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Short-Term RentalsCities Craft Tailored Regulations

s part of a growing sharing economy of online platforms used to buy and sell, services like Airbnb have dramatically altered the world of short-term rentals for cities and towns.

Even before Airbnb became a household name, some local governments, like Folly Beach and Mount Pleasant, were studying the issue. These municipalities shared their experiences at the Municipal Association's 2019 Annual Meeting.

Spencer Wetmore, city administrator for Folly Beach, said her community has long had short-term rentals as a fact of life. Even so, she said, its residential community has a life of its own, and so the city, in crafting an ordinance, sought to help the renters "to be good neighbors."

To accomplish this, Folly Beach staff and officials focused on things like special events for the rentals, disallowing amplified

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music and limiting gatherings at the rentals to no more than 49 people. The city also created a requirement that each rental property owner designate someone locally who can respond to calls about problems within 30 minutes. For about two years, they have enforced a four-strike policy for violations on a rolling six-month basis, although she said no one has approached that yet, as they generally make changes quickly after receiving the first warning letter containing suggestions on changes to make.

"In our experience, the people who are doing short-term rentals are generally not scofflaws trying to figure out how they can get around the rules and be the worst possible rental," she said. "They're not trying to host the MTV 'Road Rules' at their property. They want it to be a reasonable family vacation or a reasonable place for grandma and Aunt Stacy to stay during the wedding."

The city shares information with property owners to help make compliance easy, calling attention to the availability of noise meters the owners can use for monitoring, as well as services to put trash cans out at the curb. Wetmore said that communicating the expectations of renters in the original rental advertisements helps greatly.

She advised those entering into short-term rental regulations to budget for a substantial verification process in the first year. Software can help identify short-term rental listings within a city, but it can confuse properties with their neighbors or confuse upstairs or downstairs units.

Mount Pleasant Assistant Town Administrator Christiane Farrell described the recent regulation development process there. It began with research and public input meetings, but the proposed ordinance was not recommended by the Planning Commission because of remaining concerns of its members.

The eventual ordinance capped the number of possible short-term rentals at 1% of all dwelling units in the town — about 400 total. The ordinance received final approval in August.

Farrell said some regulation issues will be common for all communities, such as determining whether to allow whole-house and partial-house rentals, whether to create a cap on the number of rentals and whether to include fire code and parking requirements. Mount Pleasant, she said, was also concerned about the effect short-term rentals might have on affordable housing. Renting out part of a property could help people afford to remain in their houses, but at the same time, highly profitable short-term housing could be taking long-term rentals off the market.

She said that the entire regulation development process had seen strong and steady public participation.

"I have honestly never seen an issue that has been more 50/50 ... I have never seen one where two sides have come up with equally good arguments and concerns that are legitimate," she said.

Learn more about the state regulations and tax treatments that impact rental properties in the article "A short guide to short-term rentals" at www.masc.sc (keyword: short-term rental).



New Business License Class Schedule Available

he Municipal Association of South Carolina recently published an updated business license class schedule, based on the most recent IRS data.

The class schedule is part of the Association's model business license ordinance, and adopting that ordinance is one of the key ways cities and towns can standardize their business license practices and demonstrate their commitment to business-friendly practices.

Some other improvements municipalities can make include being willing to accept the Association's standardized business license application; adopting the practice of calculating business license taxes on the previous calendar year or a business' prior fiscal year; and adopting a standard license year of May 1 – April 30, a standard license tax due date of April 30 and a standard penalty date of May 1.

The model ordinance can be found at www.masc.sc (keyword: business license ordinance), with a link to the class schedule appearing as Appendix B. Municipalities wanting to update the class schedule can do so through these steps:

- Review the new 2019 class schedule under Appendix B to determine if it will increase or decrease the amount of business license revenue generated in the city or town. This might happen because businesses may move into a different rate class and pay a different amount than they have previously.
- If the movement of businesses from one class to another significantly changes the amounts of revenue for the city, adjust the city's business license rate schedule, found in Appendix A, to prevent a significant revenue loss or gain.
- If adjustments are needed to the class schedule, the rate schedule or both, the city or town council will then need to adopt the changes by ordinance.

