



Through the **Partners in Municipal Research (PMR)** program, the **Center for Municipal Research & Innovation** serves as a link between Florida's public policy researchers and municipal governments, bridging the gap between academics and public policy makers and administrators. The PMR program currently has 42 participating researchers at 13 research institutes in the southeast region. One component of the Partners in Municipal Research program is a regular research column in the League's *Quality Cities* magazine from our research institute partners. The following is a compilation of those articles published in 2018.

Begun in 2011, the Florida League of Cities' Center for Municipal Research & Innovation is the primary source for local government research at the League. Through the center, Florida's city officials have access to municipal resources and data as well as a number of programs and publications, including two annual research symposiums, a statewide research forum for our research partners, regular research articles in the League's *Quality Cities* magazine and a quarterly e-newsletter.

The cornerstone of the center's research is the annual CityStats survey covering municipal operations, budgets, policies and services. The CityStats survey forms the basis for the online Find A Peer City database tool and the annual *State of the Cities* report. Contact Research Analyst Liane Giroux with the center for more information.



PLANNING

Improving Population Estimates

A population estimation for every land parcel in Florida

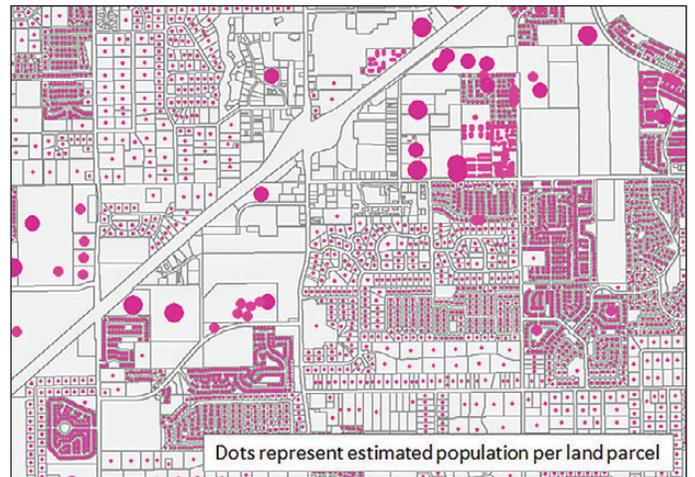
by **Georgianna Strode**
Florida State University

Population estimates are important for formulating policies on urban planning, crime, socioeconomic welfare, health care, emergency services and assessing risks of exposure to environmental hazards and natural disasters.

Data from the U.S. Census Bureau are most commonly used, as they are widely available and relatively inexpensive. But there are drawbacks to using census data: Census boundaries are arbitrary and bear little relation to the actual landscape. Population is assumed to be spread evenly across an area – even in lakes and highways. And census records can mask data patterns.

However, **dasymetric** (pronounced DAY-sym-met-ric) population estimation methods combine census data with other types of locally maintained data, such as night-time lights, land cover, address points, electricity hookups and property tax information, resulting in more realistic population patterns. Property appraiser information is a respected component of dasymetric mapping because of its high precision and detailed information.

The property appraiser database contains information useful to predicting residency, such as land use codes and number of residences on a property. The following image shows an example of the results: The pink dots represent an estimated population



for each parcel. Larger dots could represent apartments, nursing homes or other group-living areas, while smaller dots might reflect individual houses. Parcels with no dots have a population estimate of zero.

Although there are several methods for determining population counts, they are not equal. However, for many

areas of public policy, accurate population counts are vital. For example, with a more targeted knowledge of the numbers and locations of persons at risk, first responders can better prepare for disasters.

One method for determining population counts uses interpolation to estimate population based on the proportion of the risk area to the full census area. In other words, if an area at risk covers 40 percent of the census area, then the population at risk is assumed to be 40 percent of the census totals.

While this method is commonly used, studies suggest it often results in a population undercount that can leave public officials unprepared. The interpolation method assumes people are evenly dispersed across geographic areas when, in reality, people tend to live in clusters.

The parcel-based dasymetric method is another way to determine population counts. It assigns population estimates to the finest level of resolution – the land parcel. In short, interpolation divides a large area, while parcel-based estimation reflects a group of smaller areas (parcels).

The example below demonstrates a fictitious area of risk and the population affected calculated using two methods: First, by splitting census boundaries; and second, by parcel-based dasymetric methods. The census splitting method undercounted

the at-risk population by 3,688 people, or 29 percent. The dasymetric method calculated 5,267 people.

The explanation is that census data assume an even distribution of people across area, even across uninhabitable areas, when in reality people tend to live in groups and neighborhoods. Parcel-based mapping gives a more precise and realistic view of where people live and provides more accurate numbers to officials working for the public good.

THE FREAC'S POPULATION ESTIMATES

The **Florida Resources and Environmental Analysis Center (FREAC)** at Florida State University has calculated population estimates for each of Florida's 9 million land parcels. This method is relatively new and Florida is the first state in the United States to have this information statewide.

Could your city benefit from this high-resolution population data? Potential uses could be future land planning, water usage projections, infrastructure expansion, emergency response and more. Contact the FREAC today with questions or ideas for your city.

Georgianna Strode is an application developer at the Florida Resources and Environmental Analysis Center at the Florida State University. Contact her at gstrode@fsu.edu or (850) 644-5886. 



CENSUS BLOCK GROUP DATA

Population is assumed to be spread evenly across an area. Calculating the number of people at risk in an event is done through the ratio of the size of the risk area and the size of the census area (e.g. 20% of the land area and area assumes 20% of population).

