot be proved, as shared ride platforms gained traction (reporting a 20 percent increase) crime has been reduced by 37 percent. Parking usage remains near 100 percent at peak hours.

- In Orlando the project manager for nighttime economy is part of the Redevelopment Authority.
- Pittsburgh's Office of Nighttime Economy is supervised by the Public Safety Department and reports weekly to the mayor's office.

The charge, however, is fairly consistent: to coordinate efforts of city departments; county, state and federal permitting and regulating agencies; community organizations; residents; and businesses to achieve a balance of safety and vibrancy in the nighttime economy.

Photo Credit: Danielle Wickland

Nighttime Economy Manager Allison Harnden meets annually with the Student Government Council that convenes ten of Pittsburgh's higher education institutions.

WHAT DOES A NIGHT MANAGER DO?

Pittsburgh's nighttime economy manager oversees and advises nightlife planning and management strategies citywide. This involves coordinating multiple city departments, services, policies, and resources needed to assure safe, vibrant, and sustainable opportunities to socialize for the city's citizens, businesses, and visitors. The Office of Nighttime Economy primarily focuses efforts on:

- Acting as a liaison to businesses and the community
- Monitoring the nighttime economy
- Guiding policy and development
- Managing projects

Act as Business Liaison

To better understand the needs and challenges of nighttime businesses, the office convenes and facilitates meetings with the nightlife sector. Both issue identification and problem solving occurs in these sessions, which are sometimes businesses only and other times involve permitting, licensing, and enforcement representatives to answer questions, clarify misunderstandings, and foster collaboration.

Beyond meeting with bars and restaurants, the night manager also coordinates and improves communication among representatives of Uber, Lyft, and the night police staff to achieve optimum egress at bar closing time and for large events.

NIGHT MANAGER ROLE

Percentage	*Job Duty*	*Frequency*
30%	Community Relations	Daily
20%	Project Management	Daily
15%	Monitor Nighttime Economy	Weekly
15%	Business Liaison	Weekly
10%	Policy and Practices Advisor	Weekly
5%	Guide Economic Development	Weekly
5%	Improve Process Efficiency	Bi-Monthly

Photo Credit: Melissa Farlow, The Heinz Endowments Downtown Now Photography Project

Attendees enjoy dancing at an August Wilson Center event.

Maintain Community Relations

The office helps businesses and neighbors to achieve peaceful and mutually beneficial coexistence. A good deal of the office's role centers on maintaining relations with community organizations, higher education, chambers of commerce, merchant and bar associations. The manager and project coordinator split this workload, which includes making presentations, hearing concerns, and conducting follow up actions on community requests. Such requests have led to the creation of a Social Host Ordinance, which holds landlords accountable for the disruptive activity of their tenants (i.e. noise or underage drinking at student house parties).

Residents play an important role in a healthy nighttime economy, as both patrons and monitors. Those who live in or near hospitality zones, given an effective outlet, can communicate early warnings of potential issues. Two neighborhood resident groups in Pittsburgh, Oakwatch in Oakland and Southwatch in South Side, meet monthly with city departments to focus on code violations, including noise, house parties, and other impacts. Through participating with numerous resident groups on a consistent basis, the nighttime economy manager can monitor trends, better understand root causes, and address situations before they become full blown issues.

Monitor the Nighttime Economy

Staying up to date on nightlife trends and issues involves more than hearing from the community. Onsite observation of nightlife in various neighborhoods with skilled sets of eyes balances out the sometimes subjective opinions of residents. A common question of night managers is: "How much do you work at night?" In Pittsburgh, the manager and coordinator strive for onsite observation of hospitality zones at night two times per month. Generally, they start at 10pm to observe the "patron shift

One thing that is consistently reported from cities across the country is, "We didn't plan nightlife, it just happened." In order to steward the evolution of life at night, Pittsburgh's office works with neighborhood development corporations, Business Improvement Districts, community councils, and the Urban Redevelopment Authority to anticipate, plan, and guide responsible nightlife growth.

change," when diners (typically boomers) are exiting the hospitality zone and when nightlife patrons (typically millennials) are arriving. The team looks for a host of things that might be cured with policy, education, marketing, or communication with other city departments:

- Is door security managing the lines outside businesses?
- Are there street lights burnt out?
- Where is litter tending to concentrate?
- How could closing time be less chaotic?
- Are there patterns to Uber/Lyft/taxi drivers who stop in the middle of the street to drop off/pick up customers?
- What patron behaviors are undesirable and what can be done to change them?
- Where and at what time are sidewalks unable to accommodate the number of patrons such that they spill into the street?

Policy and Practice Advisor

With a combined 35 years of experience in hospitality and in guiding nighttime economies in cities nationwide, Pittsburgh's Office of Nighttime Economy is uniquely qualified to brief and advise elected officials on policy strategies and legislation related to the nighttime economy. Sharing strategies on a quarterly call with night mayors from other cities helps the team to stay abreast of best practices and remain a solid resource for the mayor, City Council, and city departments

Guide Development

To stay ahead of the curve, the office works proactively to guide development in several ways. This involves leadership by the Office of Nighttime Economy, as well as participating in initiatives led by other public and private partners.

District Development – One thing that is consistently reported from cities across the country is, "We didn't plan nightlife, it just happened." In order to steward the evolution of life at night, Pittsburgh's office works with neighborhood development corporations, Business Improvement Districts, community councils, and the Urban Redevelopment Authority to anticipate, plan, and guide responsible nightlife growth.

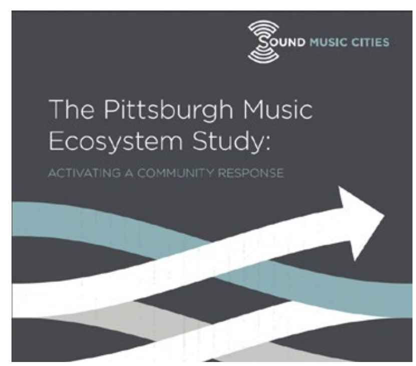
Business Development – A key area of focus is informing businesses of requirements and tools to open, expand, and maintain safe and profitable ventures. Several how-to guides have been drafted to assist businesses to understand rules, regulations, and navigating city processes. A current focus is encouraging a live music scene and, to that end, making policies and regulations more transparent and user friendly.

Public Space Development – Of late, the office has been asked to weigh in on streetscape projects. With a deeper understanding of how public space is utilized at night, this team is aptly suited to provide suggestions to urban planners. For instance, night managers know that music venues need loading zones for musicians and their equipment and can advocate for them. The management team understands where within a hospitality zone the nightlife pedestrian flow creates bottlenecks and causes pedestrians to spill into the street and can suggest environmental design solutions to reduce risk.

Project Management

When a topic of interest is related to nightlife or socializing and involves multiple departments, it makes sense for the Office of Nighttime Economy to manage the project. Sometimes it involves engaging a consultant and monitoring their progress; other times it means managing a pilot program. The office is currently managing or co-managing the following projects:

Pittsburgh Music Ecosystem Project – To address visitors' disappointment with live music offerings, the challenge of musicians to make a living at their craft and barriers to venues offering live music, Mayor William Peduto assigned the nighttime economy manager to team with the Pittsburgh Downtown Partnership and local radio WYEP 90.7 to remove barriers and nurture a music scene. (See pghMusicProject.org)



Office of Nighttime Economy, WYEP Radio, and Pittsburgh Downtown Partnership facilitated a study to assess and grow a music economy.

Alternative Entertainment – Bars and events with alcohol are a diversion for some, but others desire some other form of entertainment. Pittsburgh hosts a large population who are under 21 years old, some of whom are students. While universities provide many activities, students seek an off-campus experience. This group is exploring ways to encourage entrepreneurship and development of creative alternative diversions and entertainment without alcohol.

Parking Enhancement District – a mechanism for those who participate in nightlife to contribute to its sustainability, this initiative legislated the application and re-

It seems that every city is courting info tech, bio tech and other sectors to bring jobs and revenue to their communities. Many of these industries work internationally, which means work schedules around the clock. Socializing typically happens at night due to prevalence of a 9-5 employment. But as 24/7 economies expand, so will the hours of socializing.

quirements for such districts in 2016, then implemented a pilot on the South Side in 2017. The nighttime economy manager coordinated the efforts of a team of partners, both public and private.

WHY YOUR CITY NEEDS A NIGHT MANAGER

Ask yourself: who within my city coordinates the full range of planning, managing, and monitoring detailed in this article? Most large cities and some small cities are experiencing greater night activity. Some have harnessed it; some are in reaction mode, responding with a piecemeal approach. For those who need more fodder to adopt an intentional strategy to embrace nighttime economy, consider the following demographic projections, market strength, and economic and community benefits.

Consumer Demand Will Continue to Grow

Consumer demand for social space is being buoyed by two demographic cohorts that have reached historic numbers. The population of baby boomers tagged in at 74 million in 2016. Trends show this generation is trading in suburban living for downtown condos and social options.

The generation that values "experiences" over "stuff," the millennials (those 20-35 years old in 2016) swelled to 71 million. These are arguably the ages of most intense socializing, and the wave keeps coming.

The Pew Center reports that, in 2019, millennials are projected to overtake baby boomers as the largest generation. (http://www.pewresearch.org/fact-tank/2018/03/01/millennials-overtake-baby-boomers/)

Market Response Is Growing

Demand is growing and industry is responding. Food and Beverage was one of the few industries to weather the storm of the last decade's economic downturn. The National Restaurant Association projected for 2017 a national average of 4.3 percent in sales growth.

Sales spur job growth. In Pittsburgh, while other industry jobs increased just .4 percent in the last five years, restaurants and eating places enjoyed a 3 percent increase in jobs. And that's all good, but it does bring other problems. Unless public transit service hours shift to accommodate nighttime economy (most cities have not), all those workers who serve your food and drinks can get to work but they're stuck for a ride home after the bars close.

Photo Courtesy of City of Play

Alternative recreation resonates with millennials. City of Play hosts Monday Night Dodgeball at the Ace Hotel.

Quality of Life

More attention is centering on the benefits of social interaction on the well-being of our citizens and communities. Gallup teamed psychologists, economists, and other acclaimed scientists to identify common elements of individuals' well-being. They discovered that an optimum dose of socializing is one of five points that constitute a life well-lived.

Nighttime economy can attract and retain engaged residents. In 2008 Gallup teamed with the John S. and James L. Knight Foundation's Soul of the Community study project, interviewing nearly 43,000 people in 26 communities over three years. Social offerings, such as entertainment venues and places to meet, were ranked as the most important quality that attached people to community. The study also found a positive correlation between attachment to community and local GDP growth.

More 24/7 Industries

It seems that every city is courting info tech, bio tech and other sectors to bring jobs and revenue to their communities. Many of these industries work internationally, which means work schedules around the clock. Socializing typically happens at night due to prevalence of a 9-5 employment. But as 24/7 economies expand, so will the hours of socializing.

Socializing enhances quality of life. More and more this is what relocating companies seek in a city to attract and retain employees. The question is: Do you want to present a sociable city with managed life at night or one where nightlife "just happened?"

LESSONS LEARNED

Some basic tenets have held true for Pittsburgh's work on life after dark and have been commonly expressed by colleagues from other cities who manage this specialized discipline and economic niche.

Create a Balanced Team – To tap into the nighttime economy requires dedicated attention, advocacy, and change making. Start by building a team comprised of a balance of public and private entities and with equal representation of hospitality, safety, development, and community interests. This alliance will give you the full scope of identifying and addressing issues, as well as deciding if you want or need a night manager. Balanced representation will assure no one interest reigns.

Focus on Socializing rather than nightlife: it's more palatable to a broader audience and will serve to diffuse polarizing attitudes and galvanize stakeholders toward a common goal. The vision of Pittsburgh's Office of Nighttime Economy intentionally focuses on socializing and doesn't even mention the word "night" in its Vision Statement:

> To create safe and vibrant places to socialize for Pittsburghers and visitors of all ages, lifestyles and cultures.

Give Organizational Structure Careful Consideration – For those cities that want to pursue a nighttime economy manager, deep discussion should take place to consider in what organization or city department will the manager reside. Managers outside city government may have difficulty affecting changes needed inside the institution. That said, managers' places inside municipal government need access and support of top level decision makers.

Maintain Momentum – Building trust, collaboration, and a common direction among the diverse interests of your alliance will take time. A night manager can serve to continually move the needle forward. Absent that, tasks can be shared by a balanced alliance. Look for some easy agreed upon wins. If momentum is lost, participants will drop out and the group's balance will be lost.

CONCLUSION

Nightlife and socializing is a sleeping giant with great potential to provide economic benefits and heightened quality of life for citizens, visitors, and relocating industries. It is a complex ecosystem with many facets: Nurture it and reap the benefits; ignore it and it will grow anyway.

Very few cities have had the luxury of planning for nightlife, Pittsburgh included. It quietly grew after dark while everyone was sleeping. But this city and a handful of others with night managers have awakened to a new day, one that begins after dark. There is much catch up work to be done to address the current reality while working steadily to the future sociable city.

If your city has not planned for life at night, heed this: It's here now. More is coming. Are you ready?

2018 ECONOMIC FUTURE FORUM SPONSORS

IEDC would like to thank the sponsors of the 2018 Economic Future Forum for demonstrating their commitment to the important work of economic developers. It is through their generous support that IEDC has brought leaders of the profession together for this forum of professional development, peer networking, and discussions of the most imperative issues facing economic developers today. We proudly recognize the following sponsors as partners in helping economic developers to build strong, more vibrant communities.