For assistance, contact Melissa Harrill, research and legislative liaison for the Municipal Association of SC, at mharrill@masc.sc or 803.933.1251. For information about the business license tax, visit www.masc.sc (keyword: business license tax).

Association Highlight:

How to Conduct Effective Meetings

he Municipal Association of South Carolina offers city officials and staff access to publications covering a wide variety of local government topics, including the handbook *How to Conduct Effective Meetings*.

Managing city council meetings comes with many challenges, from the transparency requirements of the SC Freedom of Information Act to the need to keep meetings on topic and productive.

This handbook offers guidance on adopting rules of procedures; how the presiding officer and other members of the governing body should act, make motions and handle voting; how to set an agenda; how to schedule and publicize the meeting lawfully; and how to follow the law when entering into executive session.

It also provides a model rules of order document, which includes procedures recommended by the Municipal Association as well as actions required by law. A listing of commonly used motions explains whether specific motions require seconds and whether they can be debated or amended.

Find the handbook at www.masc.sc (keyword: conduct effective meetings).

NEWS BRIEFS

The City of York was named No. 10 in the USA Today 10Best Readers' Choice 2019 category "Best Small Town Cultural Scene." A list of 20 nominees was determined by a panel of experts, and the top 10 winners were selected by popular vote.

The SC Business Licensing Officials
Association recently awarded 12
individuals with the Accreditation
in Business Licensing designation:
Sherry Atkinson, Town of West Union;
Noel Blackwell, Town of Lyman; Tami
Boyle, Town of Mount Pleasant; Caitlin
Cothran, Municipal Association of SC;
Jarrett Epperson, City of Cayce; Karen
Osborne, City of Greenville; Chaconas
Parson, Town of Andrews; Tim Roberts,
City of Greer; Ashley Rochester, City of
Clinton; Kathy Teague, City of Union;
Karine Thomas, City of Hartsville; and
Carroll Williamson, City of Cayce.

The South Carolina Department of Labor, Licensing and Regulation and SC Occupational Safety and Health Administration recognized the City of Columbia Public Utilities Department as a recipient of the 2019 Palmetto Shining Star Safety Award at their Annual Safety Achievement Award reception. The department rose to the top by reducing their Recordable Incident Rate by 40% as it relates to the criteria to receive this award.



Building Attractions and Managing Risks

reative economic development projects can substantially boost a city's or town's tourism, but getting creative can expose a municipality to liability it has never faced before. The annual members meeting of the Municipal Association's Risk Management Services insurance programs, the SC Municipal Insurance Trust and SC Municipal Insurance and Risk Financing Fund, will feature two city officials describing how their city tackled the risk management challenges posed by innovative projects.

Both of the projects are 2019 winners of the Association's Achievement Awards: North Augusta's Riverside Village development and Hartsville's Neptune Island Waterpark.

The Riverside Village is a \$230-million public/private partnership to develop North Augusta's Georgia-facing riverfront with the Minor League Baseball stadium SRP Park as well as a hotel, restaurants and apartments.

North Augusta City Administrator Todd Glover, who will present at the RMS Annual Members Meeting says, some insured facilities, namely the parking decks, fall under the category of "traditional municipal offerings," while the city-owned baseball stadium, leased to the GreenJackets, is an example of a less-common facility that nonetheless needs coverage. He noted that when the project, insured by the SC Municipal Insurance and Risk Financing Fund, approached completion, it was visited by

the Municipal Association's Risk Management Services staff to assess the type of coverage SCMIRF could provide.

The GreenJackets have now completed their second season at SRP Park, after seeing a huge boost in attendance in the inaugural 2018 season, counting more than 76,000 attendees in total.

The Hartsville project, Neptune Island Waterpark, presented by City Manager Natalie Zeigler, is a water park with slides, a wave pool and a lazy river. As a facility with open bodies of water, children and full exposure to weather, the overriding concern at Neptune Island is safety, Zeigler said.