Population at Risk in this example: 3,688

DASYMETRIC PARCEL-BASED ESTIMATIONS

Population is estimated for each land property parcel. Calculating the number of people at risk in an event is done by summing the estimates for all parcels within the area at risk.

Population at Risk in this example: 5,267

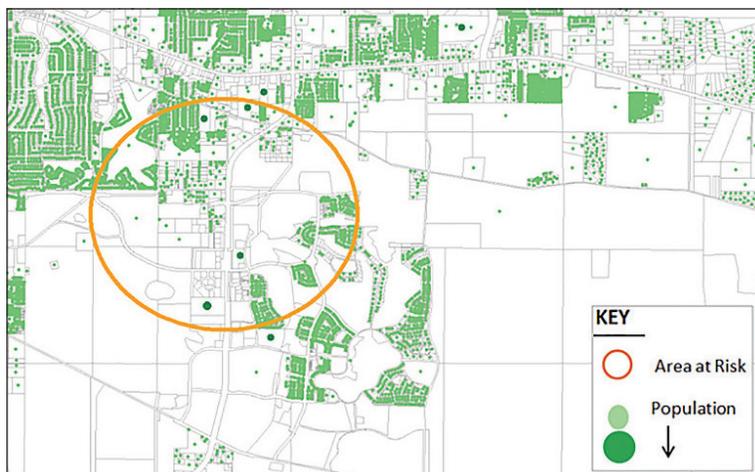




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TRENDS

State of the Cities

Florida's municipalities: Diverse in makeup, but with common goals

What does a city in Florida look like?

Is it a beachfront metropolis? A community of rolling fields and farms? A weathered and cozy fishing village? Is it a high-tech hub of research and innovation? A forested gem of nature trails and wildlife? A buzzing center of world travelers and students? Is it a downtown of brick streets lined with local shops and restaurants?

Cities in Florida are all these things and more. But as diverse in atmosphere, size and geography as they are, Florida's municipalities share commonalities, particularly the desire of their municipal officials to provide residents with the services most important to them and to be the best possible stewards of city resources while providing those services.

**by Liane M. Giroux
Florida League of Cities**

Since 1990, 26 new cities have been incorporated in Florida, which increases the state's municipal population to 50.6 percent of the statewide total. In the past five years, the municipal population has increased 6 percent, which outpaced statewide population growth of 4 percent. Florida is, however, a state of smaller cities. The median municipal population is 5,755, and 67 percent of Florida cities have populations of less than 15,000.

The number of municipal employees needed to deliver services in each city is based not only on the city's population but also on the number and level of services provided. Staffing levels in Florida cities vary greatly and range from less than

10 employees up to more than 1,000 employees. In 2017, the statewide average was one municipal employee for every 106 residents.

Municipal service levels are far-reaching and vary depending on the needs and desires of residents. Municipalities typically provide services directly by city employees or by contracting with another government entity such as a county.

Many cities place a high priority on quality-of-life services such as parks and recreation. More than 90 percent of Florida municipalities provide city parks. Basic services such as garbage collection and some level of water service are commonly provided by cities as well. While two-thirds of cities provide water service, 42 percent additionally provide wastewater and storm-water services.

Police, fire and emergency medical services are consistently among the top city services provided. Well over four-fifths of Florida municipalities provide police and fire services for their citizens.

Municipalities are making strides to improve communication outreach to citizens through new technologies to keep their residents informed of general governance issues and during emergencies. In addition to a website, more than 70 percent utilize at least one social media platform, with the most frequently used being Facebook and Twitter.

Improving economic conditions for their cities and citizens is a multifaceted effort for municipal officials and staff. Economic development incentives to spur business growth can include expedited permitting procedures, favorable development regulations and tax breaks. In Florida cities with populations greater than 60,000, the most widely used incentives are community redevelopment agencies, expedited permitting and job incentives. Additionally, a vast majority of cities seek additional funding for local projects and initiatives through grants from federal, state and nonprofit sources.

The largest portion of municipal revenue comes from service taxes, permitting fees, franchise and impact fees, interest earnings, and state and federal grant funding. While property taxes are another key revenue stream for most cities, in FY 2016-17, 85 percent of cities maintained or reduced their millage rates. The average percentage increase in municipal millage rates statewide from FY 2012-13 to FY 2016-17 was an extremely modest 0.59 percent. The average statewide millage rate during the same period was 4.6207.

Florida's cities continue to meet the needs of their residents by tailoring their services and revenue sources to fit their municipalities, while still striving for the same goal: to do the best and most efficient job of providing for their communities.

To read the *2017 State of the Cities* report, visit floridaleagueofcities.com.

Liane M. Giroux, CAE, is research analyst for the Florida League of Cities. 

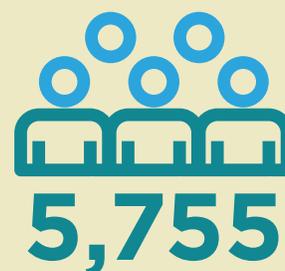


Need to know how many cities in your population range have the same form of government as your city?

Wonder how many cities in your region contract out their fire services and to what entity?

Searching for the average surcharge imposed by cities that provide water service to neighboring jurisdictions?

Trying to draft an ethics ordinance and wondering which other cities have already done so?



median population of cities in Florida

The Center for Municipal Research & Innovation can help.

Through the CMRI's annual **CityStats** survey, answers to these questions and more can be provided to our member cities' elected officials and staff. But only if you participate! The 2018 survey will launch in April via email to all Florida cities.