CHAIRMAN'S CLUB:

DIAMOND SPONSOR:

PLATINUM SPONSORS:

GOLD SPONSOR:

SILVER SPONSORS:

BRONZE SPONSORS:

MEDIA SPONSORS:

NEWS FROM IEDC

IEDC STRATEGIC PLAN UPDATE UNDER WAY

Understanding how global shifts and emerging trends affect local economies is critical to devising future plans. As part of updating the organization's strategic plan, the IEDC Board of Directors met during the 2018 Economic Future Forum in Buffalo to discuss issues that have been influencing the economic development profession and will continue to do so in the near future.

Key topics included the uneven economic recovery; demographic changes; infrastructure challenges; global competitiveness; sustainability; labor market changes; wavering entrepreneurship; and the increase in natural disasters. The strategic plan will be updated and voted on at the Annual Conference in September.

EDRP "FUTURE READY" REPORT NOW AVAILABLE

The Economic Development Research Partners (EDRP) program recently released a report that looks at industry and workforce trends impacting economic development. "Future Ready: Preparing for Tomorrow's Economy" examines technological advancements such as artificial intelligence, 3D printing, robotics, machine learning, and blockchain, and how they are upending entire industries and the nature of work itself.

The report also provides a framework for economic developers to help them become more future-ready at the organizational and community level.

Visit the IEDC website to download the report and register for the accompanying webinar series.

IEDC'S ECONOMIC RECOVERY VOLUNTEER PROGRAM WANTS YOUR EXPERTISE!

IEDC seeks economic development professionals to serve as economic recovery volunteers in disaster-impacted communities. IEDC currently is sending volunteers to Texas, Florida, Puerto Rico, and the U.S. Virgin Islands through the Economic Recovery Volunteer Program, and has need for volunteers beyond these assignments as well.

Volunteers work on projects for 2-5 days in an impacted community, providing services such as business surveys, community assessments, meeting facilitation, action planning, and more. All expenses are covered, thanks to funding from the U.S. EDA. To volunteer, please sign up at restoreyoureconomy.org.

AT IEDC'S ANNUAL CONFERENCE: THE ISLAND ECONOMIC RESILIENCE ROUNDTABLE

Typically less diverse, with limited resources and special transportation and infrastructure needs, island economies face particular challenges recovering from natural disasters and building long-term resiliency.

To help share ideas and increase capacity, IEDC is hosting The Island Economic Resilience Roundtable at the Annual Conference in Atlanta, on Oct. 3 from 1-5pm. If you're an islander, this is your opportunity to discuss what has worked and what hasn't in growing your economy.

We'll share knowledge about how to support local businesses in core economic sectors many islands depend upon, including tourism, agriculture, manufacturing, and more. For more information or to register, please contact Delaney Luna at dluna@iedconline.org.

ACCREDITED ECONOMIC DEVELOPMENT ORGANIZATION PROGRAM NEWS

AEDO
Accredited Economic Development Organization

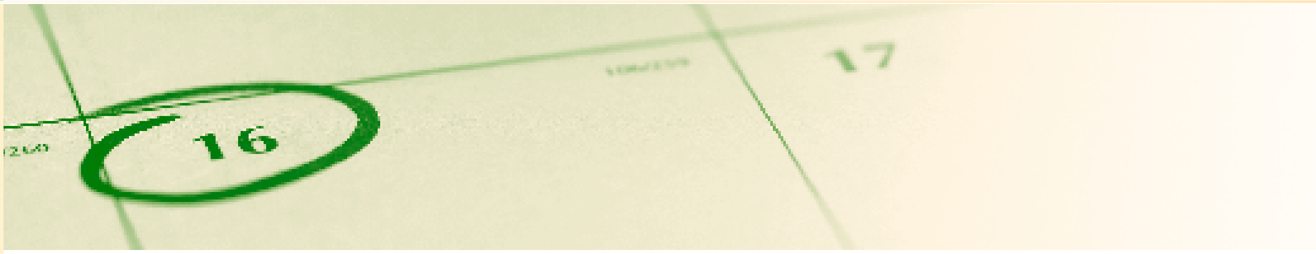
Louisiana Economic Development has become the first statewide Accredited Economic Development Organization (AEDO) in a decade. Originally accredited in 2006, Louisiana Economic Development is the fourth AEDO in the state of Louisiana.

In the state of Michigan, Lake Superior Community Partnership (Marquette) and Saginaw Future, Inc. (Saginaw) were recently reaccredited. The Tyler Economic Development Council in Texas also achieved reaccreditation. Accredited organizations apply for reaccreditation every three years.

To learn more about becoming a member of the prestigious AEDO community, please visit www.iedconline.org/AEDO or contact Program Manager Dana Crater at dcrater@iedconline.org.

INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

CALENDAR OF EVENTS



IEDC sponsors an annual conference and a series of technical conferences each year to bring economic development professionals together to network with their peers and learn about the latest tools and trends from public and private experts.

IEDC also provides training courses and webinars throughout the year for professional development, a core value of the IEDC. It is essential for enhancing your leadership skills, advancing your career, and, most importantly, plays an invaluable role in furthering your efforts in your community.

For more information about these upcoming conferences, webinars, and professional development training courses, please visit our website at www.iedconline.org.

CONFERENCES

2018 Annual Conference
September 30- October 3
Atlanta, GA

2019 Leadership Summit
January 27-29
Ft. Lauderdale, FL

2019 Federal Forum
April 14-16
Washington, D.C.

2019 Economic Future Forum
June 9-11
Salt Lake City, UT

2019 Annual Conference
October 13-16
Indianapolis, IN

2020 Leadership Summit
February 9-11
Tampa, FL

2018 TRAINING COURSES

Workforce Development Strategies
September 27-28
Atlanta, GA

Economic Development Marketing & Attraction
October 11-12
Calgary, AB

Business Retention & Expansion
October 18-19
Toronto, ON

Entrepreneurial & Small Business Development Strategies
October 25-26
Chapel Hill, NC

Real Estate Development & Reuse
November 1-2
Phoenix, AZ

Managing Economic Development Organizations
November 8-9
Baltimore, MD

Economic Development Marketing & Attraction
December 6-7
Atlanta, GA

2018 CERTIFIED ECONOMIC DEVELOPER EXAMS

September 29-30, 2018
Atlanta, GA

December 1-2, 2018
Denver, CO
(Application Deadline: October 2)

2018 WEBINARS

Webinar Series: Future Ready Economic Development Organizations
Register for the series or individual webinars.

How Economic Developers Are Thinking about the Future – Visioning
October 11

The Future of Infrastructure
October 18

The Future of Work
October 25

The Future of Technology Development and Commercialization
November 1

The Future of Economic Development Practices
November 8

RECERTIFICATION FOR CERTIFIED ECONOMIC DEVELOPERS

Fulfill a recertification requirement without tapping into your budget!

Earn two credits towards your next recertification by having an article published in the *Economic Development Journal*, IEDC's quarterly publication.

This is one of a number of ways that you can pursue recertification credits. Submissions are accepted throughout the year. The Journal Editorial Board reviews all articles and determines which articles are accepted for publication.

For more information contact Jenny Murphy, editor, at murp@erols.com (703-715-0147).

INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

aging as an engine of
INNOVATION, BUSINESS DEVELOPMENT, AND EMPLOYMENT GROWTH

By James H. Johnson, Jr., Allan M. Parnell, and Huan Lian

INTRODUCTION

We are an aging nation. The U.S. population is growing older thanks to below replacement level fertility rates, continued aging of the baby boom cohort, improvements in health behavior (active living and healthy eating), and major advances in medical care for older adults (Ortman, Velikoff, & Hogan, 2014; The Economist, 2010; Exner, 2014; Xu, et.al., 2016; Atkins, 2016-17). Even the definition of what is considered "old" is changing (Vernon, 2017). Stanford University economist John Shoven suggests, ". . . the threshold age for being considered old for men increased from about 55 in the 1920s to 70 today." For women, "old . . . today is about 73, which increased from the late 50s in the 1920s." For both men and women, what was considered "old" in the 1920s is considered "middle aged" today (quoted in Vernon, 2017).

Despite the changing definition of "old," older adults' increased physical activity, and continuing high levels of engagement in the workforce for much longer than in the past, aging is typically viewed as more of a *challenge* than an *opportunity* in our society. To be sure, major challenges exist. Figuring out how to cover the additional costs of social safety net programs for the frail elderly, for example, is unquestionably a major issue (Atkins, Tumlinson, and Dawson, 2016-17; Hoagland, 2016-17). However, we believe aging can be a new engine for innovation, business development, and employment growth in the U.S.

Despite the changing definition of "old," older adults' increased physical activity, and continuing high levels of engagement in the workforce for much longer than in the past, aging is typically viewed as more of a *challenge* than an *opportunity* in our society. To be sure, major challenges exist. Figuring out how to cover the additional costs of social safety net programs for the frail elderly, for example, is unquestionably a major issue (Atkins, Tumlinson, and Dawson, 2016-17; Hoagland, 2016-17). However, we believe aging can be a new engine for innovation, business development, and employment growth in the U.S. More specifically, as we have argued elsewhere (Johnson and Parnell, 2016-17), we are convinced that "opportunities abound in this space to support and facilitate healthy and active aging on the one hand, and to care for the frail elderly on the other" (also see Kohlbacher and Herstett, 2011; BCG, 2011; Federal Reserve Bank of Atlanta, 2015).

Against this backdrop, this article makes the case for such an age-focused economic development strategy. Toward this end, we begin by setting the demographic context, presenting data on both the current state and projected future of aging in the U.S. Next, we highlight areas in which major opportunities exist to innovate, form new and expand existing businesses, and create jobs aimed at facilitating successful aging and creating age-friendly communities. We conclude by discussing areas in which major policy changes are required to sustain and expand the strategic focus on aging-anchored economic development.

James H. Johnson, Jr. is William Rand Kenan, Jr. Distinguished Professor of Strategy and Entrepreneurship in the Kenan-Flagler Business School at UNC-Chapel Hill.

Allan M. Parnell is a Senior Research Associate in the Frank Hawkins Kenan Institute of Private Enterprise at UNC-Chapel Hill.

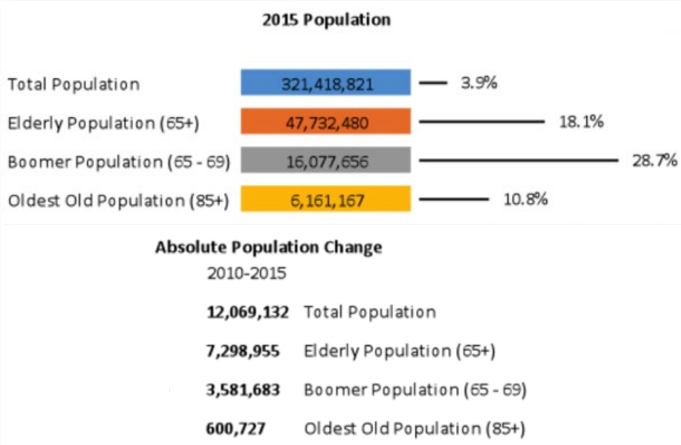
Huan Lian is a Research Associate in the Frank Hawkins Kenan Institute of Private Enterprise at UNC-Chapel Hill.

This article builds upon the work done at the Elder Care Economy Innovations Hub launched in the Kenan-Flagler Business School.

FACILITATING AGE-RELATED ECONOMIC DEVELOPMENT

Older adults will drive U.S. population growth over the next quarter century. Aspiring entrepreneurs and existing business enterprises that recognize the propitious opportunity to drive innovation by creating products and services that promote successful aging and create age-friendly communities can potentially shape U.S. economic and employment growth in the foreseeable future. Policy prescriptions required to facilitate this age-related economic development are discussed.

FIGURE 1. ABSOLUTE AND PERCENT POPULATION BY AGE, 2010-2015



CURRENT SNAPSHOT AND FUTURE PROJECTIONS OF AGING

In 2015, the U.S. senior population (65+) totaled 47.7 million, growing by more than 7 million between 2010 and 2015. Over these five years, the senior population grew at a rate that was nearly *five* times the rate of growth experienced by the total population (18.1 percent versus 3.9 percent), as Figure 1 illustrates. The first baby boomers turned 65 in 2011, and those between the ages of 65 and 69 grew *seven* times as fast as the total population (28.7 percent versus 3.9 percent). The oldest old (85+ population) grew *three* times as fast as the total population (10.8 percent versus 3.9 percent).

Over the next quarter century, senior population growth is projected to continue to outpace total population growth (Horvath, 2013). Between 2015 and 2040, according to the Census Bureau's National Population Projections, the American total population is projected to increase by 18 percent – from 321 million to 380 million. During this period, the 65+ population is expected to increase much more rapidly – from 47.8 million to 82.3 million, an increase of 72 percent. And because life expectancy at birth is projected to continue to increase significantly for both genders and all race/ethnic groups (see Table 1), the 85+ population – the oldest old – is forecast to grow even faster than the 65+ population (132 percent versus 72 percent) over the next quarter century. By 2040, the 85+ population is projected to reach 14.6 million, up from 6.3 million in 2015. Outpacing both groups, the 100+ population is projected to increase by 168 percent between 2015 and 2040. According to Census Bureau projections, there will be an estimated 193,000 centenarians living in the U.S. by 2040, up from 72,000 in 2015 (Figure 2).