"Creating a safe environment came before creating a fun environment. It had to be safe," she said.



The warning signs at Neptune Island maintain the attraction's pirate theme. Photo: City of Hartsville.



SRP Park is a major focal point of the award-winning Riverside Village development. Photo: City of North Augusta.

The park has more than 20 lifeguards on duty at any time. It employs more than 130 people throughout the season, and the city focuses on their safety as well making sure they have proper clothing, plenty of water and adequate breaks.

When the city decided to build Neptune Island, it made the decision to serve alcohol at the water park, but only in the designated bar area or at a rented cabana. The decision came from industry research, Zeigler said, showing that banning alcohol will lead to park guests attempting to sneak it in, or periodically going to their cars in the parking lot to

drink, which creates liabilities for the city.

"If you do it in a more controlled environment at higher price points, with measures in place to make sure it's not abused, then we could still have a safe and enjoyable environment," she said.

Neptune Island also has a variety signs, warning of areas to avoid because of machinery, areas that are off-limits for alcohol or simply areas to move through carefully. To keep the signs from seeming excessively negative, the city designed them in a way to fit the pirate theme of the park, with many beginning with the words "BEWARE MATEYS!"

"We didn't want signs just reading 'no' with a big slash through it," Zeigler said.

For the 2019 season, the first full season for Neptune Island, the city set a goal of 80,000 attendees. It surpassed this number by mid-August, ahead of the season closer on September 8.

The Risk Management Services Annual Members Meeting will take place November 12 in Columbia. Find registration information at www.masc.sc (keyword: RMS Annual Meeting), and learn more about Achievement Award projects such as North Augusta's Riverside Village and Hartsville's Neptune Island (keyword: Achievement Awards).



Testyourselfmonthlyquiz

True False: A clear warning sign of a serious problem for a municipal budget is if expenditures are exceeding approved budgeted amounts.

Answer: True

A municipality's expenses must stay within the budget approved by council to avoid negative effects on the financial health of the municipality. Only the council may appropriate, by ordinance, the funds of a municipality for expenditure. If total expenditures exceed the total appropriations that were approved by council in the budget,

then council must amend the budget. Because the annual budget is approved by ordinance, the procedure for amending the budget is through the adoption of a new ordinance amending the budget. There is no public hearing requirement for amending the budget, unless the council has established such a requirement locally.

The Municipal Elected Officials Institute of Government offers in-person and online courses. Basic Budgeting and Municipal Finance is offered as an on-demand course online. In-person courses will take place February 5, 2020, the day after Hometown Legislative Action Day, in Columbia. Learn more at www.masc.sc (keyword: MEOI).

Optimizing Salary Amounts with Compensation Studies

eeping a city's or town's staff roster full can be challenging. Human resources directors can attest that a nearby municipal or county government paying even a small amount more for an equivalent position can make recruitment and retention more difficult.

Cities and towns can often offset this difficulty by periodically investing in studies of employee classes and compensation to help make sure that pay is appropriate and competitive in the labor market.

The Town of Kiawah Island is one of many municipalities that have commissioned a compensation study in recent years. Town Administrator Stephanie Tillerson said the town worked to make certain that the finished report reflected the town's specific circumstances, especially in terms of staff members juggling multiple job responsibilities.

For that purpose, the study included an interview of each person, "because they may wear four or five different hats," she said.

In other instances, the study reached beyond fellow governments for comparison. Kiawah Island employs two biologists, for example, and so the study looked at state agencies and universities — the type of institutions that also employ biologists. Salary ranges produced in the study also took into account potential commuting costs, since employees often need to live elsewhere in the Charleston region.

Tillerson said the process helped to justify to councilmembers that salaries are appropriate, while also giving employees the confidence of knowing they had input in the process. Staff members, she said, "very much are a part of this process, by having them do job questionnaires and having them do interviews and explain what they do."

The City of Mauldin is another municipality to have conducted a class and compensation study in the last couple of years. It drew comparisons both from the governments of cities about the same



"We tried to do it as fairly as we could for the employees that had been here for a while."