It's important that the CMRI receives the largest possible percentage of responses from the League's members. The data is most relevant with a 100 percent response rate because it then is a true reflection of municipal activities for the year, and it helps determine trends over multiple years.

How is the data used?

- » To produce the annual *State of the Cities* report
- » To support the League's legislative advocacy efforts
- » To guide FLC University's training and education opportunities
- » To provide answers for dozens of member city data inquiries per year

Much of the data collected through the survey is not available anywhere else. League members can use the results for a better understanding of issues occurring in their communities and for determining how national, statewide and regional trends and events are impacting Florida cities.

The CityStats survey is the cornerstone of the center's research and data analysis. In 2017, surveys were collected from 314 of Florida's 412 cities, for a 76 percent response rate. Watch your city's email for this year's survey.

Contact Liane Giroux at lgiroux@flcities.com for more information.



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By the Numbers – MiniSurvey Series

Through its **MiniSurvey Series**, several times a year the **Center for Municipal Research & Innovation** gathers targeted data on a narrow topic. MiniSurveys consist of five to 10 brief questions that are sent electronically to all 412 Florida cities. Response rates vary and are noted on the survey conclusion report.

MUNICIPAL GRANTS PROCEDURES MINISURVEY RESULTS

84 percent of cities have applied for a grant in the last 12 months.

More than two-thirds of those cities (**69 percent**) have applied for a grant in the last six months.

Only **2.5 percent of cities** have never applied for a grant.

80 percent of cities that have applied for a grant have received one in the last 12 months.

Only **1 percent of cities** that have applied for a grant have never received one.

For **64 percent of cities**, at least one of their most recently received grants was federally funded.

Nearly half of state-funded grants (**48 percent**) were received from the Florida Department of Environmental Protection and more than a third (**34 percent**) were received from the Florida Department of Transportation.



38 percent of cities that have received grant funding received a grant from a non-federal/state government agency or a nonprofit agency. Nearly half (**49 percent**) of those grants were for infrastructure projects.

The minisurvey was conducted electronically from August 1-25, 2017, with a response rate of 28 percent or 116 cities.

DIGITAL TECHNOLOGIES MUNISURVEY RESULTS

40 percent of cities utilize a text notification system to communicate with citizens.

Of those cities that have a text notification system, the most common notifications sent are emergency notifications (**92 percent**), event notifications (**59 percent**) and meeting notices (**39 percent**).

20 percent of cities utilize a mobile app to communicate with citizens.

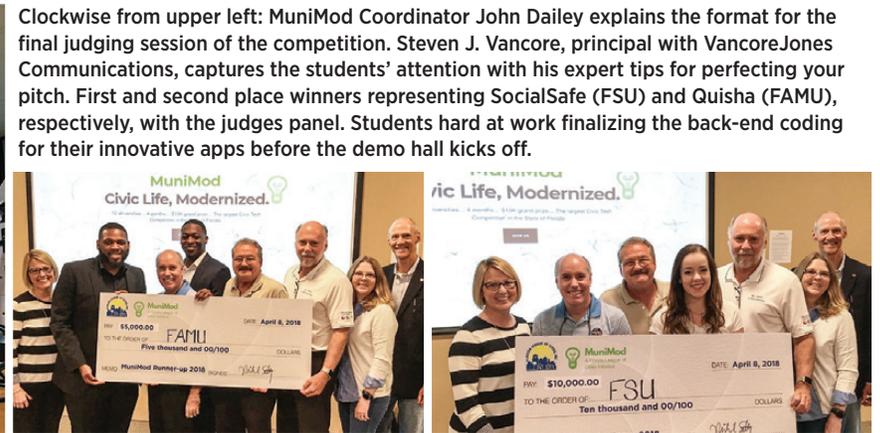
Of those cities that have a mobile app, the most common notifications sent are emergency notifications (**80 percent**), event notifications (**67 percent**) and meeting notices (**40 percent**).

71 percent of cities utilize at least one social media platform to communicate with citizens.

Of those cities that have a social media platform, the most common notifications sent are event notifications (**87 percent**), emergency notifications (**83 percent**) and meeting notices (**63 percent**).

The minisurvey was conducted electronically from October 25 - November 12, 2017, with a response rate of 36 percent or 147 cities.

Other minisurveys include Hurricane Debris Removal, Municipal Mobile App Usage, Tourism & Its Effects on Municipal Government, Municipal Government Utilization of Business Enterprise Programs, Honorary Transportation Facility Designations, Municipal Elections Procedures and Underground Electric Utilities. Visit floridaleagueofcities.com/research/data-statistics/cmri-reports to view the results and for more information. We encourage you to complete and return the minisurveys when received. **QC**



Clockwise from upper left: MuniMod Coordinator John Dailey explains the format for the final judging session of the competition. Steven J. Vancore, principal with VancoreJones Communications, captures the students' attention with his expert tips for perfecting your pitch. First and second place winners representing SocialSafe (FSU) and Quisha (FAMU), respectively, with the judges panel. Students hard at work finalizing the back-end coding for their innovative apps before the demo hall kicks off.

PHOTOGRAPHY BY HOLLY MCPHAIL, FLORIDA LEAGUE OF CITIES

CIVIC TECHNOLOGY

MuniMod 4.0

Students vie for best solutions to cities' challenges

by Jenna Tala
Florida League of Cities

The **MuniMod** program has grown in popularity, and this year brought together teams from 11 Florida universities to compete in the state's largest civic-tech competition. Three years ago, the Florida League of Cities launched MuniMod, which challenges college students to think critically about municipal functions and create cutting-edge technology and service delivery solutions to address common issues.