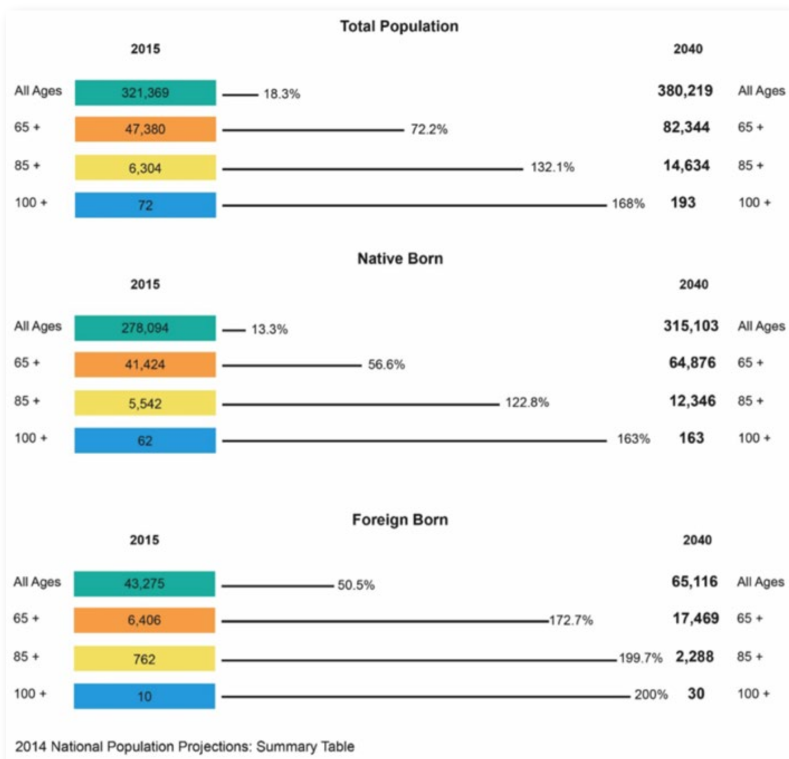
In 2015, over three quarters of America's senior population were non-Hispanic Whites (78 percent or 37 million). Blacks (9 percent or 4.3 million) and Hispanics (8 percent or 3.8 million) each accounted for less than 10 percent of the 65+ population (American Community Survey, 2017). Due to the increasing role immigrants are playing in the U.S. today (Johnson, 2013; Johnson & Kasarda, 2011), the senior population will become far more diverse over the next quarter century. In all three

TABLE 1. PROJECTED CHANGES IN LIFE EXPECTANCY AT BIRTH BY GENDER & RACE, 2015 AND 2040

Gender	2015	2040
Both Sexes	79.4	83.0
White	80.0	83.5
Black	76.1	80.5
American Indian/Alaskan Native	77.5	81.7
Asian	79.9	83.6
Native Hawaiian/Pacific Islander	80.1	83.5
2 or more races	79.8	83.0
Hispanic	81.9	83.5
Males	77.1	81.2
White	77.7	81.7
Black	72.9	78.0
American Indian/Alaskan Native	74.7	79.6
Asian	77.5	81.7
Native Hawaiian/Pacific Islander	77.7	81.6
2 or more races	77.2	81.4
Hispanic	79.6	81.7
Female	81.7	84.8
White	82.2	85.2
Black	78.9	82.8
American Indian/Alaskan Native	80.3	83.8
Asian	82.0	85.2
Native Hawaiian/Pacific Islander	82.5	85.4
2 or more races	82.2	85.1
Hispanic	84.1	85.2

Source: U.S. Census, National Population Projections.

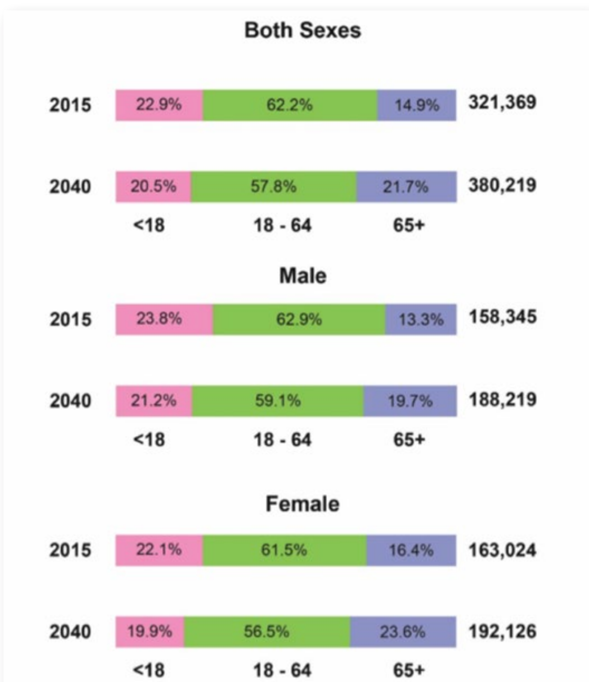
FIGURE 2. U.S. POPULATION PROJECTIONS BY AGE AND NATIVITY, 2015 AND 2040 (IN THOUSANDS)



senior age groups – 65+, 85+, and 100+ – the foreign-born population will increase more rapidly than the native-born population. While native-born seniors in these three age groups are projected to increase by 57 percent, 123 percent, and 163 percent, respectively, the corresponding numbers for foreign-born seniors in these age groups are 173 percent, 200 percent, and 200 percent, respectively. By 2040, there will be an estimated 64.9 million native-born and 17.5 million foreign-born seniors living in the U.S. (Figure 2).

In part as a function of these projected changes in the absolute size and composition of the senior population, the elderly share of the total population is projected to increase from 14.9 percent in 2015 to 21.7 percent in 2040. This shift will be evident among men and women. Elderly men are projected to comprise 19.7 percent of all men in 2040, up from 13.3 percent in 2015. The elderly share of the female population is projected to increase from 16.4 percent to 23.6 percent of the total between 2015 and 2040 (Figure 3). Paralleling these increases in the elderly share of the total, male, and female populations, there will be corresponding declines in the under 18 and 18-64 shares of the U.S. population – a potential problem given that the demand for caregivers for the elderly will increase along with the projected growth of the senior population (Redfoot, Feinberg, & Hauser, 2013).

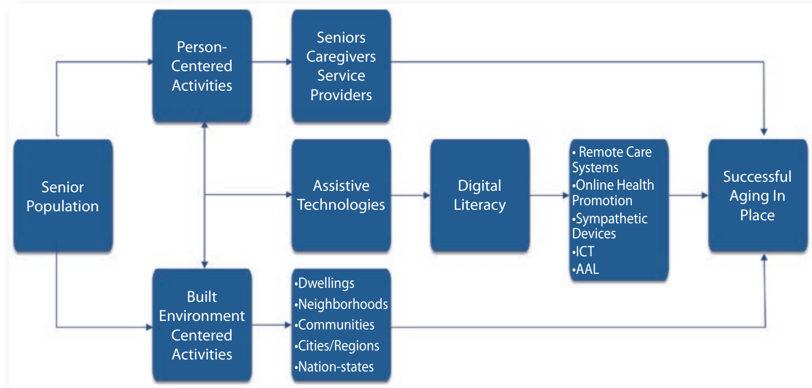
FIGURE 3. PERCENT DISTRIBUTION OF U.S. POPULATION BY GENDER AND AGE IN 2015 AND 2040



OPPORTUNITIES FOR INNOVATION, BUSINESS DEVELOPMENT & EMPLOYMENT GROWTH

Our framework for leveraging both the opportunities and challenges that accompany an aging population is depicted in Figure 4. The central proposition is that everything in both the person-centered (i.e., residential)

FIGURE 4. AGING IN PLACE FRAMEWORK



and the built-environment (i.e., all public, private, and commercial spaces) must change to accommodate an aging population (Johnson & Parnell, 2013). New ideas and innovations, including assistive technologies and the digital literacy training required to use them, are needed to support seniors as they strive to cope with their age-related difficulties while maintaining residence in their homes and communities. In addition, new models of care are required to address the needs of the oldest old (85+ population), the segment of seniors that is growing most rapidly (Easterbrook, 2014; Christensen & Willingham, 2014; Chalabi, 2013).

Unfortunately, The Boston Consulting Group (BCG, 2011, p. 28) estimates that “fewer than 50 percent of companies are taking global aging into account in their strategic planning.” Reflecting on this fact, BCG (2011, p. 28) asserts “far too few companies are taking sufficient steps to prepare for the impact of [this] demographic change” and argues further that “only those organizations that proactively prepare for the demographic shifts to come will be able to meet the challenges and capture the opportunities” (BCG, 2011, p. 3). Building on this view, we focus here on four specific areas or domains that BIG opportunities exist to innovate, build and expand businesses, and create jobs in our aging society.

The Innovation Challenge
Big Opportunity #1

Opportunities exist to adapt existing products and services as well as develop a portfolio of new products and services that address the needs of the elderly. A host of venture competitions and pools of venture capital have been created specifically to support the design, development, beta testing, and launch of innovations that help seniors age successfully in their homes and the broader community. However, to maximize success and impact in this space, three problems/obstacles must be overcome.[1]

First, a strategy adjustment is in order. As Kohbacher and Herstatt have noted (2011, p.xxi), “…the focus of most silver market strategies are the “rich and young at heart” elderly, while the “poor and weak-of-limb” elderly are often neglected.“ Moreover, most of the efforts in this space have focused on technological innovations and have ignored the kinds of creative services that will allow older adults to live independently for as long as

Older adults should be directly involved as active participants or simulations of the difficulties they encounter performing activities of daily living and instrumental activities of daily living should be incorporated in the innovation process. The view is that this approach, which has been defined elsewhere as gerontechnology (Fukuda, 2011), will lead to the design and development of innovations that are more likely to be embraced or adopted by older adults.

possible. Dedicated business plan competitions and creative financing models – social purpose venture funds and philanthrocapitalism investment pools – are needed to support the design, development, testing and dissemination of innovative products *and* services for the poor elderly – a group that will likely grow in the future, particularly as a result of the looming wealth crisis among nonwhite older adults (Gassoumis, Lincoln, & Bega, 2011; Guzman & Vulimiri, 2015; Rhee, 2013; Brooks, 2017; Sykes, 2016; Vinik, 2015) .

Second, better innovation management is needed because, even with the disproportionate focus on technological solutions, far too many products have been developed that do not align with the needs and desires of older adults, especially those who are poor.[2] As Kohlbacher and Herstatt (2011, p. x) note, "classical methods in product development and design have often failed to develop attractive and helpful solutions that meet the wishes of this age group." A basic failure to recognize that older adults are not a homogenous group is a large part of the problem. As Kohlbacher and Herstatt (2011, p. viii) note, "…chronological age by itself is not a sufficient segmentation criterion." Innovation must be anchored in sound research on older adults' diverse demographics, living arrangements, cultural orientations, and consumer perceptions, attitudes, and behaviors (Johnson and Lian, 2018).

Third, given this innovation management problem, a new approach to the design and development of products and services is needed. As Melkas (2011) and Fukuda (2011) have argued, this new approach should be data driven. Older adults should be directly involved as active participants or simulations of the difficulties they encounter performing activities of daily living and instrumental activities of daily living should be incorporated in the innovation process. The view is that this approach, which has been defined elsewhere as gerontechnology (Fukuda, 2011), will lead to the design and development of innovations that are more likely to be embraced or adopted by older adults.

Two critical constructs should drive this approach to successful aging-focused innovations: empathy and autonomy. In the words of Kohlbacher and Herstatt (2011, p. viii), we must "… carefully assess the needs of older consumers and *empathize* with them, to ensure adequate and early integration of representatives of this market (customers and users) into product and service development" (emphasis added) – a process called empathic design. As Miller (2017, p. 5) notes, "[t]echnical skills without empathy have resulted in products that have bombed in the market, because a vital step to building a product is the ability to imagine how someone else might think and feel."[3] Products and services also should be designed to maximize *autonomy*, that is, to help older adults maintain or regain independence for as long as humanly possible.[4]

Given the foregoing innovation issues and challenges, a unique opportunity exists to better and more strategically leverage the interests, concerns, and desires of a group of older adults who not only aspire but also are taking proactive steps to become encore entrepreneurs (Ortmans, 2015; Peterson, 2014; Stangler, 2014). Many of these individuals have retired from successful careers. Thus, their primary goal in pursuing an encore career as an entrepreneur is not just to make money; rather, they are keen on leveraging what has been popularly referred to as their double ESP (Peterson, 2014) – experience, expertise, seasoned judgement, and proven performance – to address pressing societal issues like poverty, racial inequality, illiteracy, and food insecurity (Freedman, 2016-17).

Continuing to encourage encore entrepreneurs to focus on aging issues, as is done currently through a program jointly sponsored by the U.S. Small Business Administration and AARP (Brooks, 2014; PR Newswire, 2016), is likely to pay big dividends. Research shows encore entrepreneurs not only start businesses at a higher rate but their newly launched enterprises also have a higher five-year survival rate than entrepreneurial ventures launched by any other demographic group, including the twenty-somethings (Peterson, 2014).

Boomer Purchasing Power Big Opportunity #2

Innovative devices, products, and services are sorely needed to help older adults age in place – in their homes and communities, but most seniors are not obsessing over arthritis, incontinence, or dementia. Rather, many are working past age 65, a significant number are launch-

Research shows encore entrepreneurs not only start businesses at a higher rate but their newly launched enterprises also have a higher five-year survival rate than entrepreneurial ventures launched by any other demographic group, including the twenty-somethings (Peterson, 2014).

ing encore careers, and a substantial share have both the active/healthy lifestyles and the purchasing power that makes them a formidable consumer market opportunity (Bulik, 2010). The boomer segment of the older adult population – individuals born between 1946 and 1964 – reportedly constitutes, for example, a $15 trillion market globally and a $3 trillion market here in the U.S. (Boyle, 2013).