> Mark Putnam
> Human Resources Director for the City of Mauldin

size as Mauldin as well as some county governments where comparisons could be informative, according to Human Resources Director Mark Putnam.

In July 2018, the study's results went into practice, and the adjustments included a pay increase for all police up to the rank of sergeant and all firefighters up to the rank of lieutenant. Some changes made for existing employees used a formula based on the amount of time they had been in a job as well as their current salary.

"We tried to do it as fairly as we could for the employees that had been here for a while," Putnam said.

He said the changes did not substantially impact "applicant flow," in that the number of applicants did not necessarily increase, but the qualifications did in some cases. Applicants for police positions, for example, began to include some certified officers, capable of beginning patrol work sooner than those hires who first need to go to the SC Criminal Justice Academy.

The SC Municipal Human Resources Association Annual Meeting will feature a session titled "Class and Compensation Studies: How to Convince Your Mayor, Council or City Manager that Your City Needs One." The Annual Meeting takes place November 11 – 15 in Greenville. Learn more and register at www.masc.sc (keyword: MHRA). Also, find the Municipal Association's Municipal Compensation Survey, reporting wages and salaries for cities and towns, which is searchable by criteria (keyword: compensation survey).

Protective Equipment Safeguards Employees and Municipalities

Between police, fire and public works services, city and town employees can face potentially hazardous situations every day — circumstances that can cause severe and costly injuries.

Eye injuries are a common injury type for members of the SC Municipal Insurance Trust, the Municipal Association of South Carolina's sponsored workers' compensation program. In the last five years, about 380 employees sustained eye injuries, with a total cost of \$284,000.

Eye injuries usually occur when employees wear inadequate personal protective equipment, known as PPE, or when employees wear no equipment at all. For eyes, PPE typically takes the form of safety glasses or goggles, but PPE also includes gloves, shoes, earplugs, hard hats, respirators, coveralls, vests and even full body suits. They are all designed to prevent contact with workplace hazards, including physical, chemical, electrical, mechanical or radiological hazards, and all of them should be made to comply with an appropriate regulatory standard. In the case of safety glasses, all glasses used should meet the American National Safety Standards Institute's Z87.1 standard.

"Avoiding preventable injuries means that all municipal employees need to be able to serve as their own risk managers," said Heather Ricard, the Municipal Association's director of risk management services.

For eye injuries, she pointed to several steps employees can take:

 Avoid distractions and pay attention to both the task and its hazards.

- Don't ignore peripheral vision when working — use it to help monitor nearby activity.
- Rely on the senses of sight, hearing, smell and touch as appropriate to recognize hazards.
- Report all unsafe conditions.
- Keep all tools and equipment in good working order.
- When maintaining lawns with mowers or edgers, check for debris that could be sent flying outward beforehand.
- Use full face protection to reduce eye and face hazards. Eye and face protection is critical when using a grinder, spark-causing tools, molten metal and liquid chemicals.

For those employees working with chemicals, understanding the identities and hazards of chemicals used is critical to avoid eye injuries. The Occupational Safety and Health Administration's Hazard Communication Standard requires employers to provide communications sharing chemical information with employees. The communications should include several elements:

- Hazard classification, with specific criteria for classification of health and physical hazards, as well as classification of mixtures.
- Labels chemical manufacturers and importers must provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.
- Safety data sheets with a specified 16-section format.

 Information and training: Employers are required to train workers on the label elements and safety data sheets format to facilitate recognition and understanding.

To help control hazards from chemicals, OSHA recommends these methods, given in order of effectiveness:

- Eliminate harmful chemicals or substitute with safer alternatives.
- Establish physical engineering controls in the workplace to reduce, minimize or even eliminate employees' contact with hazardous chemicals.
- Rotate shifts to make sure no employee is overexposed.
- Make sure all affected employees use personal protective equipment, such as chemical resistant gloves as well as eye and full face protection.
- Have an eyewash and shower available within 25 feet, with no doorways or stairwells, as required per the safety data sheets.