Students, selected by their individual educational institutions, participated in webinars, conference calls and one-on-one meetings with civic leaders to gain an understanding of municipal government and learn what problems challenge Florida cities. Then, applying this knowledge, the students had, on average, 13 weeks to develop innovative solutions to those problems.

THE EXPERIENCE

All of the students' work culminated in a 24-hour "Experience" held at FLC University in Orlando on April 7-8. This final stretch began at noon on Saturday as teams claimed their stations and began building their final prototypes in hopes of winning the \$10,000 grand prize.

The League provided advisers and mentors on-site as the students progressed through the day and into the night with lightning talks and high-energy activities. The competitors represented diverse backgrounds and disciplines including engineering, computer science, public administration, business economics and political science.

League President Gil Ziffer, a Tallahassee commissioner, and First Vice President Leo Longworth, Bartow vice mayor, welcomed competitors and reminded them that their innovations have the ability to change the way government operates for the next 20 years.

The first speaker, **Steven J. Vancore, principal at VancoreJones Communications,** helped teams finalize their presentations with concrete how-to advice for delivery and pivoting, a technique to use during a question-and-answer session. Next, **Matt Broffman, director of innovation with the City of Orlando,** inspired the competitors to see their products through the eyes of a municipal administrator and to not just explain how it works but to describe the benefits to the community.

At 9:00 a.m. Sunday, the six judges arrived at the MuniMod "Demo Hall" to casually explore all 11 innovations. The judging panel included Ziffer and the following:

» **Toni Bleissweiss, president of the Florida Local Government Information Systems Association and digital strategist for Lee County Clerk of Court**

» **Gary Bruhn, president of the Florida League of Mayors and mayor of Windermere**

» **Gwen Keough-Johns, president of the Florida Association of City Clerks and city clerk of Mount Dora**

» **Mike Lester, technology transfer partnership manager at NASA**

» **Jim Hanson, president of the Florida City and County Management Association and town manager of Orange Park**

Competition was fierce. Ultimately five of the 11 teams passed to the second round: Florida A&M University, Florida Gulf Coast University, Florida International University, Florida State University and the University of Miami.

Each of the remaining teams then had five minutes to present its new technology and five minutes to answer any questions posed by the judging panel. The teams were evaluated on the following five categories: product idea, functionality, scalability, potential impact and presentation.

The judges were thrilled with the new solutions and impressed with the dedication of the student teams. At noon, once the judging was completed, the League hosted the closing ceremonies and announced the winner of the MuniMod 4.0 competition.

THE WINNERS

After intense deliberation by the judging panel, Ziffer presented **Florida State University** with the \$10,000 grand prize for **SocialSafe**. SocialSafe is a GPS-enabled safety app designed to reduce intimate partner violence by empowering potential victims to reach out to friends and family in a safe, discreet way before a situation escalates. However, when it does, the app has built-in mechanisms to alert law enforcement, provide critical data via text message to assist in locating a victim, and produce audio and visual evidence of an incident.

The second-place team from **Florida A&M University** received \$5,000. The team developed a solution to managing and marketing municipally owned event venues such as park pavilions and splash pads to community centers and amphitheaters. The team's solution, **Quisha**, which is a blend of the entrepreneurs' names, utilizes 360-degree video, mobile-friendly forms and process automation to make the resident's experience more customer-focused and efficient.

AN ENORMOUS SUCCESS

Finding its start as a regional pilot program, MuniMod is now a statewide success. All involved are proud of these student teams and cannot wait to see what next year's participants will create.

By starting with education and using it as a base to identify opportunities for problem solving, MuniMod is bridging the gap between passionate entrepreneurs and the reality of city governments' most current challenges. These students are using technology to help cities throughout Florida and potentially nationwide.

Likewise, the League is continuing its tradition of engaging citizens of Florida, specifically young adults, in civic education.

Jenna Tala is director of communications and education for the Florida League of Cities. 



MuniMod
Civic Life, Modernized.

THE TEAMS AND THEIR PRODUCTS

FIRST PLACE WINNER

Florida State University: SocialSafe is a GPS-enabled application designed to reduce intimate partner violence by allowing users to send discreet alerts to friends and family before a situation escalates. It includes built-in mechanisms to provide first responders key information if needed.

SECOND PLACE WINNER

Florida A&M University: Quisha is an online service designed to improve the utilization and booking of government venues. Using 360-degree videography and process automation, it improves the user experience and eliminates excessive paperwork.

Embry-Riddle Aeronautical University: Florida's Expedited Relief Network (FERN) is an application connecting communities in need with resources after a storm. It uses an advanced algorithm to predict what resources a community will need based on a unique set of indicators.

Florida Atlantic University: Augmented Reality Utilities Application (ARUA) is a mobile-friendly application designed to locate underground pipes and wires with ease, which allows municipal governments to locate breaks and disruptions quickly and effectively.

Florida Gulf Coast University: Hurri-CAN is a mobile application designed to improve emergency management communication. Working with the Federal Emergency Management Agency and a GPS-enabled platform, it stores the latest information on shelters, evacuation routes and updates on mobile devices that is accessible even when Wi-Fi isn't.

Florida International University: Fire 360 is a training program designed for improving firefighter communication and procedures. It utilizes augmented reality to create real scenarios in lieu of testing based on pen and paper or live simulations that often result in injuries.