To tap this consumer market successfully, advertisers and marketers need a makeover (Nyren, 2011; Melkas, 2011). As the BCG points out, "To serve the growing 55-and-over segment properly, companies need to build a deep understanding of this heterogeneous age group, adapting their product portfolios and sales approaches to meet the segment's evolving needs" (BCG, 2011, p. 24). Further, as BCG (2011, p. 25) continues by adding, "Companies wishing to find ways to serve the rapidly growing silver segment should undertake comprehensive, qualitative consumer research in order to identify the forces that motivate these consumers, formulate ways to meet their evolving needs, and set a goal to fully capture the opportunity that demographic shifts present."

The boomer segment of the older adult population – individuals born between 1946 and 1964 – reportedly constitutes, for example, a $15 trillion market globally and a $3 trillion market here in the U.S. (Boyle, 2013).

To succeed with older consumers, Kohlbacher and Herstatt (2011, xv) assert – correctly in our view – that the advertising industry must diversify its employee base by hiring older adults as "copywriters, graphic artists, producers, video directors, and creative directors." Noting the downside of not doing so, they go on to state that "[i]f companies plan on implementing a marketing strategy that includes baby boomers as a primary, secondary, or tertiary market, and turn it over to only people in their 20s and 30s, they will forfeit the natural sensibilities required to generate vital campaigns." They conclude that "if the right people are not in the right jobs, what happens is what happens in all arenas of business – failure and mediocrity" (Kohlbaher and Herstatt, 2011, xv; also see Nyren, 2011).

In addition, advertisers and marketers should be well trained in how to develop meaningful and respectful relations with older adults (Nyren, 2011). This will go a long way toward ensuring that older adults are portrayed in positive, non-stereotypical ways in marketing and advertising – and not just in real estate and insurance/financial services ads. Such training, properly executed, also will help advertisers and marketers understand the aging consumer paradox: Older adults do not like to be singled-out and reminded that they are old, so, in the words of Boyle (2013), "the company that does a great job of making products for seniors takes great pains not to make products of seniors."

To develop meaningful relations with older adults, advertisers and marketers must not only understand the basic demographics of aging but also the diverse living arrangements of older adults (Bulik, 2010; Fry and Passel, 2014; Cohn and Passel, 2016; Lofquist, 2012; Carns, 2016). Most U.S. older adults live independently as single individuals or older couples (Johnson and Appold, 2017). This is particularly the case for white older adult households. However, *nonwhite* older adults are far more likely than *white* older adults to live in multigenerational households (Gamboa, 2016; Abrams, 2013; Bitter, 2016; Barnett, et al, 2016; Johnson and Lian, 2018).

This demographic reality creates huge opportunities for, among others, architects, designers, homebuilders, and aging in place specialists (Bitter, 2016; Timberlake & Coleman, 2016). Research shows that multigenerational households are more likely than one-generation households to remodel (March, 2017). Moreover, the demand for new construction that will accommodate more than one generation of family members will likely rise as the foreign born older adult population continues to grow, and as the demand for more flexible space for different stages of life among all older adult multigenerational households continues to grow in the future (Abrams, 2013).

Older adult households that contain multiple generations also create opportunities for food companies to "market healthy-style meals that appeal across the ages," for financial marketers to create products that "help [multigenerational] families manage budgets and shared expenses," and for ad agencies to develop advertisements that both reflect and appeal to multigenerational households (Bulik, 2010; also see Atchley, 2013).

Finally, to leverage this consumer market fully, businesses must design, label, and package products and services in a manner that is age friendly. Given the challenges of aging, including diminished hearing, vision impairments, and other chronic disabilities, packaging and labeling must be easy to read, easy to understand, easy to carry, easy to enjoy, and safe to use. Major progress in this domain will probably require a major review of the Product Labeling and Packaging Act which has not been amended since it was enacted in 1968.

Demand for Senior Care Workers
Big Opportunity #3

An additional 1.2 million senior care workers will be needed by 2025 to accommodate the growth in the older adult population (Nelson, 2016; Liepelt, 2015; Espinoza, 2017). Given that many senior care workers are foreign born, meeting this demand will likely be a major challenge owing, at least in part, to the federal government's unwillingness to create a path to citizenship for otherwise law-abiding undocumented immigrants in the U.S. The current proposal to reduce by one-half the flow of *legal* immigrants into the U.S., if enacted into law, will likely further exacerbate the senior care labor recruitment challenge. Individuals who could potentially fill senior care jobs would not be a priority under the proposed point scheme for entry that would favor well-educated, highly skilled workers (The Editorial Board, 2017).

Notwithstanding, and in part as a function of these challenges, there are enormous opportunities for existing and new HR staffing agencies that are willing to develop recruitment and retention business models to address this need for both in home care providers and institutional care providers. Firms that are able to overcome the challenges that senior care workers face will profit from older adult population growth.

Those challenges include cultural barriers (most older adults are white and most of the workers are non-white and often foreign born with linguistic challenges), family issues (many in-home care and institutional-care providers are female single parents with young children), and transportation constraints (many rely on public transportation which creates scheduling and response time challenges). In addition, to meet forecasted labor demand, firms serving older adults will have to revise workplace policies and procedures to accommodate aging workers as well as their co-workers – both native- and foreign-born – who have elder care responsibilities of their own. The latter group includes more than 10 million millennials.

Fixing Spaces and Places
Big Opportunity #4

To accommodate an aging population, major modifications are required in all types of real estate, including commercial (office, industrial, retail, and special purpose), residential (single family, multi-family, duplexes, condominiums, townhomes, vacation homes), and public sector (government, transportation, and education facilities), and all classes of real estate (A, B, and C) (Gonyea & Hudson, 2015; Guzman & Harrell, 2015; Hudson, 2015; Lawler, 2015; Phillipson, 2015; Eisenberg, 2015). The required modifications to be age friendly extend beyond what is required to comply with the Americans with Disability Act.

Considering the kinds of age-related challenges older adults face, "we must redesign existing [facilities], plus design new ones that substantially reduce the likelihood of costly and possibly life-threatening slips and falls, as well as frequent trips to hospital emergency rooms, extended hospital stays, and long term placements in institutionalized care settings" (Johnson and Parnell, 2016-17, p. 13; also see Bergland, Jarnlo, and Laake, 2003; Ambrose & Hausdorff, 2013). As we have argued

In addition, to meet forecasted labor demand, firms serving older adults will have to revise workplace policies and procedures to accommodate aging workers as well as their co-workers – both native- and foreign-born – who have elder care responsibilities of their own. The latter group includes more than 10 million millennials.

In addition to age-friendly facilities and institutions, substantial opportunities exist to create mixed income, multigenerational communities that can serve as an antidote to much of the gentrification that is currently pricing older adults out of many urban communities (Lawler, 2015; Liepett, 2017).

elsewhere, it is almost certainly cheaper to invest in age-friendly modifications than it is to pay for falls-related litigation and/or to cover the cost of hospitalizations, rehabilitation services, and long-term services and supports (The Centers for Disease Control and Prevention, 2015; Johnson and Appold, 2017; Stone, 2016-17; Genworth Financial, 2017).

Huge business-to-business (B2B) opportunities also exist to help existing business enterprises in all sectors of the U.S. economy to prepare internally for this demographic shift. In 2014, 24.2 percent of the 65-74 year old population and 6 percent of the 75+ population were still working (Johnson and Parnell, 2016-17). Constraints on immigration will likely tighten the labor supply and force employers to rely even more so on older workers in the future than they do today. Moreover, the retirement crisis that many older adults face will force them to either remain in or return to the workforce out of necessity (Guzman and Vulimiri, 2015). Firms will have to adapt their workplaces to accommodate these older workers and develop new products and services to address, among other issues, their personal age-related challenges and diverse living arrangements, which oftentimes include extended family responsibilities and obligations (Johnson and Appold, 2017; Johnson and Lian, 2018).

In addition to age-friendly facilities and institutions, substantial opportunities exist to create mixed income, multigenerational communities that can serve as an antidote to much of the gentrification that is currently pricing older adults out of many urban communities (Lawler, 2015; Liepett, 2017). Given that those most in need of aging in place assistance are predominantly older women who live alone, often in older houses that are beyond rehabilitation, viable business plans are urgently needed to build clusters of affordable, age-friendly houses, including tiny home villages (Johnson and Huan, 2018). Infill sites in cities are ideal for such developments. The houses should be constructed around a community center that is designed to promote daily interaction and thereby combat the isolation, loneliness, and abuse problems that affect older adults who live alone today (Mosqueda, Hirst, and Sabatino, 2016-17). Such communities, properly designed, can help older adults age in the "right" place (Golant, 2016; Adamson, 2016).

Finally, opportunities also exist to redesign/modify the physical infrastructure of our communities. Among other characteristics, age-friendly communities provide easy access to transport systems, offer pedestrian crosswalks with extended walk times, have street signage that is large and readable, and feature older adult or multigenerational playgrounds and fitness parks. Major shifts in state and federal policies and regulations in a range of domains, including transportation and economic development for cities, counties, and states, are required to generate the investment dollars required to create age-friendly public infrastructure (Lawler, 2015). In addition to the immediate business development and job creation potential, the financial and social returns on such investments are likely to be substantial. Age-friendly communities, properly branded and marketed, can become major retiree destinations and centers of older adult and multigenerational household tourist activity. Such activities are not only major drivers of business development and employment growth; they also will boost the local tax base of these communities.

RECOMMENDATIONS FOR STRATEGIC ACTIONS

Population aging will affect all sectors of the American economy and all types of businesses. For both existing businesses and aspiring entrepreneurs who are willing to gather the requisite business intelligence on the older adult market, unlimited opportunities exist to develop products and services as well as transform the built environment to accommodate our rapidly growing older adult population. In a word, aging can be a major source of both economic and social value creation in America.

Population aging will affect all sectors of the American economy and all types of businesses. For both existing businesses and aspiring entrepreneurs who are willing to gather the requisite business intelligence on the older adult market, unlimited opportunities exist to develop products and services as well as transform the built environment to accommodate our rapidly growing older adult population. In a word, aging can be a major source of both economic and social value creation in America.

To facilitate innovation, business development, and employment growth in the so-called longevity economy, the following strategic actions are required.

First, the U.S. Congress must implement comprehensive immigration reform legislation, and vigorously enforce the recent U.S. Department of Labor ruling stipulating that homecare workers benefit from the same labor protections as other employees (The Editorial Board, 2017). These are strategic imperatives because, as Nelson (2016) notes, immigrants will be needed to fill the demand for the estimated 1.2 million additional homecare and institutional care workers that will be required by 2025 to accommodate growth in the senior population (also see Espinoza, 2017).

Second, current discussions about rebuilding our nation's crumbling infrastructure must be broadened to reflect the realities of population longevity (Lawler, 2015). The policy discussion must extend beyond how to modernize our system of roads, railroads, subways, airports, and air traffic control systems; bridges, dams, and levees; inland waterways and marine seaports; water and waste water, solid waste, and hazardous waste treatment systems; electric power grids; and schools, public parks, and outdoor recreation areas. Policy prescriptions and funding proposals should reflect the planning guidelines and checklists for creating age-friendly communities developed by the World Health Organization (WHO, 2007) and AARP (2017).

Third, the federal government should create an aging in place social innovation fund which would invest in social purpose business ventures that demonstrate the greatest potential or capacity for helping the most vulnerable older adults age in their homes and in their communities, perhaps through the Centers for Medicare & Medicaid Services (CMS) Innovation Center (Johnson and Lian, 2018). In 2015, AARP, in collaboration with J.P. Morgan Chase as asset manager, launched a $40 million "innovation fund" to invest in technological innovations focused on improving the lives of people 50-plus (Chew, 2015).

By obligating or dedicating a specified amount of its fund to this type of initiative, AARP could play a major role in mobilizing the requisite bipartisan Congressional support required to enact federal legislation. In addition, once such legislation is enacted and funds are appropriated to create such a fund, the federal government should in turn use its investments to leverage additional philanthropic and corporate dollars, including existing angel investment and social venture pools, to grow the fund. Given the magnitude of the problem (see JCHS, 2014; Johnson and Lian, 2018), dollars from all of these sources will be required to ensure that aging in place is an option for as many of our most vulnerable older adults as possible.

Fourth, following New York City's lead, the federal government should create a guide for age friendly building upgrades in the multi-family rental market (NYC Department for Aging, 2016). This is important because older adults who are renters, including many for whom housing constitutes a cost-burden, do not control their local living environment and property owners or landlords are unlikely to make age friendly modifications without government incentives or mandates/directives. In addition to specific recommendations that building owners should follow to make their properties more age friendly, the guide also should include information about existing federal financial incentives, including the Disabled Access Tax Credit and the Business Expense Tax Deduction, which cover at least some of the cost of making age friendly modifications to rental properties. The guide also should provide links to state level incentives.

Fifth, property and casualty insurance companies and their building owner clients should be encouraged to forge mutually-beneficial strategic alliances to facilitate aging in place for older adult tenants. A case can be made, as noted previously, that it is cheaper for property and casualty insurance companies to invest in modifications through their charitable foundations than to pay for costly litigation and medical expenses after an accidental slip or fall has occurred. This type of philanthrocapitalism on the part of property and casualty insurers would constitute a win-win-win for all parties involved (Bishop, 2008).