"Employees are the most valuable assets of any municipality, and eye safety is a critical part of their well-being," Ricard said. "The most important goal of employee safety is to make sure all employees come home at the end of the day, unharmed and safe."

For further information on eye injury protection and OSHA standards, contact the risk management loss control staff of the Municipal Association of South Carolina at losscontrol@masc.sc, or find more resources at www.osha.gov or scosha. llronline.com.

ECONOMIC DEVELOPMENT TOOLS

Historic Rehabilitation Credits

The following article is part of a series about economic development tools and how to use them. Find more at www.masc.sc (keyword: economic development tools).

ehabilitating a historic building as part of a development project can pose a higher investment risk, but tax credits can take a project with marginal cash flow projections and turn it into a more attractive venture.

The federal Historic Rehabilitation Tax Credit can be used for these kind of projects, which equals 20% of eligible expenses, excluding the cost of purchasing the land and the building. Corporate investors can obtain these credits by buying an equity interest in the entity that owns the building. Typically, these credits are allocated to the owners in accordance with their allocation of profits.

Credit amount available

If a project is approved, the taxpayer receives a credit equal to 20% of income tax, based on the qualified eligible expenses undertaken during a 24-month measurement period.

The credit is claimed in equal amounts over a five-year period, beginning with the year that the property is placed in

> service. Any unused credit may be carried forward for the next five years. How the credit is distributed will vary based on how the business entity is legally structured.

Meeting eligibility requirements

To be eligible for the credit, the property must



Redevelopment of the Robinson and Marks buildings in Columbia took advantage of the federal Historic Rehabilitation Tax Credit.

be either listed on the National Register of Historic Places or otherwise must contribute to a National Register historic district. Properties on the National Register can be found at www.nps.gov/subjects/nationalregister.

The project cannot be an enlargement of the existing structure. The property must also be used for income producing purposes, cannot be tax-exempt, and the rehabilitation investment must be greater than the adjusted basis of the building.

The adjusted basis is the net cost of the building after adjusting for various tax-related items and is calculated based on the length of ownership. In the case of newly acquired properties, the adjusted basis is the purchase price of the property, subtracted by the value of the land. In cases of properties held by owners or investors, the adjusted basis is determined by adding together the purchase price of the property and any capital improvements, then deducting the value of the land and depreciation.

Claiming the credit requires the taxpayer to complete a historic preservation certification application available through the National Park Service's website, www.nps.gov.

In South Carolina, developers who successfully complete the application process for the federal tax credit automatically qualify for a 10% state income tax credit. For cases of a certified historic structure having less than \$1 million in qualified expenses, that 10% can increase to a 25% tax credit.

A five-year recapture period applies for the credits, in which the investor must keep its interest in the project. After that period expires, the developer or general partner usually has the option to purchase the investor's interest for a fraction of the investor's initial investment.

The benefits of using historic tax credits extend beyond the developer.

The entire city or town can benefit from the preservation of a historic huilding for several

building for several reasons — a significant increase of the property's market value, the economic stimulus of newly created jobs and businesses, and even the public perception benefits of transforming a blighted property into an asset.



Storing the Data of Body-Worn Cameras

ody-worn cameras have emerged as a common tool for law enforcement officers nationwide.

In South Carolina, the Law Enforcement Training Council, acting in accordance with a law passed by the General Assembly in 2015, established statewide guidelines for the use of body cameras. The law requires all agencies to develop a body camera policy and it determines who may obtain body camera videos. South Carolina law enforcement agencies are not required to release body camera videos through Freedom of Information Act requests, but courts can order videos released. Those involved in criminal and civil litigation can obtain the videos as well.

The law also created a mandate for all officers to wear cameras. However, the mandate does not become effective until the state provides full funding for cameras, which has not happened yet. The General Assembly has made some appropriations toward the costs of the cameras, but not full funding.