University of Central Florida: COMMUNITY is a mobile-responsive, fully customizable application designed to enhance communications between residents and their local officials.

University of Florida: Optimum Recycling is a subscription-based recycling service for high-density housing designed to assist local governments in reaching target recycling mandates.

University of Miami: Event Guard is a GPS-enabled application designed to enhance public safety at live events such as parades or concerts. In the event of an emergency, the app provides clear channels for law enforcement communication directly to the user.

University of South Florida: Shltr-Aid is an application designed to connect resources to those experiencing or at risk of homelessness.

University of West Florida: CityAQUA is an application providing information in real time on water quality reports for every major water body including springs, lakes, rivers and beaches.



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RESILIENCE

Coastal Adaptation Planning

Understanding stakeholder priorities for improvements and timetables

by C.J. Reynolds and Frank Muller Karger
University of South Florida

An innovative research collaboration between universities and local governments is increasing understanding of how people think about coastal adaptation and is contributing ideas for improving stakeholder engagement.

METROPOLE, the international adaptation research project led by the **University of South Florida College of Marine Science**, brought together urban planning and municipal finance experts, social scientists, coastal engineers and environmental scientists with staff and elected officials in **Broward County; Santos, Brazil; and Selsey, United Kingdom**. Stakeholders and staff in the cities of **Hollywood, Dania Beach and Fort Lauderdale** also participated.

The researchers conducted a vulnerability assessment and cost analysis in each city. The assessment estimated potential damages to property and costs for different storm categories and sea level rise scenarios using **COAST** (COastal Adaptation to Sea-level rise Tool) software. The project also identified potential

barriers to adaptation planning. The team interviewed decision-makers to assess institutional capacity to adapt. The team also assessed values and preferences for options that are feasible as well as public finance mechanisms. Workshops held in each community addressed vulnerability assessments and impacts with elected officials, staff and others.

WHAT TO DO AND WHEN

To assess adaptation options and timeframes, researchers surveyed participants before and after the workshops. Stakeholders across the three countries shared surprisingly similar perspectives about which improvements were preferred and when they should be implemented.

Data sets were small, but this step was significant because the communities were quite different socio-economically and culturally, with different weather/climate risks, infrastructure and local governance structures.



People walking along the seawall in the City of Selsey, UK. (Right) One of the groups discussing seawall improvements.



A consistent “top five” list of adaptation options emerged, with slight differences in rank order and percentage ratings. Most participants thought that local governments should prioritize policies that would reduce new risks and implement nature-based adaptation projects *before* implementing major engineering projects. The top options included growth management and re-development policies and nature-based or green infrastructure improvements.

Other studies show similar findings. A multi-year opinion polling study of residents in nine counties surrounding San Francisco Bay found that multi-use preservation and restoration projects appealed to diverse audiences. The **Save the Bay** study led to the passage of a referendum for a \$12 annual parcel tax that generates \$25 million per year for restoration and adaptation projects.

OPPORTUNITIES FOR LOCAL GOVERNMENTS

Local governments that participated in the METROPOLE project used the vulnerability assessment process and stakeholder workshops to increase their community’s understanding of future risks and potential damages to private property and infrastructure in specific neighborhoods. The governments also used the information to enhance plans and catalyze new projects.

The mayor of Santos established a **Municipal Commission for Adaptation to Climate Change** and tasked it with developing an integrated adaptation plan in one year. When elected officials in Selsey realized the severity of future finance issues, they held a sea defence conference with other small towns in the region to identify potential collaborative actions to address national infrastructure funding disparities. The results from the Florida

workshops were presented to the **Broward County Climate Change Task Force** and integrated into plans.

The study offers insights for Florida local governments to integrate concepts into resiliency planning and stakeholder engagement. For example, changing policies and codes to provide incentives for low-impact development to reduce flooding and runoff, as well as preserving or creating natural open spaces, should be well-received. Post-disaster redevelopment plans could be updated to include restrictions on development in highly vulnerable areas.

Suggestions for engagement include facilitating discussions about the co-benefits from combined resiliency and restoration projects such as improved water quality, better fishing or other outcomes valued by your community. To help people more easily understand adaptation planning activities, materials should include tables and charts that define specific actions that can be accomplished in three- to five-year increments and their benefits.

C.J. Reynolds is a research associate at the Institute for Marine Remote Sensing at the University of South Florida, and Frank Muller Karger, Ph.D., is a professor at the University of South Florida College of Marine Science. Special acknowledgment is given to research partners Jack Kartez, Ph.D., the New England Environmental Finance Center, and Sam Merrill, Ph.D., GEI Consultants Inc. [QC](#)

Resource: Merrill S, Kartez J, Langbehn K et al. “Who Should Pay for Climate Adaptation: Public Attitudes and Financing of Flood Protection in Florida.” *Environmental Values*. The White Horse Press. In press.

Florida Stakeholder Priorities

- » Restrict new building in vulnerable areas.
- » Conserve existing natural areas (wetlands and mangroves).
- » Restrict rebuilding in vulnerable areas after damage.
- » Restore or increase natural areas.
- » Use green technology to reduce flooding.
- » Require new building elevated above the required minimum.



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UPDATE

Post-Disaster Redevelopment Plans

Resiliency planning in Florida's coastal communities

by Jerry Murphy
University of Florida

With Hurricane Irma barely fading from our municipal rearview mirror, it should be abundantly clear that Florida continues to witness increasingly extreme weather disasters. The numerous tropical storm disasters early in the first decade of the 21st century convinced the state to support a pilot project promoting Post-Disaster Redevelopment Plans (PDRPs).