Older adult tenants would benefit from a renovated, age friendly living environment. Building owners would benefit from the increased value of their properties and reduced exposure to the risks associated with accidental slips and falls as well as other environmental hazards that exist in older buildings. In addition, property and casualty insurers would benefit from the tax break or deduction associated with their charitable investments in aging in place, the economic value-add in the insurance market place for engaging in socially responsible business practices, while simultaneously maintaining a sound and profitable business relationship with insured building owners. Further, local aging in place contractors and their employees as well as local economies would benefit from the renovation business that such an initiative would generate.

Sixth, the federal government also should expand funding and streamline the application process for the USDA Section 504 Home Repair program that provides "grants to [rural] elderly very-low-income homeowners to remove health and safety hazards" (Collings & Feinberg, 2014). In expanding the program, the government should stipulate that renovations must be completed by certified aging in place contractors and according to the universal design guidelines recommended by the National Association of Homebuilders (HUD, 2013a; Cook, 2016). In addition, an urban equivalent of this program should be developed. It should be designed to address the needs of elderly homeowners burdened by excessive housing costs, including those involved in multigenerational living arrangements (Timberlake and Coleman, 2016). To scale this program, the government should leverage the capabilities and expertise of Habitat for Humanity, National Church Residences, and other nonprofits, including mega-churches, that are already engaged in efforts to provide safe housing for older adults (National Church Residences, 2017; Habitat for Humanity, 2017; Mullaney, 2016).

Finally, since a significant number of the most vulnerable older adult households rely on Medicaid for long term supports and services, senior advocates must make every effort to block proposed cuts and lobby forcefully for increased federal funding for the program (The Editorial Board, 2017; Levey, 2017). States that have not done so should embrace Medicaid expansion (Atkins, 2016; Atkins, Tumlinson, & Dawson, 2016), with a specific eye toward leveraging Medicaid Home and Community Based-Waivers Programs to complete home modifications that will facilitate aging in place for some of our most vulnerable older adults (HUD, 2013b; Johnson and Lian, 2018). Since Medicaid covers long-term care for many seniors, extension of aging in place will reduce these costs (Johnson and Parnell, 2016; Marek, et.al., 2012; HUD, 2013b).

In addition, for multigenerational older adult households, states and local communities should leverage these Medicaid waiver programs to create a funding pool to be invested in compulsory education for the in-home relatives of older adults to be trained as non-medical caregivers and paid for their caregiving roles (Blumenfeld, 2014). This is likely to be a much cheaper option than institutionalized care (see Genworth Financial, 2017), and it would acknowledge in a tangible way the value that unpaid caregivers contribute to society today (Burnette, 2017; Poo and Whitlatch, 2016; Stone, 2016).

WHAT CAN ECONOMIC DEVELOPERS DO?

What can economic developers do to facilitate successful aging as an engine of innovation, business development, and job creation? Their overarching goal must be to rebrand local communities as age friendly places to live and do business. To achieve this goal, they must:

1. Devise economic development strategies that align with the age-friendly community development principles established by the World Health Organization and AARP.
2. Leverage existing and mobilize new economic development assets and incentives to rebuild existing and create new age-friendly public and private infrastructure.
3. Review existing regulatory policies, procedures, and practices to identify barriers to age friendly community economic development and make necessary adjustments.
4. Establish multi-channel communications/media strategies to increase awareness of age-friendly economic development, policies, procedures, and practices, as well as networking and business opportunities in this space.
5. Create dedicated innovation spaces (i.e., incubators and accelerators) for encore entrepreneurs.
6. Formulate workforce development goals and strategies that align with the labor demands that will define the longevity economy.

ENDNOTES

[1] Venture competitions include the Stanford Center on Longevity Design Challenge, the National Academy Grand Challenge in Healthy Longevity, Silicon Valley Boomer Venture Summit, the Palo Alto Longevity Prize, Aging 2.0 Global Network of Innovators, IAGG Tech Day 2017, and What Next Boomer Summit.

[2] For ongoing reviews and evaluations of technological innovations in aging, see the Aging in Place Technology Watch at https://www.ageinplacetech.com/.

[3] Commenting further on this problem, Miller (2017, p. 5) quotes a noted historian who studies the cultural history of the software industry. He said, "The failure rate in software development is enormous, but it almost never means the code doesn't work…It doesn't solve the problem that actually exists, or it imagines a user completely different from actual users."

[4] The MIT AgeLab (http://agelab.mit.edu/) embraces these two constructs in its approach to developing age-friendly innovations.

REFERENCES CITED

This extensive list of references enables the reader to delve more deeply into the topic of age-related economic development.

AARP Foundation. (2017). AARP Foundation Prize: Rewarding Innovations Serving Low-Income Older Adults. http://www.aarp.org/aarp-foundation/our-work/aarp-foundation-prize.html

Abrahms, S. (2013, April). 3 Generations Under One Roof. *AARP Bulletin*. http://www.aarp.org/home-family/friends-family/info-04-2013/three-generations-household-american-family.html

Adamson, A. (2016, June 11). Canadian Seniors Deserve to Age in the Right Place. HuffPost, http://www.huffingtonpost.ca/arlene-adamson/seniors-age-in-place_b_7555432.html.

Ambrose, A. F., Paul, G., & Hausdorff, J. M. (2013). Risk factors for falls among older adults: a review of the literature. *Maturitas*, 75(1), 51–61. doi:10.1016/j.maturitas.2013.02.009

American Community Survey Office. (2017, January 19). American Community Survey 2011 - 2015 ACS 5 - Year PUMS Files Read Me. https://www2.census.gov/programs-surveys/acs/tech_docs/pums/ACS2011_2015_PUMS_README.pdf

Atchley, C. (2013, March 27). Marketing to Millennials, Boomers, *Food Business News*. http://www.foodbusinessnews.net/articles/news_home/Consumer_Trends/2013/03/Across the_ages.aspx?ID=%7B1CAE250B-F95A-42B9-A66F-41E40605A73E%7D

Atkins, G. L. (2016). Aging in America: An Agenda for an Era of New Possibilities. *Generations, Journal of the American Society on Aging*, 40(4), 6–8.

Atkins, G. L., Tumlinson, A. & Dawson, W. (2016). Financing for Long Term Services and Supports. *Generations, Journal of the American Society on Aging*, 40(4), 38-44.

Barnett, M.A., et. al. (2016). Wellbeing Among Rural Grand Families in Two Multigenerational Household Structures. *Grand Families: The Contemporary Journal of Research, Practice, and Policy*, 3(1), 61-92. http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1037&context=grandfamilies.

BCG. (2011,December). Global Aging: How Companies Can Adapt to the New Reality. The Boston Consulting Group. https://www.bcg.com/documents/file93352.pdf.

Bergal, J. (2016a, June 20). Going Gray: How Aging Baby Boomers Will Challenge Suburbia. The Pew Charitable Trusts. http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/06/20/going-gray-how-aging-baby-boomers-will-challenge-suburbia.

Bergal, J. (2016b, June 20). Can Car-Centric Suburbs Adjust to Aging Baby Boomers? The Pew Charitable Trusts. http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/06/20/can-car-centric-suburbs-adjust-to-aging-baby-boomers.

Bergland, A., Gun-Britt, J., & Laake, K. (2003). Predicators of Falls in the elderly by Location. *Aging Clinical and Experimental Research*, 15 (1) 43-50.

Bishop, M. (2008). *Philanthrocapitalism: How the Rich Can Save the World* (1st U.S. ed.). New York: Bloomsbury Press.

Bitter, L. (2016, March). The Rise of the Multigenerational Household. *HomeCare*. http://www.homecaremag.com/aging-place/march-2016/rise-multigenerational-household

Boyle, M. (2013, September 17). Aging Boomers Stump Marketers Eying $15 Trillion Prize. BloombergTechnology. https://www.bloomberg.com/amp/news/articles/2013-09-17/aging-boomers-befuddle-marketers-eying-15-trillion-prize.

Brooks, C. (2014, April 1). SBA and AARP Host National Encore Entrepreneur Mentor Month. *Business News Daily*. http://www.businessnewsdaily.com/6168-april-program-advises-older-entrepreneurs.html.

Brooks, R. (2017, March 9). The Retirement Crisis Facing African Americans. *Forbes*. https://www.forbes.com/sites/nextavenue/2017/03/09/the-retirement-crisis-facing-african-americans/#2045d3c34f5b

Bulik, B. S. (2010, August 23). Boom in Multigenerational Households has Wide Implications for AD Industry. AdAge.com. http://adage.com/article/news/multigenerational-households-implications-marketers/145506/

Burnette. (2017, April 5). Aging in Place: Home Renovations for Seniors [Blog post]. http://www.huffingtonpost.com/nerdwallet/aging-in-place-home-renov_b_9619846.html

Carrns, A. (2016, August 12). Multigenerational Households: The Benefits, and Perils. *New York Times*. https://www.nytimes.com/2016/08/12/your-money/multigenerational-households-financial-advice.html

Centers for Disease Control and Prevention. (2016, August 19). Costs of Falls Among Older Adults | Home and Recreational Safety. https://www.cdc.gov/homeandrecreationalsafety/falls/fall-cost.html

Chalabi, M. (2013, September 27). Super Old: How Many People Live to 100? *The Guardian*. http://www.theguardian.com/news/datablog/2013/sep/27/super-old-how-many-centenarians.

Chew, J. (2015, October 1). $40 million VC Fund Targets Technology for Seniors. *Fortune*. http://fortune.com/2015/10/01/aarp-jpmorgan-fund-seniors/

Christensen, J. & Willingham, V. (2014). Live to 100: Number of Centenarians has Doubled, *CNN.com*. http://www.cnn.com/2014/06/04/health/centenarian-death/.

Cohn, D., & Passel, J. S. (2016, October 1). Record 60.6M Americans live in multigenerational households . *Pew Research Center*. http://www.pewresearch.org/fact-tank/2016/08/11/a-record-60-6-million-americans-live-in-multigenerational-households/

Collings, A., & Feinberg, M. (2014). *USDA/Rural Housing Service's Section 504 Repair and Rehabilitation Program*. Washington, DC: Housing Assistance Council. http://www.ruralhome.org/storage/documents/rd504_vli_repair.pdf

Cook, Mary (2016, July 14). 5 Design Features That Help Sell Multi-Generational Housing [Blog post]. http://www.huffingtonpost.com/mary-cook/5-design-features-that-he_b_10842284.html.

Easterbrook, G. (2014, October). What happens When We all Live to 100? *The Atlantic*. http://www.theatlantic.com/magazine/archive/2014/10/what-happens-when-we-all-live-to-100/379338/.

Eisenberg, R. (2015, August 12). Why Are There So Few Age-Friendly Cities? *Forbes*. https://www.forbes.com/sites/nextavenue/2015/08/12/why-are-there-so-few-age-friendly-cities/#6bf6900a1b02

Espinoza, R. (2017, June). Immigrants and the Direct Care Workforce. PHI Research Brief. https://phinational.org/sites/default/files/research-report/immigrants_and_the_direct_care_workforce-phi-june_2017.pdf.

Exner, R. (2014, October 29). U.S. life expectancy for 65-year-olds is now to reach age 84.3. *Cleveland.com*. http://www.cleveland.com/datacentral/index.ssf/2014/10/us_life_expectancy_for_65-year.html

Fay, R. (2015, July 8). Time for Aging in Place Tax Credits? *Next Avenue*. http://www.nextavenue.org/is-it-time-for-tax-credits-to-help-people-age-in-place/

Federal Reserve Bank of Atlanta. (2015). The Graying of the American Economy. 2015 Annual Report. https://www.frbatlanta.org/economy-matters/annual-report/2015.aspx.

Freedman, M. (2016-17). The Encore Life: A Generation of Experienced Workers is Ready to Serve. *Generations, Journal of the American Society on Aging*, 40(4), 74-78.

Fry, R., & Passel, J. S. (2014, July 17). Multi-generational Household Population Continues to Rise Post-Recession. *Pew Research Center*. http://www.pewsocialtrends.org/2014/07/17/in-post-recession-era-young-adults-drive-continuing-rise-in-multi-generational-living/

Fukuda, R. (2011). Gerontechnology for a Super-Aged Society. Chapter 6 in F. Kohlbacher and C. Herstatt (eds.). The Silver Market Phenomenon, Springer-Verlag Berlin Heidelberg, pp. 79-89.

Gamboa, S. (2016, August 11). Pew: More Latinos, Asians in Multigenerational Households. *NBC News*. http://www.nbcnews.com/news/latino/pew-more-latinos-asians-multigenerational-households-n628201

References Cited continued:

Gassoumis, Z. D., Lincoln, K. D., & Vega, W. A. (2011). How Low-Income Minorities Get By in Retirement: Poverty Levels and Income Sources. *USC Edward R. Roybal Institute on Aging*. http://roybal.usc.edu/wp-content/uploads/2016/04/Minorities-RetirementIncome.pdf

Genworth Financial (2017). Cost of Care Survey. https://www.genworth.com/about-us/industry-expertise/cost-of-care.html.

Golant, S. M. (2015). *Aging in the right place*. Baltimore: HPP, Health Professions Press.

Gonyea, J.G. & Hudson, R.B. (2015). Emerging Models of Age-Friendly Communities: A Framework for Understanding Inclusion. *Public Policy & Aging Report*, 25, 9-14.