Around the state, police departments vary in the ways they manage the use of the cameras and the video data generated by every officer's shift. Data management can range from a fully integrated off-the-shelf software and hardware solution to hard drives that serve as a backup to the server. Data retention is another key issue, where the amount of time video data is kept can vary depending on what kind of legal case is involved. In some cases,

the video is needed for a relatively short period of time, while others need data to be stored indefinitely.

The system used by the Summerville Police Department allows uploading of videos into storage as soon as officers pull into the parking lot of the station at the end of the shift, Chief Jon Rogers said.

One of the changes made with storage, he said, was a longer data retention period for files with certain event tags — for example, a citation for municipal court.



"That way we're not pulling the stuff down, burning it to CDs and putting it into evidence, because we were filling up quite a bit of our evidence room with DVDs and CDs, and of course, it's an added expense," he said. "So, we started adjusting out certain drop-off dates on which stuff would be removed from the server to help ease time of pulling it down and burning it to disks."

For some municipal court cases, therefore, the data stays on the server and is then added onto a tablet for its use on the court date. For other cases, like general sessions cases, which can have a timeframe spanning years, the files are still burned onto disks.

In the Town of Ninety Six, officers reaching the end of their shift make use of designated docking stations outside the server room, both to upload the camera data and also to recharge the camera.

Chief Chris Porter said that the town's system of dedicated computer hard drives for body camera data had created no storage issues. For retention, he said the department keeps the removal of old files completely manual, to prevent the loss of needed files because of an automated deletion process.

The Law Enforcement Training Council's guidelines for body-worn cameras can be found at www.masc.sc (keyword: body camera guidelines).

City Services for the Smartphone Age **Municipal Apps Drive Engagement** and Communication

hen the City of Columbia changed its curbside recycling program in 2015, leaders understood the importance of communicating with residents about the switch from bins to large roll carts. They also sensed a change in expectations — residents now wanted immediate access to information about recycling in the palm of their hands.

Columbia introduced the Waste Wizard, a digital tool designed to answer residents' questions and make garbage and recycling collection easier. With the app, users can use a smartphone or tablet to find out when, where and what to recycle. They can have a little fun with it too, as the app offers a waste-sorting game.

"The tool is a notification system, search box, help center and game all wrapped into one," said Samantha H. Yager, Columbia's assistant superintendent of public works and solid waste. "With the app, we hoped to accomplish more engagement with the Solid Waste Division rather than people only engaging when there was an issue."



The City of Aiken Explorer app's features include bill payments, notifications and issue reporting. Photo: City of Aiken.

Columbia is not alone. The digital age has opened up a new frontier of communication tools for municipalities. Now there are apps allowing residents to do everything from reporting potholes and code violations to tracking down parks and recreation facilities.

In the City of Aiken, the Explorer app features an interactive map of parks, a way to read the latest notices from the city, a method to pay bills and a place to report water and sewer problems.

"Our app gives our residents and visitors another way to connect with



our city. Whether you are interested in weekend events, wish to report a problem or directly contact staff, the app offers one seamless way to do that," said City Manager Stuart Bedenbaugh.

In the City of Conway, the Citizen Problem Reporter is a GIS-based app allowing users to share nonemergency problems, submit reports, and review and comment on reports submitted by other users. City staff members use the report to triage and manage problems reported by the general public, according to Taylor Newell, Conway's public information officer.

"We wanted a platform to reach our residents so that we could be the first to hear their problems and address them. If we're able to quickly address any concerns that are reported on the app, we're able to curb any negative comments in public input and to our councilmembers. This can also be an alternative to people putting their complaints on social media," Newell said. "The target audience is the young adult and teenage population. Our older population will call City Hall to voice concerns."

Cities have found various ways to pay for app startup and maintenance costs, including using grant money and relying on the expertise of city staff.

When Columbia changed to recycling roll carts, it received grant funding for its app from The Recycling Partnership, a national nonprofit, and the SC Department of Health and Environmental Control's Office of Recycling and Solid Waste Reduction. Since then, internal funding has covered the app's annual renewal fee. Two staff members help maintain the app, one handling submitted customer service requests and the assistant superintendent handling calendar updates, campaigns and service alerts, Yager said. About 14% of residents are registered on the app.