HISTORY OF PDRPS

Through an engaging and robust planning process in the 2000s, the state's position was that "local governments can collaboratively create a long-term recovery and redevelopment strategy in pursuit of a sustainable community." This policy resulted in several pilot local government PDRPs and the publication of "Post-Disaster Redevelopment Planning: A Guide for Florida Communities."

As our communities evolve, key among the recommendations of the PDRP guide is that the local government PDRP be updated every five years. Many of the pilot communities' PDRPs and those of other communities that have followed suit are due for audit and update. The state also updated its guidance documents for PDRP preparation, publishing an addendum to the PDRP guide in 2012.

NEW ADDENDUM PUBLISHED

A second edition of the addendum was published in June of this year. It highlights the increased occurrences of "sunny day flooding" and severe tropical weather and how these events have elevated the topic of resilience and reinforced the importance of planning in Florida's coastal communities.

It specifically notes the Legislature's adoption of the Peril of Flood Act in 2015. That act requires coastal communities to

CMRI Resiliency and Sustainability Training

The Florida League of Cities' Center for Municipal Research & Innovation connects municipalities with the most current evidence-based information on resiliency and sustainability. This ongoing educational program provides city officials with tools to assist them as they make decisions on planning, infrastructure and investments in these areas.

RECENT TRAINING

The CMRI's December 2017 research symposium focused on combating water hazards in an era of recurring extreme weather and on ways municipal governments can reduce and prevent vulnerabilities. Presentations from the symposium are available at floridaleagueofcities.com/research/events-symposiums.

In June 2018, the CMRI hosted a webinar delving into creating a long-term sustainability and resiliency plan using the quadruple bottom-line strategy. A follow-up webinar was held in July 2018. It detailed how to assess environmental threats and the risks they pose to cities, and it provided information on understanding vulnerability analysis and assessment considerations for future planning. Recordings of both webinars are available on the FLC website. Visit floridaleagueofcities.com and search for "On Demand Learning Library."

This fall and winter the CMRI will offer training on plan elements of vulnerability assessment, stormwater and sewer system impacts, and financing resiliency projects. Keep an eye on your email for dates and topics.

For more information, contact Research Analyst Liane M. (Schrader) Giroux at lgiroux@flcities.com.

update the coastal management elements of their comprehensive plans to take steps:

» to "eliminate inappropriate and unsafe development in the coastal areas when opportunities arise"

» to eliminate that development by including "development and redevelopment principles, strategies, and engineering solutions that reduce the flood risk in coastal areas" that results from "high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea level rise."

PDRPs are an accepted strategy for improving community resiliency and satisfying the requirements.

The second edition also emphasizes the growing number of communities that are adopting adaptation strategies, the increasing number of resources available and the planning activities in which many communities are engaged to reduce their long-term exposure to hazards that may also address the potential risks from sea level rise.

An updated section on environmental restoration strategies discusses living shorelines, which involve shoreline stabilization strategies that use "mangrove or marsh grass plantings or oyster restoration to preserve non-beach shorelines." These shorelines can allow "habitats to migrate along with sea level rise while being protected against accelerated erosion" and demonstrate "benefits to the structures behind them during storm events."

The concluding chapter on implementation considerations introduces by reference a new publication, "The Adaptation Planning Guidebook," as an additional resource for improving the public outreach approach and opportunities for community participation specific to each step of the adaptation planning process.

UPDATING THE PDRP

Manatee County, a major participant in the pilot project, is on the leading edge of local government PDRP update efforts. Following an audit last year of its PDRP by the University of Florida Resilient Communities Initiative (UFRCI), Manatee County is poised to undertake a comprehensive update of its PDRP with UFRCI, the cities of **Anna Maria, Bradenton, Bradenton Beach, Holmes Beach and Palmetto**, and the **Town of Longboat Key**.

The UFRCI audit of Manatee County's PDRP compares the relationship of the PDRP to other Manatee County future land

planning resources: The Comprehensive Plan, the Comprehensive Emergency Management Plan and the Local Mitigation Strategy. The UFRCI audit also contains a critical analysis of Manatee County's PDRP, including a review of each section with recommendations based on best practices. The UFRCI audit also recommends that the PDRP be structurally organized to accord with the Department of Homeland Security's National Preparedness System.

Today, the types of analyses and tools identified by statute and provided in the guidance documents are similar to, or more refined than, those used in preparing the original pilot PDRPs. These statutory directives, requirements and options, as well as the increasing frequency of

extreme climatic events, continue to support planning for coastal redevelopment in post-disaster scenarios and regularly maintaining and updating local government PDRPs.

Jerry Murphy, JD, AICP, CFM, is a project coordinator for the UFRCI. The UFRCI is available to work with cities on crafting or updating their PDRPs. For more information, contact Murphy at (239) 322-8510 or jerry@murphyplanning.com. 