Guzman, S. & Harrell, R. (2015). Increasing Community Livability for People of All Ages. *Public Policy & Aging Report*, 25, 28-29.

Guzman, E., & Vulimiri, M. (2015, August). African American Retirement Insecurity. *Center for Global Policy Solutions*. http://globalpolicysolutions.org/wp-content/uploads/2015/08/African-American-Retirement-Insecurity.pdf

Habitat for Humanity of Lee and Hendry Counties. (2016). Senior Housing. https://www.habitat4humanity.org/index.php/information/senior-housing

Hoagland, G. W. (2016). The economic, fiscal, and financial implications of an aging society. *Generations, Journal of the American Society on Aging*. 40(4), 16-22.

Horvath, M. (2013, August 11). The Silver Tsunami Is Coming, Are We Ready? HUFFPOST IMPACT. http://www.huffingtonpost.com/mark-horvath/the-silver-tsunami-is-com_b_3422603.html.

Hudson, R. B. (2015). Making a Home in the City: The Age-Friendly Community Movement. *Public Policy & Aging Report*, 25, 1-3.

Joint Center for Housing Studies. (2014). *Housing America's Older Adults - Meeting The Needs of An Aging Population*. (M. Fernald, Ed.). Cambridge, MA: Harvard University. http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs-housing_americas_older_adults_2014.pdf

Johnson, Jr., J.H. & Kasarda, J.D. (2011, January). Six Disruptive Demographic Trends: What Census 2010 Will Reveal. Frank Hawkins Kenan Institute of Private Enterprise. https://www.kenan-flagler.unc.edu/~/media/Files/kenaninstitute/UNC_KenanInstitute_2010Census.pdfa

Johnson, Jr. J.H. (2013). The Demographic Case for Immigration Reform. *The Ripon Forum*, 47 (Summer) 18-21.

Johnson, Jr. J.H., & Parnell, A. (2013). Aging in Place in the Carolinas: Demographic Highlights, Programmatic Challenges & Opportunities, Frank Hawkins Kenan Institute of Private Enterprise and The Duke Endowment. http://www.nciom.org/wp-content/uploads/2015/03/Aging-in-Place-White-Paper-2013-v2.pdf.

Johnson, Jr., J.H., & Parnell, A. (2016). The challenges and opportunities of the American demographic shift. *Generations-Journal of the American Society on Aging*, 40(4), 9-15.

Johnson, Jr., J. H., & Appold, S. J. (2017). *U.S. Older Adults: Demographics, Living Arrangements, and Barriers to Aging in Place*. Chapel Hill, NC: Frank H. Kenan Institute of Private Enterprise. http://www.kenaninstitute.unc.edu/wp- content/uploads/2017/06/AgingInPlace_06092017.pdf

Johnson, Jr., J.H. & Lian, H. (2018). Vulnerable African American Seniors: The Challenges of Aging in Place. *Journal of Housing for the Elderly*, forthcoming.

Kohlbacher, F. & Herstatt, C. (eds.). (2011). The Silver Market Phenomenon: Marketing and Innovation in the Aging Society. Springer-Verlag Berlin Heidelberg.

Lawler, K. (2015). Age-friendly communities: Go big or go home. *Public Policy & Aging Report*, 25(1), 30-33.

Levey, N. N. (2017, March 16). Trump budget envisions big cuts for health and human services. *The Los Angeles Times*. http://www.latimes.com/politics/washington/la-na-essential-washington-updates-trump-budget-envisions-big-cuts-for-1489664310-html-story.html

Liepelt, K. (2017, April 17). Senior Living and the City: Hottest Urban Design Trends. *Senior Housing News*. http://seniorhousingnews.com/2017/04/17/senior-living-city-hottest-urban-design-trends/

Lofquist, D. A. (2012). *Multigenerational Households: 2009 - 2011*. Washington, DC: U.S. Census Bureau. https://www.census.gov/prod/2012pubs/acsbr11-03.pdf

March, M.T. (2017, May 23). Multigenerational Households More Likely to Remodel. *Construction Dive* http://www.constructiondive.com/news/multigenerational-households-more-likely-to-remodel/443281/

Marek, K. D., Stetzer, F., Adams, S. J., Popejoy, L. L., & Rantz, M. (2012). Aging in place versus nursing home care: Comparison of costs to medicare and medicaid. *Research in Gerontological Nursing*, 5(2), 123-129.

Melkas, H. (2011). Effective Gerontechnology Use In Elderly Care Work: From Potholes to Innovation Opportunities. Chapter 32 in F. Kohlbacher and C. Herstatt (eds),The Silver Market Phenomenon, Springer-Verlag Heidelberg, pp. 435-449.

Miller, C. C. (2017, August 12). Tech's Damaging Myth of the Loner Genius Nerd. *The New York Times*. https://www.nytimes.com/2017/08/12/upshot/techs-damaging-myth-of-the-loner-genius-nerd.html.

Mullaney, T. (2016). Senior Living Meets Mega-Churches in Innovative Development Model. *Senior Housing News*. http://innovation.seniorhousingnews.com/senior-living-meets-mega-churches-in-innovative-development-model/

National Church Residences. (2017). Excellence that Transforms Lives. http://www.nationalchurchresidences.org/

Nelson, M. K. (2016, February 10). 1.2 Million Senior Living Workers Needed by 2025. *Senior Housing News*. http://seniorhousingnews.com/2016/02/10/1-2-million-senior-living-workers-needed-by-2025/.

Niederhaus, S. G., & Graham, J. L. (2013). *All in the Family: A Practical Guide to Successful Multigenerational Living*. Taylor Trade Publishing.

NYC Department for Aging. (2016). *Aging in Place Guide for Building Owners*. (K. Kubey, Ed.). New York City: NYC Department for the Aging, AIA New York, Age Friendly NYC. http://www.nyc.gov/html/dfta/downloads/pdf/publications/AIPGuide2016.pdf

Nyren, C. (2011). Advertising Agencies: The Most Calcified Part of the Process. Chapter 19 in F. Kohlbacher and C. Herstatt (eds.). The Silver Market Phenomenon. Springer-Verlag Berlin Heidelberg, pp. 249-262.

Ortman, J. M., Velikoff, V.A., & Hogan, H. (2014). An Aging Nation: The Older Population in the United States. Current Population Reports, P25-1140. https://www.census.gov/prod/2014pubs/p25-1140.pdf.

Ortmans, J. (2015, December 7). Incentives for Silver Startups. Policy Dialogue on Entrepreneurship. http://www.kauffman.org/blogs/policy-dialogue/2015/december/incentives-for-silver-startups.

Peek, S. T. M., Luijkx, K. G., Rijnaard, M. D., Nieboer, M. E., van der Voort, C. S., Aarts, S., van Hoof, J., Vrijhoef, H.J., Wouters, E. J. M. (2016). Older Adults' Reasons for Using Technology while Aging in Place. *Gerontology*, 62(2), 226–237.

Peterson, J. B. (2014, July 9). Solopreneurship and the End of Retirement. Encore Entrepreneurs to the Rescue. http://agingandwork.bc.edu/blog/encore-entrepreneurs-to-the-rescue/.

Phillipson, C. (2015). Developing age-Friendly Urban Communities: Critical Issues for Public Policy. *Public Policy & Aging Report*, 25, 4-8.

PR Newswire. (2016, June 7). SBA and AARP Renew "Summer of Encore Mentoring" for Older Entrepreneurs with Nationwide Events. *The Business Journals*. http://www.bizjournals.com/prnewswire/press_releases/2016/06/07/DC18124.

Poo, A., & Whitlatch, C. (2016). Caregiving in America: Supporting families, strengthening the workforce. *Generations-Journal of the American Society on Aging*, 40(4), 87-93.

References Cited continued:

Rhee, N. (2013). *Race and Retirement Insecurity in the United States*. Washington, DC: National Institute on Retirement Security. http://www.nirsonline.org/storage/nirs/documents/Race%20and%20Retirement%20Insecurity/race_and_retirement_insecurity_final.pdf

Stangler, D. (2014). In Search of a Second Act: The Challenges and Advantages of Senior Entrepreneurship. Testimony Before the U.S. Senate Special Committee on Aging & the Senate Committee on Small Business and Entrepreneurship. http://www.kauffman.org/what-we-do/research/2014/02/the-challenges-and-advantages-of-senior-entrepreneurship.

Stone, R. I. (2016). Successful Aging in the Community: The Role of Housing, Services, and Community Integration. *Generations-Journal of the American Society on Aging*, 40(4), 67-73.

Sykes, T. A. (2016, March 16). The Hidden Retirement Crisis. *Time*. http://time.com/money/4254612/retirement-planning-african-americans/

The Centers for Medicare & Medicaid Services. (2015). Application for a 1915 (c) HCBS Waiver. https://www.medicaid.gov/medicaid-chip-program-information/by-topics/waivers/downloads/hcbs-waivers-application.pdf

The Economist, (2010, February 4). The Silver Tsunami. http://www.economist.com/node/15450864.

The Editorial Board. (2016, July 2). Home Care Workers Can Finally Claim Victory, *The New York Times*. http://www.nytimes.com/2016/07/03/opinion/sunday/home-care-workers-can-finally-claim-victory.html?emc=edit_th_20160703&nl=todaysheadlines&nlid=13175790&_r=0

The Editorial Board. (2017, May 27). Trumpcare's Cruelty, Reaffirmed. *The New York Times*. https://www.nytimes.com/2017/05/27/opinion/sunday/trumpcares-cruelty-reaffirmed.html.

Timberlake, J. & Coleman, J. (2016, May 9). How Builders are Catering to Multigenerational Households. *Knowledge@Wharton*. http://knowledge.wharton.upenn.edu/article/one-big-happy-family-builders-catering-multigenerational-households/

Tinetti, M. E., Speechley, M., & Ginter, S. F. (1988). Risk factors for falls among elderly persons living in the community. *The New England Journal of Medicine*, 319(26), 1701-1707.

U.S. Department of Housing and Urban Development [HUD]. (2013a, Fall). Aging in Place: Facilitating Choice and Independence. *Evidence Matters*. https://www.huduser.gov/portal/periodicals/em/fall13/highlight1.html

U.S. Department of Housing and Urban Development [HUD]. (2013b, Fall). Measuring the Costs and Savings of Aging in Place. *Evidence Matters*. https://www.huduser.gov/portal/periodicals/em/fall13/highlight2.html

Vernon, S. (2017, June 29). What Age is Considered "Old" Nowadays? *MoneyWatch*. http://www.cbsnews.com/news/what-age-is-considered-old-nowadays/.

Vinik, D. (2015, February 18). The Alarming Retirement Crisis Facing Minorities in America. *New Republic*. https://newrepublic.com/article/121084/urban-institute-study-minorities-have-built-less-wealth-whites

WHO. (2007). Global Age-Friendly Cities: A Guide http://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf

Xu, J., Murphy, S. L., Kochanek, K. D., & Arias, E. (2016). Mortality in the United States, 2015. *NCHS Data Brief*, (267), 1-8. https://www.cdc.gov/nchs/data/databriefs/db267.pdf

navigating the site
DEVELOPMENT PROCESS

By Beth H. Land, CEcD

There is little that is more frustrating to an economic developer than having high levels of prospect activity and having no buildings or sites to show. Exacerbating the issue is that companies' deadlines to select a site and bring products to market are getting shorter and shorter. To compete for jobs and investment, economic developers are becoming more engaged and taking a leadership role to provide viable real estate options to prospects. This article outlines four case studies of communities that have taken on risk in real estate development projects to encourage growth and investment. While there are certainly political and financial risks to development, the pay-off can bring huge returns for a community.

It is important to note that economic developers should consider the competitive landscape within which they operate and complete a cost/benefit analysis of tackling real estate development projects within their community. The end goal of these projects is to reduce the schedule and financial risks for companies making a location decision. By doing so, the community is in a better position to compete for the project. The first case study takes an in-depth look at how Huntsville, Alabama, positioned itself to win the Toyota-Mazda automotive assembly plant.

HUNTSVILLE MEGA SITE

Huntsville, Alabama

The first example is within the city limits of Huntsville, Alabama. The Huntsville/Madison County Chamber of Commerce and the Tennessee Valley Authority (TVA) partnered together to prepare a Mega Site for a large Original Equipment Manufacturer (OEM). After the site was a finalist for the Volkswagen project in 2008 and lost to Chattanooga, local leadership knew that they lost because the site was not ready. Local stakeholders spent 10 years preparing the site for the next big OEM project. Leaders tackled five issues to prepare the site: property developability, availability, utility infrastructure, transportation, and zoning.

Any time you are dealing with acreage on this scale, it is difficult to assemble land without on-site development impediments (e.g. wetlands, floodplain, easements, etc.). The Huntsville Mega Site was hand-selected because of the limited existing impediments on-site. Due diligence reports (Phase I ESA; wetlands delineation; geotechnical; archaeological and historical investigation; and protected and endangered species) were also completed. If there were any concerns found within the reports,

After a multi-jurisdictional team created Tri-County Industrial Park in the 1970s, Bell Helicopter was one of the anchor tenants to announce within the park. The park is now home to more than 35 industrial tenants.