"There is always that initial fear and thought of, 'Will people actually use it?' That was the biggest challenge five years ago when we were introducing a lot of program changes. The Solid Waste Division built a strong relationship with our IT and GIS departments because it took



all three departments to make this app a success," Yager said. "We needed strong address data from our GIS department to make sure users were getting the most accurate information. We also needed to make sure the app would integrate smoothly with our website."

Conway created its app in-house about two years ago with no additional funding necessary. The app has logged about 110 complaints and requests for service from residents, and the city plans to promote it more.

The app, Newell said, "took very little configuring on our part."

"Our IT department sets up all the email notifications, and then those emails are funneled to the appropriate department head to address the concern," Newell said. "On the IT side of the app, the biggest challenge was to get the email notifications up and running. We also have people send us complaints for Conway, Arkansas from time to time."

Aiken researched its needs for a mobile app and aligned those needs with its budget.

"Since the launch of the app we have about 3,000-plus registered accounts. App analytics help us see date ranges of app sessions, visits, device types, downloads, average time in app," said Gary Meadows, City of Aiken media specialist. "Technically the app is performing as expected. Visitor-wise, we are averaging over 1,000 visits a month."

As with all technology, it's important for cities to stay current and explore new ways to connect and use apps.

The goals for Columbia's app have changed since its introduction. While it still informs residents of their service days for trash and recycling, its new goals "revolve around lowering contamination and end 'wishful' recycling," Yager said. "The Waste Wizard and education campaigns are used to make sure residents are only recycling what we accept and managing our waste properly."

Information from Columbia's app is compiled each month, offering analytics on all sorts of topics, such as the number of app downloads and the number of addresses that were searched.

Aiken is planning an update next January to perfect its geo-fencing for push notifications, which will allow the city to narrow notifications to a .05-square-mile radius, Meadows said.

"There are a million apps out there that can do a million different things. My best advice is do your research. When looking at apps or similar projects, make sure the app meets your goals and needs. Call references, download other cities' apps and play around. If you don't understand how to use the app, your residents probably won't either," Yager said. "My second piece of advice is to make sure that all departments involved are on board and understand what you are trying to accomplish. Teamwork makes the dream work."

A Day in the Life of a

GIS Manager



or years, county governments have used geographic information system, or GIS, mapping to draw lines for service areas and properties, and to provide highly detailed maps for a variety of needs. South Carolina's cities and towns have not adopted the practice as uniformly, though, because of the variety in their GIS mapping needs and resources.

Staffers in this field find their work a mix of long-term projects and quick solutions to problems as they crop up.

Mary Wasson, City of Clinton GIS analyst, works primarily with the city's water and sewer workers to correct sewer issues.

"Right now, one of our main pushes is manhole inspection and valve turning program," she said.

Before that project could get underway, the city needed to know where everything was located using the Global Positioning System, or GPS.

"The only sewer map we had was a CAD [computer aided design] map from many years ago, so we didn't really have an accurate map," Wasson said. "I physically was out GPSing manholes so we could at least know where our assets are. So, we would GPS the manholes then I would come back in and draw the lines, connecting the dots from manhole to manhole."

Once that map was complete, the inspections could begin.

"A GIS technician and the sewer crew can go out together and inspect the manholes. All the data in the field is collected on a tablet, it goes online and



Mary Wasson, right, seen here with Eric Morse, is the City of Clinton GIS analyst. Photo: City of Clinton.

comes back to our database. Everything is interconnected," she said.

That interconnected nature of data keeps Ryan Coleman, GIS manager for the Town of Bluffton, quite busy.

"Any information the town collects that has a geographic component — that's basically everything except financial records — it has something to do with our department," Coleman said. "That's land use, property information, zoning, engineering, capital improvements projects, stormwater and watershed management. All that information has to be stored somewhere and that's what we do. And we serve it up to the public as well. We create paper maps and web maps and put the information online."

All the different components means Coleman doesn't really have a typical day.