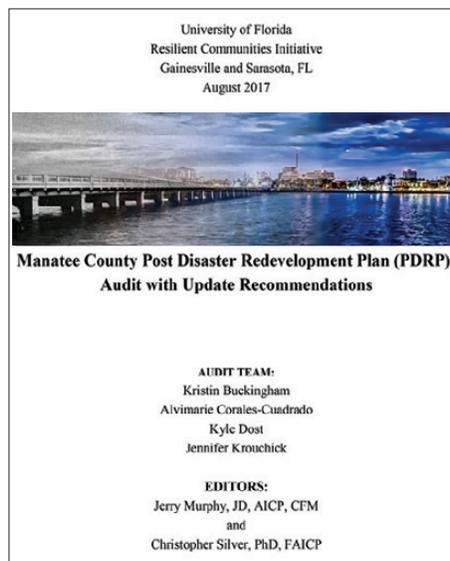




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BENCHMARKING

Housing Use Mix

Steps to develop a mix for your community

by **Brumby McLeod**
College of Charleston

At this year's Florida League of Cities summer research symposium, a template for housing use mix was introduced as a benchmark for communities in understanding the usage profile for housing in a community. Taking a collaborative approach, jurisdictions should examine their housing in the context of a greater market area.

The first step in developing a housing use mix for your community is to determine your market jurisdiction. Most communities are part of a larger region or market. Many of these communities are better to comparatively analyze within the metropolitan statistical area or county, or by geographical features such as coastlines, highways and riverways.

Once the larger market area for analysis is determined, the municipalities within that jurisdiction are broken down along housing use mix. Determining this information from your

geographical information system is probably worth the effort, but a quick solution is using the census data.

Consider this example of a housing use mix. Sun Valley, Idaho, is a unique mountain resort community that faces challenges related to affordable housing, workforce housing, labor shortages and traffic congestion. The community is also concerned with the proliferation of nightly rentals. Begin by determining the appropriate level of analysis. The resort community has neighboring towns along the main highway entering the resort community. Preparing a housing use mix provides some interesting insight into the housing dynamics of the greater valley these communities share.

In this case, the towns along the main road rely on the same thoroughfare. One neighboring town is home to the community airport. Also, several communities are part of the larger Wood

JURISDICTION	HOUSING UNITS	OCCUPIED (OWNER/TENANT)	VACANT	NIGHTLY RENTALS
Blaine County, Idaho	15,050	8,823 (5,939/2,884)	6,227	??
Bellevue, Idaho	926	849 (580/269)	77	??
Carey, Idaho	240	196 (144/52)	44	??
Hailey, Idaho	3,532	3,069 (1,893/1176)	463	??
Ketchum, Idaho	3,591	1,448 (838/610)	2,143	??
Sun Valley, Idaho	2,597	622 (471/151)	1,975	??

River Valley. With this information, the county appears to be the best fit for conducting the housing use mix.

Census data is readily available for housing. Those using GIS mapping software have easy access to these reports for quickly creating an initial benchmark of housing use mix. The housing profiles from the business analyst add-on provide the quickest and simplest approach. The reports are generated by selecting the jurisdiction for each element of Blaine County, Idaho, that was appropriate to profile for determining the housing use mix. Reports are generated for each jurisdiction and then converted into a summary table.

In the preliminary creation of the housing use mix, there is an interest in the overall housing units. The two basic categories are “occupied” versus “vacant.” Each of these categories can be further refined as shown in the table.

Strong sources of housing use data allow a community to get granular. For purposes of this exercise, the data is from the most recent census. The data reveals how a jurisdiction’s housing units were used at the time of the census. GIS mapping software provides projections to what housing usage might look like today and in the future.

For this exercise, the table uses the 2010 Census data. When possible, the community should use more authentic sources of data such as assessor’s data, utility data, tax data or even school district data. However, census data is consistent in format and structure and readily available for the initial benchmarking.

The table above aggregates the housing profiles for Blaine

County and five municipalities within the region. At the most basic level, the variation in the Wood River Valley begins to unfold. The overall county has a vacancy home rate of approximately 41 percent. Most of this vacant housing represents seasonal second homes.

As additional jurisdictions of the valley are profiled, the resort communities of Sun Valley and Ketchum reveal the vacancy home rates of 76 percent and 60 percent, respectively. This ratio was determined by taking the number of vacant homes and dividing it by the number of occupied units. These ratios reveal

a housing use mix of resort second homes in Sun Valley and Ketchum. Profiling this information over time would reveal housing use mix changes. Interestingly, resort communities have maintained a strong second-home presence for decades.

Further exploration of neighboring jurisdictions reveals the residential communities of the valley. Vacancy rates of housing drop to 13 percent in the bedroom community of Hailey.

This basic housing use mix provides a starting point for benchmarking and discussing housing in

a community. From here, municipal leaders can begin to fill the gaps in housing knowledge such as how much housing is being used for nightly rentals.

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“ Strong sources of housing use data allow a community to get granular. ”



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TOURISM

Sharing Technologies

Will regulation of home- and ride-sharing impact tourism?

by Jennifer M. Connolly
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The advent of the sharing economy, including companies such as Uber and Airbnb, is upending the traditional tourism industry.

Tourism has long been an important source of economic activity and revenue for municipalities in Florida. However, with the rapid development of new technologies, the sharing economy is changing how people travel.

This change has created opportunities for some cities. Many are also considering how to craft local policies to address some of the most common concerns about the sharing economy: zoning violations, noise, nuisance and public safety. But which local policy responses to the sharing economy, if any, do citizens support? Furthermore, what impact do regulations of the sharing economy have on tourism?