Beth H. Land, CEcD, is Vice President within the Industrial and Economic Development Division of Site Selection Group, a provider of global location advisory, economic incentive and corporate real estate services. (bland@siteselectiongroup.com)

COMMUNITIES PREPARE FOR SUCCESS IN THE INDUSTRIAL REAL ESTATE MARKET

The industrial real estate market across the United States continues to tighten, making it difficult for communities to attract new jobs and investment. Economic developers are getting creative with site and product development tactics to encourage economic growth. This article looks at how four different communities navigated the site development process, and their success stories. These case studies demonstrate how thoughtful planning and calculated risk in site development resulted in considerable new investment and jobs for the communities. The article also offers key steps and considerations for starting the site development process.

the issues were addressed. Coordinating and paying for due diligence reports on such a large piece of property is an accomplishment itself. Out of 1,252 total acres, studies found that 1,157 acres were developable. This high percentage (92 percent) of developable land allowed for a great deal of flexibility in configuration and master concept planning.

Ensuring availability of the property can also be cumbersome with Mega Sites due to the scale of the project. Developers are often trying to herd several different ownership groups to agree on terms. It is not unheard of for an industrial property to have 10 to 100 different ownership groups, which can quickly complicate a deal. Given the size of the property, limited developability issues, and the fact that there was only one ownership group, the city of Huntsville coordinated an exclusive option in anticipation of a project. By maintaining this option, the city and county ensured that the Huntsville Mega Site was preserved for a high-impact user. In addition, when Toyota-Mazda requested additional adjacent acreage for their project, Huntsville was aggressive in securing the property to meet project needs.

Mega Site users have robust utility requirements, and local stakeholders completed proactive extensions to make sure that infrastructure at the site could meet the capacity needs of prospects. The Huntsville Mega Site needed a sewer line extension, so the city of Huntsville proactively constructed a gravity sewer line to the property in mid-2015. TVA also constructed a 500-kV substation adjacent to the site. Having the sewer line and substation in place eliminated lengthy schedule risks for Toyota-Mazda.

The city also addressed transportation concerns around the property. The city of Huntsville coordinated a Transportation Master Plan and proactively extended Greenbriar Parkway along the western boundary of the

Executives and elected officials gather to celebrate the announcement of the joint Toyota-Mazda automotive assembly plant in Huntsville, Alabama. (from left to right) Greg Canifield, Secretary of Commerce for the State of Alabama; Masamichi Kogai, Mazda Motor Corporation President and Chief Executive Officer; Kay Ivey, Governor of the State of Alabama; Akio Toyoda, Toyota Motor Corporation President; Tommy Battle, Mayor of Huntsville; and Mark Yarborough, Commission Chairman of Limestone County.

An aerial of the Huntsville Mega Site where Toyota-Mazda announced their joint automotive assembly plant with $ 1.6 billion in capital investment and over 4,000 new jobs. The new facility will produce 300,000 vehicles annually of the Mazda crossover and Toyota Corolla.

property. This four-lane limited access highway provided additional access to both I-65 and I-565. The city coordinated funds to make these massive infrastructure projects happen, even before they had a project in hand. In addition, locals worked together with Norfolk Southern and the adjacent property owner to prepare rail access to the property. The team put together a detailed proposed plan for extending rail infrastructure that could be completed within a 12-month timeframe and obtained the necessary rights-of-way for the extension. Obtaining right-of-way easements proactively can give prospects confidence that service can be provided. By having a Letter of Intent in place from the adjacent property owner, the economic development team was well-prepared to show Toyota-Mazda that all the details were in place.

Having the property zoned appropriately also shows a prospect that the community has designated the area for industrial growth. Originally, a portion of the Mega Site was within the unincorporated area of Limestone County. While the property within the city limits was zoned "Planned Industrial," the portion in Limestone County did not have zoning designations. Again, seeing the potential of the property, the city of Huntsville decided to annex the remaining portion of the Mega Site and zoned it "Planned Industrial." Because of their careful planning, the city of Huntsville will see significant gains in their property tax base when Toyota-Mazda invests within their city limits.

The result of Huntsville's careful planning was a mammoth economic development win. In January 2018, Toyota-Mazda announced a joint automotive assembly plant at the site. The announcement will include $1.6 billion of investment and 4,000 new jobs, and will be a catalyst for the regional economy for generations to come. While all communities do not need to develop a Mega Site, the case study is a good example of how community stakeholders had vision and took the appropriate steps to land a win.

THE LAKES AT GREEN VALLEY

Griffin, Georgia

Denzaemon Sasada, Owner, Chairman and CEO of Marukan Vinegar Co., Ltd., waters the newly planted cherry blossom tree at the grand opening for their new facility in Griffin, GA. The new facility was opened in October 2017 after meeting the Sustainability Checklist criteria of The Lakes at Green Valley industrial park.

The Lakes at Green Valley in Griffin, Georgia, is another example of a community that thought outside-the-box in terms of site development. The Lakes at Green Valley was a joint effort between the Griffin-Spalding County Industrial Development Authority (GSCIDA) and the Georgia Institute of Technology. Community leaders initiated the project in 2008 and formed a strategic plan. Based on the natural beauty of the land and the nine lakes located on-site, community developers decided to develop and market The Lakes at Green Valley as an eco-friendly industrial park. The green industrial park's goal is to support greater environmental sustainability at the firm level.

GSCIDA purchased the property, which allowed for direct control over how the property would be developed. The board created a Master Development Plan, incorporating eco-friendly and water conservation initiatives with the nine lakes on-site. The industrial park is made up of 570 acres, with 12 industrial sites. The Master Development Plan estimated 2.5 million square feet of industrial space, as well as a hotel/conference center, retail center, residential area, and 30 acres dedicated to green space. The industrial area offers unique amenities with an outdoorsmen component that includes award winning bass fishing lakes and a scenic hunting lodge available to industrial tenants. GSCIDA also proactively extended two miles of internal road network with all the necessary utility infrastructure.

The industrial park development team, with the help of environmental experts, created a "Sustainability Checklist" with environmental initiatives for companies to incorporate. The buildings in the park must also be built within LEED certified standards. Branding the park as "green" and eco-friendly provided a unique marketing proposition to companies during the site selection process. The park has been a success, attracting foreign direct investment from companies such as Marukan (rice vinegar manufacturer), Otsuka (chemical manufacturer), and Toppan (printing manufacturer). Announcements associated with the park have led to at least $140 million in capital investment and at least 112 new jobs. GSCIDA was wise to recognize that companies are increasingly making sustainability goals an important part of their core values, and positioning Griffin as a home to their environmentally friendly operations.

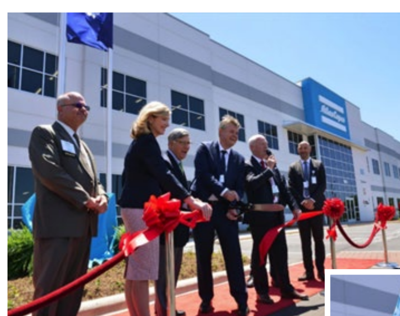
RIVERWALK CAROLINAS

Rock Hill, South Carolina

Riverwalk Carolinas is a "live, work, play" community south of Charlotte along the Catawba River. The property was formerly home to the Celanese Acetate Filament plant, which at its peak employed over 2,500 people. The facility closed in 2005 and needed significant brownfield remediation. The Assured Group purchased the property in 2008 and started working towards developing a master planned community, which included a 350-acre industrial park. A joint effort between the city, county, and the Assured Group provided an opportunity to "in-fill" this strategic location adjacent to I-77 for new investment and growth.

The Assured Group worked with the city and county to utilize a tax increment financing (TIF) district to proactively extend road and utility infrastructure inside the park. SC Textile Mill Tax Credits and New Market Tax Credits were also captured to provide unique cost savings to new tenants within the industrial park. The acreage for the industrial park was strategically located outside of the contaminated area associated with the Celanese plant but was still eligible for SC Textile Mill Tax Credits.

The city and county also planned critical projects to ensure the development's success. Cel River Road, which provided access to the industrial park, was narrow and not suited for industrial tractor-trailer access. The county set aside funds from the Pennies for Progress sales and use tax program to widen Cel River Road. The city of Rock Hill also assisted with the development of a Velodrome (cycling) facility and a BMX Supercross Track. These niche sport facilities were creative anchors to the development that drew interest and visitors from around the world.



Left: Atlas Copco President and CEO Mats Rahmstrom cuts the ribbon at the 2017 grand opening of the facility in Riverwalk Carolinas in Rock Hill, SC, celebrating $25 million in investment and 300 jobs.

Right: The celebration at the May 2017 grand opening of the Atlas Copco facility in Riverwalk Carolinas in Rock Hill, SC. Riverwalk Carolinas is a mixed-use development that incorporates a "live, work, play" mentality.

As the industrial market tightens and strategically located land becomes scarce, projects like Riverwalk Carolinas will be important to complete smart in-fill development. Because of the brownfield remediation, use of creative financing tools, and public support, the development has announced over $460 million and 927 jobs in the industrial park alone. Industrial tenants include McKesson, Physicians Choice Labs, Exel Distribution, Atlas Copco, and most recently NFI.

TRI-COUNTY INDUSTRIAL PARK

Sullivan County, Tennessee

Tri-County Industrial Park is a prime example of the advantages of using a regional approach to economic development. Community stakeholders in eastern Tennessee wanted to work together to create a new industrial park to create new jobs. A multi-jurisdictional group including Sullivan County, city of Johnson City, city of Elizabethton, and Carter County formed to develop a park. By forming this alliance, the group was able to pool resources, leverage regional assets, and utilize grant funding for site development costs.

The park was developed in the early 1970s using the following steps to bring local leaders' vision to life:

- Preliminary Analysis of Available Land;
- Site Selection and Acquisition;
- Developmental Plan;
- Formulation of Restrictions and Controls of Property;
- Installation of Site;
- Improvements (Infrastructure);
- Building Construction;
- Management;
- BRE Programs; and
- Marketing of the Park.

After the site was developed, economic developers were intentional about marketing the property to local existing industries. Because they targeted existing employers,

Tennessee Economic and Community Development Commissioner Bill Hagerty (left) and Chad Nimrick, Bell Helicopter general manager in Piney Flats, talk following a partnership agreement between Bell and Northeast State Community College.

During the early stages of the Toyota-Mazda site search, the project went by the appropriate code name, "Project New World." With highly publicized projects like Foxconn, Amazon's HQ2, and Toyota-Mazda, it is indeed a new world as the protocol for capital investment projects is changing. The publicity is heightening the competition between regions, which means that communities must have vision and take ownership in their future to secure jobs and capital investment.

Bell Helicopter announced an expansion and became one of the anchor tenants of the industrial park.

The percentage of dollars spent to establish the park among the four communities are roughly as follows: Sullivan County (50 percent), city of Johnson City (25 percent), Elizabethton (12.5 percent), and Carter County (12.5 percent). The multi-jurisdictional approach has been extremely successful in bringing companies to the area. Tri-County Industrial Park is now home to over 20 industrial tenants, which employ residents from all over the region.

A "NEW WORLD"

During the early stages of the Toyota-Mazda site search, the project went by the appropriate code name, "Project New World." With highly publicized projects like Foxconn, Amazon's HQ2, and Toyota-Mazda, it is indeed a new world as the protocol for capital investment projects is changing. The publicity is heightening the competition between regions, which means that communities must have vision and take ownership in their future to secure jobs and capital investment. For the communities in these case studies, the pay-off was well worth the risk; however, it is important to remember that development will not always (if ever) go exactly as planned. A key step in the site development process is to continually evaluate the strategic plan and not be afraid to pivot or evolve the project to meet the rapid changes of the marketplace.

HOW CAN YOUR COMMUNITY START THE SITE DEVELOPMENT PROCESS?

Communities should look at the competitive landscape in which they operate and see what are the community assets and needs. If you feel that your community has the right characteristics (e.g. adequate labor pool, interstate access, etc.) to support an industrial park, the following basic steps can help get the development process started.

1. Conduct a site identification study to find a tract developable property with good transportation access. (The fewer property ownership groups and on-site impediments, the better!)

2. Gather utility and community stakeholders to assess whether the property's infrastructure can meet the demands of an industrial park.
3. If the site has potential, target the weaknesses of the property and determine the costs and schedule to mitigate these weaknesses. The short-comings of the site may be environmental contamination, wetlands present on-site, poor road access, uncooperative ownership groups, incompatible zoning, inadequate utility infrastructure, etc.
4. Remember to manage the political process within your community. It will be important to make key stakeholders such as elected officials, state agencies, existing industries, utility providers, the media, property owners, school systems, neighbors, and the public feel included in the process.
5. Once you have a clear vision of the costs to develop the site and you have key stakeholders on-board, start identifying and securing sources of funding to assist with preparing the site.
6. Be cautious about proactively extending infrastructure. Consider whether the costs of extension will be overly burdensome or if infrastructure easements will break up contiguous, developable acreage.
7. Stay connected to the private developers in your community and gauge how your project may impact their efforts. Be sure not to duplicate efforts or "subsidize" the real estate market, which will discourage activity from local brokers and developers.
8. When the site is ready to be marketed to prospects, launch a marketing campaign and present the site information to the appropriate audience (state department of commerce agencies, real estate brokers, existing industries, site consultants, and directly to companies).
9. Continually evaluate the site development strategy to ensure the plan is in line with market demands. Do not be afraid to pivot and evolve the plan based on changes in the marketplace.