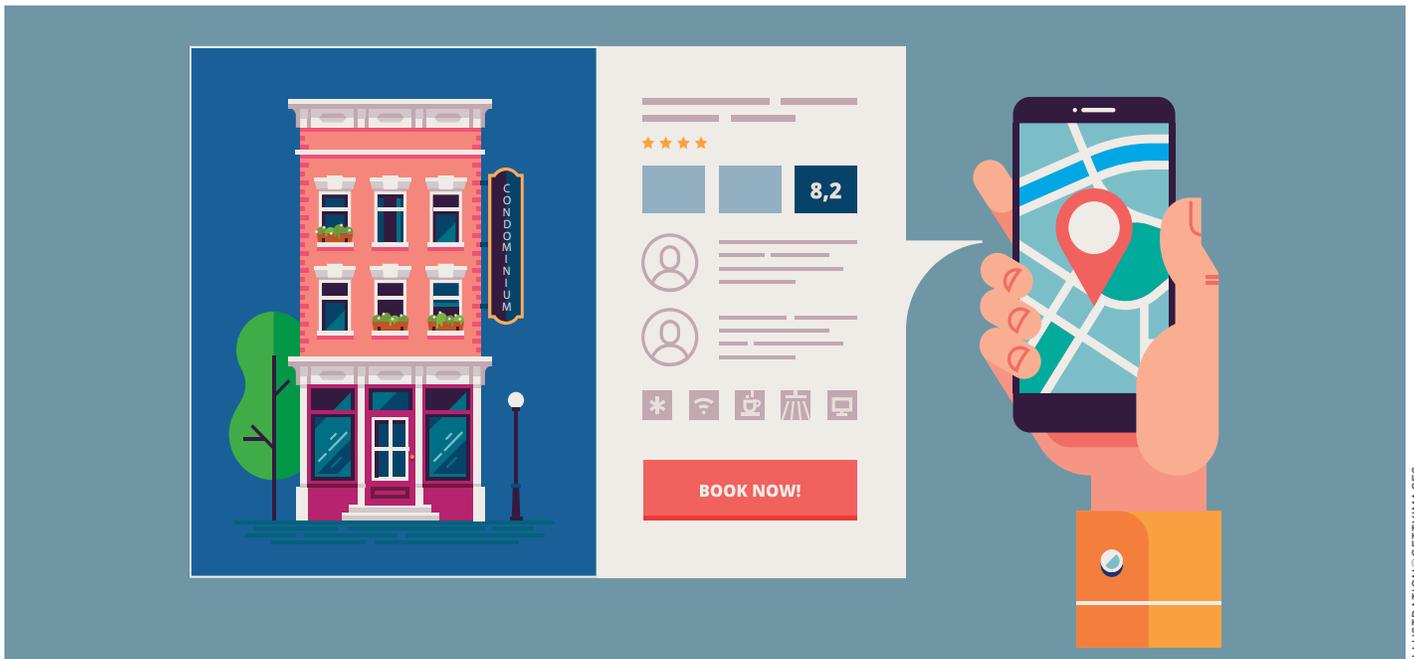


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According to a 2016 survey, the vast majority of Americans (89 percent) support at least one type of municipal-level ride-sharing regulation. The most popular are:

- » requiring fingerprinting of drivers (66 percent support)
- » requiring business licenses (57 percent support)
- » imposing local sales taxes on transactions (56 percent support)
- » banning surge pricing (55 percent support).

Less than half of respondents (47 percent) support a locally imposed minimum price per mile.

While four of the five potential policies enjoy majority support, only 23 percent of respondents support all five local-level ride-sharing regulations.

Similarly, 87 percent of respondents support some local regulation of home-sharing. The most popular are:

- » requiring background checks of hosts who are renting properties (71 percent support)
- » requiring safety inspections of all properties listed for rent (65 percent support)
- » requiring companies to pay local sales and hotel taxes (53 percent support)
- » requiring a local business license (51 percent support).

However, most respondents oppose minimum nightly rates for home-sharing; only 39 percent support them.

Only 22 percent of respondents supported all five local-level home-sharing regulations.

Given the majority support for eight of the 10 proposed regulations, you might wonder how regulation of the sharing economy could impact tourism. The survey results show that regulation of sharing economy companies, by itself, does not have a dramatic impact on tourism intention, but restricting Uber in a city that has poor public transportation options or restricting Airbnb in a city that has relatively high hotel prices does have a noticeable negative impact on people's desire to visit as tourists.

For example, 33 percent of respondents are somewhat or very

likely to visit a city in which Airbnb is not allowed and hotel prices are high. In comparison, 62 percent of respondents are somewhat or very likely to visit a city when Airbnb is allowed and hotel prices are low. Similarly, 66 percent of respondents are somewhat or very likely to visit a city in which Uber is allowed and there are good public transit options. In comparison, only 42 percent are somewhat or very likely to visit a city where Uber is not allowed and there are poor public transit options.

The primary conclusion one can draw from these results is that a policy that is popular in one city may not be popular in another. It is clear that few people want to see all of the possible sharing economy regulations enacted, so how should cities proceed?

Each municipality in Florida should consider its unique situation and local public sentiment in determining which of these policies, if any, would be appropriate. The results also show that while strict regulation may dampen tourism in one community, it may not in others. For example, if municipalities are concerned about tourism, communities with limited public transportation options and expensive hotels may wish to take a more light-handed approach to sharing economy regulation as compared to communities with thriving public transportation options and affordable hotels.

These results are based on a sample of 1,000 adults living throughout the United States, not just in Florida. Local government officials weighing sharing economy regulations should consider their own residents' preferences for such policies. While residents may support some sharing economy regulations, local government officials should also consider the quality and affordability of their municipality's public transportation and hotel options in thinking about how sharing economy regulations might impact tourism in their city.

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