If the site has potential, target the weaknesses of the property and determine the costs and schedule to mitigate these weaknesses. The short-comings of the site may be environmental contamination, wetlands present on-site, poor road access, uncooperative ownership groups, incompatible zoning, inadequate utility infrastructure, etc.

towards creating a stronger

RELATIONSHIP BETWEEN THE PUBLIC SECTOR'S LAND-USE PLANNERS AND ECONOMIC DEVELOPMENT PROFESSIONALS

By Todd J. Poole, EDFP, MPA

In the face of strained fiscal conditions, local and county governments are under great pressure to increase private investment and employment in their jurisdictions – whether through recruiting new businesses or assisting existing companies to expand their operations. With most jurisdictions now taking an aggressive approach to securing new private investment, careful coordination of public sector economic development and land planning activities is critical to achieving success.

Public sector economic development professionals and land-use planners are charged with carrying out distinct missions: economic development professionals seek out and assist private businesses and entrepreneurs with making local business investments, retain and create employment opportunities, and navigate government regulations; land-use planners ensure that the community's desires for the types of land uses (e.g., residential, commercial, industrial, open space, etc.) and intensity of these uses are addressed through planning policies and zoning ordinances. While these missions are distinct, they are not mutually exclusive.

Whether through physical separation of offices or different perspectives, economic development professionals and planners have not always acted as partners in pursuing a common vision and, indeed, sometimes work at cross purposes. Yet, the success of each professional's mission ultimately depends upon supporting the other's.

In the face of strained fiscal conditions, local and county governments are under great pressure to increase private investment and employment in their jurisdictions – whether through recruiting new businesses or assisting existing companies to expand their operations. With most jurisdictions now taking an aggressive approach to securing new private investment, careful coordination of public sector economic development and land planning activities is critical to achieving success.

For example, the creation of zoning for light industrial uses (the land planner's role) absent an understanding of the light industrial user's building size and storage area requirements (information which can usually be provided by the economic development professional) will likely lead to less than optimal private investment – depriving the community of critical tax revenues and jobs.

Likewise, the pursuit of a poultry processing plant (the economic developer's role), while representing a large tax ratable and potential for many living wage jobs, may not be a fit where land-use planning policies (the land planner's role) emphasize small scale commercial and residential development. This can lead to a waste of time and resources, political fights, and unnecessary legal challenges.

Getting economic development and land planning professionals rowing in the same direction, notwithstanding their distinct missions, requires

Todd J. Poole, EDFP, MPA, is president, founder and managing principal of 4ward Planning Inc., a land-use economics consulting practice. (tpoole@4wardplanning.com).

He has also served as director of economic planning for EDAW, a landscape architecture and planning firm; deputy executive director/CFO, Camden Redevelopment Agency; and executive director, Lakewood Development Corporation.

ESTABLISHING A SHARED UNDERSTANDING

Establishing cooperative working relationships between a political jurisdiction's land-use planners and economic development professionals can lead to increased private investment (tax ratables) and an improved quality of life for its residents. The opposite is also true: where a cooperative spirit is absent between public sector land-use planners and economic development professionals, private investment activities are likely to be thwarted and the jurisdiction's ability to pay for public services – schools, parks, police and fire departments – will be that more challenging. This article shares the author's perspective on typical challenges that can arise between land planners and economic development professionals and how these challenges can be overcome, based on the author's personal observations and experience as a public sector economic development professional.

Just as travelers headed to an unfamiliar destination would use a reliable map to help ensure the successful journey, economic development and land-use planning professionals should rely on quality market research which identifies near- and long-term projections covering demographic, industry, and real estate trends. Further, and particularly important, both the land-use planner and economic development professional should jointly review the market research, discuss its findings, and share their perspectives on how their organizations can best leverage the findings.

shared understanding by these professionals and intentional steps fostered by the elected officials and appointed executives having jurisdiction over them.

SHARED UNDERSTANDING

During more than 25 years as both a public sector economic development professional and private sector land-use economist, I have come to recognize principles and axioms that economic development and land planning professionals should embrace to help ensure success. Here are those I consider most important:

Good Market Analysis Is Critical to All Parties – Just as travelers headed to an unfamiliar destination would use a reliable map to help ensure the successful journey, economic development and land-use planning professionals should rely on quality market research which identifies near- and long-term projections covering demographic, industry, and real estate trends. Further, and particularly important, both the land-use planner and economic development professional should jointly review the market research, discuss its findings, and share their perspectives on how their organizations can best leverage the findings.

Unfortunately, there seem to be far too few municipal and county governments that commission periodic market studies (and incorporating basic demographic and business data within a comprehensive plan is not the equivalent of a sound market study), as there are few jurisdictions which require them.

Land-use planners need sound market analyses to competently inform planning and zoning board members on current real estate supply and demand trends – for example, there may be too little of a certain type of zoning (light industrial) versus too much of another type of zoning (highway commercial). Likewise, economic development professionals need quality market analyses to help them focus their time and financial resources on industries that are likely to grow, as opposed to those which may be in a downward spiral.

Many economic development organizations do in-house market research. Successfully utilizing outside market analysis starts with a mutually agreed upon procurement process. Specifically, both professionals should identify the most expeditious manner for soliciting and securing a top quality market analysis consulting firm. This may be the quasi-public economic development agency (if it is not an agency of municipal or county government) taking the lead and seeking financial and/or in-kind contribution from the municipal or county planning department. The RFP developed for these services should also include input from both professionals, as there will be certain elements of the analysis more germane to one professional than the other.

Once the RFP is developed and publicized, a joint review committee consisting of representatives from each professional's office should be convened to review proposals, interview a short list of candidate firms, and select the preferred firm. In this way, too, the selected consulting firm recognizes that it is serving the interests of two entities which have distinct missions.

The final market analysis study should be a document freely shared with the stakeholders of both professionals (e.g., economic development agency's board of directors and the land-use planner's planning and zoning board members), as well as with the public. The rationale being that the more people who have a common point of reference (the trends, findings, and recommendations in the market study), the more likely they will reach consensus around policies and strategic investments.

Regional and National Trends Influence Local Markets – Local economies, ultimately, reflect what's happening at a macro level. If certain technological trends are taking hold regionally and nationally, it will not be long before these trends influence what's happening locally. The current disruption to big box retailers is a case in point. The shuttering of thousands of retail locations over the past five years and projected to continue through 2020 is a result of a number of trends. These include changing consumer preferences among millennials, who don't spend on material items the same way their parents did at the same age, and baby boomers who are now in or nearing retirement and their retail spending is drastically reduced from their prime working age years. Further, the rise of e-commerce and its low priced items delivered within 24 to 48 hours continues to wreak havoc with the traditional brick and mortar big box retail store model. From the perspective of large retailers, these national and regional trends continue to influence their local investment trends – specifically, the reduced footprint of physical stores.

Local economies, ultimately, reflect what's happening at a macro level. If certain technological trends are taking hold regionally and nationally, it will not be long before these trends influence what's happening locally.

Land-use planners typically are operating on an almost exclusive local area view, when it comes to developing recommendations for zoning regulations and land-use policies – after all, their job is not to follow market trends so much as it is to ensure that they accommodate the land-use desires of municipal officials. However, the economic development professional is more attuned to what is happening regionally and nationally and will likely be on top of industry trends likely to influence local land-use policies in the near-term. The key is for both professionals to speak with each other about their assumptions, so that they may arrive at consensus views of trends influencing local land-uses and business investment opportunities.

A good practice for both types of professionals is to participate annually in state and national planning and economic development conferences, where thought leaders, expert consultants, and local practitioners share valuable insights on the latest trends. In addition to attending conferences, land-use planners and economic development professionals should diligently review news articles pertaining to national and regional economic events – announced store closings, changes in consumer trends, unemployment trends, interest rate movements, and more.

A good practice for both types of professionals is to participate annually in state and national planning and economic development conferences, where thought leaders, expert consultants, and local practitioners share valuable insights on the latest trends. In addition to attending conferences, land-use planners and economic development professionals should diligently review news articles pertaining to national and regional economic events – announced store closings, changes in consumer trends, unemployment trends, interest rate movements, and more.

The Opinions and Recommendations of Land-Use Planners and Economic Development Professionals Are Just As Valuable As Those of Developers – Yes, there are quite a number of spectacularly wealthy (and just plain ordinary wealthy) people in the world who got that way through smart real estate development deals. It also stands to reason that most, if not all, of these individuals particularly understand finance and market trends. However, what seems to get overlooked far too often is that successful developers can be the exception and not the rule, and not all developers are cut from the same cloth.

One need only observe where retail, office, and residential overbuilding has occurred to understand that for every successful developer, there are likely a dozen or more who crashed and burned. Yet, there are still too many public decisions concerning local land-use policy and/or economic development incentives that happen as a result of overreliance on the beliefs and promises of real estate developers and builders. Indeed, according to a recent article in the Wall Street Journal (*The Next Housing Crisis: A Historic Shortage of New Homes*, March 18, 2018), membership in the National Association of Homebuilders peaked at 240,000 in 2007 (just before the onset of the Great Recession) and since 2012 has stood at 140,000. This is a classic example of what happens when real estate investment is not based on sound market fundamentals but simply based on what happened in the last year.

Land-use planners and economic development professionals (and, the elected and appointed officials to whom they report) should recognize that their opinions and recommendations are not any less valuable than those of developers. Indeed, their input can often be considered more valuable, given the responsibilities these public sector officials have to furthering the public good.

Further, the economic development professional, who usually serves as an advocate for private developers and lobbies on their behalf for favorable financial and regulatory treatment, must make it known to prospective developers and business interests that they will only support deals which are in keeping with local public policies and land-use regulations. The economic development professional (or land-use planner) should advocate for amendments to such policies and regulations, only if they benefit the public's social and economic well being.

There Is a Cost to Doing Nothing – As taxpayers become ever more sensitive to public expenditures and the prospect of tax increases, public sector officials have exercised a greater degree of caution when considering whether and how much to participate in assisting redevelopment efforts – whether through infrastructure investments, land assemblage or the provision of tax incentives. While it is understandable and reasonable that public officials have a fiduciary responsibility to carefully manage resources made possible by taxpayers, there can be instances in which indecision or decisions not to facilitate public sector activities in support of redevelopment activities become detrimental to the public good.

Perhaps the most vivid example of the cost of doing nothing pertains to the urban renewal policies of the mid 1960s which led to government sanctioned demolition of dilapidated housing within cities across the country. The urban renewal program is best remembered for the extreme social and economic disruption it caused, particularly within communities of color. Less recognized but equally damaging to the communities was the public sector indecision about what should happen next in these communities, now filled with vacant lots.

Community activists, social scientists, and non-profit community development entities offered up ideas for revitalizing the targeted neighborhoods. However, public officials (principally, elected leaders) were reticent or outright unwilling to underwrite the costs needed to set the table for private investment (e.g., infrastructure improvements, commitments for tax incentives, regulatory relief, etc.).

The "cost" of doing nothing, in the aftermath of the urban renewal demolitions was to depress surrounding neighborhood property values, create an environment ripe for criminal activity, and signal prospective developers and businesses that these urban renewal areas were not quite ready to be renewed. Consequently, land-use planning and economic development professionals must always be cognizant of the costs associated with inaction and be certain to communicate these costs to all stakeholders.

While it is relatively easy to state that there is a cost to inaction, it is another matter to demonstrate it credibly. However, the method for demonstrating opportunity costs (or, what one forsakes when not pursuing a particular course of action) need not be overly complex. Indeed, it could be as simple as imagining a project going forward and estimating the net benefits associated with all of the upfront costs to make it happen and the present value of tax revenues (property, sales and wage, if applicable) and increased real estate values of nearby properties.

A more complex method, which is recommended only for those with experience in such methods, is employing decision tree analysis. This is an algorithm used to estimate the probability of achieving a particular project outcome (say, a new commercial development project and its net value to the community), given the probabilities associated with all of the underlying steps (legal, financial, political, etc.). Decision tree modeling, while more widely utilized in fields of business and scientific research, can help economic development professionals and land-use planners understand the likely costs and payoffs of pursuing a given policy or investment and, in turn, better equip them to persuade their stakeholders on choosing one course of action over another.

INTENTIONAL STEPS BY ELECTED OFFICIALS AND APPOINTED EXECUTIVES

Those at the top of an organization can't be idle spectators if the mission is to be achieved. Yes, it's important to hire smart and responsible professionals to carry out the day to day activities and then stay out of their way. But that does not relieve executives and elected officials from making sure that a cooperative team environment exists. It can be easy for an environment of "them" versus "us" to take hold, if planners and economic development professionals aren't encouraged by their superiors to engage in a collaborative framework. But how do the people at the top come to foster this collaboration in the first place?

Given that public sector and quasi-public executives who make a point of directing their staffs to work collaboratively with their counterparts can be more the exception than the rule, it will likely fall to the economic development professionals and land-use planners to recognize that their greater interests are best served by urging their respective superiors to foster such cooperation. Justifications that can be used, and should also resonate with executive leaders, are:

- The sharing of resources (e.g., why not share the cost of the market study rather than bear the cost alone?),
- The achievement of goals and objectives in a shorter time span (if we're all rowing in the same direction, we should get there sooner), and
- The demonstration of a united front to interested private sector developers and businesses (investment is more likely to flow to communities where a spirit of cooperation is evident).

Finally, economic development professionals and land-use planners need to advocate for one joint annual retreat, consisting of all board members, executive leadership and staff, to share organizational insights, perceptions, and concerns (as these retreats would need to take place without public participation, no formal actions would be taken). The main benefit of such a gathering would be greater understanding of how a shared municipal or county vision – e.g., high quality of life, plentiful local employment opportunities, and a welcoming environment for business investment – is a function of coordinated actions carried out by economic development professionals and land-use planners.