"One of the great things about working for a small town is you get to wear a lot of hats," he said. "I do database administration, I do web development, I fly drones, then I make maps. Anything that involves GIS, I end up having something to do with it."

Coleman has worked for Bluffton for eight years — a time that has seen significant growth for the town and for the use of GIS.

"I'm taking the data and converting it to different formats so I can upload it to the internet and people will be able to access it from there," he said.

That information is key for city and town councilmembers as they attempt to balance the sometimes competing concerns of residents.

"We have a whole division that does watershed management," Coleman said. "Our local rivers — the May River and the New River — are really important for a lot of people, not just for recreation, but also for fishing and oysters. Protecting those rivers is really important, so there is a lot of public outreach, as far as knowing that you are in the watershed and what you need to do to protect the rivers."

Coleman said the city shares its information with neighboring Hilton Head Island and Beaufort County.

"We're really lucky to have a good relationship with the county and with other municipalities like Hilton Head," he said. "Everyone who does GIS in this area, we all know each other and meet together quarterly and we share information."

For example, Bluffton uses parcel data from Beaufort County and creates address data from that, which the city shares with the county.

"We recently created permits and applications maps that you can go online and see what new developments are going on around town," Coleman says.

That kind of immediacy was not available to Jim Kiley when he started working in GIS with the City of Rock Hill in 1989. Kiley started two years earlier in the engineering division, creating water, sewer and roadway design drawings. When he joined the city's newly created three-person team to build a GIS mapping system for its water, sewer and electricity customers, Kiley and the GIS team developed maps from old drawings of building locations.

In many cases, the city's meter readers provided the data that would be added to existing maps using AutoCAD, an early drawing and mapping computer program. It was labor-intensive work that took hours and days to do what today can be done in minutes.

"When we were all done, we had addresses, streets and a set of parcels," Kiley said. "From there, we gained city council support for GIS by creating the city's first GIS-generated voting ward map."

Kiley now works with the latest GIS software to continually update and analyze data that informs the city's management



Ryan Coleman is the GIS manager for the Town of Bluffton. Photo: Town of Bluffton.

and staff for all kinds of projects.

"On those first maps, we had three layers," Kiley said. "Today we have over 200 layers."

Those layers include utilities, zoning and voting lines, as well as things like recycling and garbage zones.

"We have people doing cemetery assessments, people doing tree and sidewalk conditions," Kiley said. "They literally walk the streets and mark on the map where the point is and fill out the attributes."

That information helps the city's elected leaders decide the priorities for repairs and new equipment or when the individual voting districts have grown out of balance population-wise.

Kiley pointed to expanded offerings, including the city's parks, recreation and tourism department that has added a velodrome and a BMX course that draws visitors to the city from around the world. Increased development around those locations naturally leads to more growth opportunities for GIS and Rock Hill.

"People come in with new visions and new plans, and the public has new needs and wants, and we have to meet all those as a government to serve our public well," Kiley said.

Spell Out the Rules for Technology Use

Social media has changed constantly since it came roaring onto the scene. Facebook is still the champion in total number of users, but according to the Pew Research Center, its growth has leveled off and its popularity has fallen among young people. At the same time, Instagram has grown more popular in recent years.

The ongoing volatility of social media creates a challenge for cities and towns seeking to maintain relevant technology use policies for staff. Some have created standalone social media policies while others integrate the topic into an overall policy on the use of government technology in the workplace. There are numerous issues to consider when developing these kinds of policies to limit risks to the municipality and prevent misuse of equipment.

Work access and social access

- Will employees have access to work email on personal devices?
- Are employees allowed any personal use of employer-owned devices? If so, how is the usage defined?
- Will social media use on personal devices be limited during work hours?

Monitoring and security

- If usage is monitored, does the policy clearly explain that users should have no expectation of privacy on the employer-owned devices?
- Is there a policy regarding password security, frequency of changing passwords and process for reporting theft of a technology device?

Overall personnel considerations

• Is the technology use or social media policy tied to other personnel policies such as disciplinary action, hours of work, anti-discrimination, anti-harassment and violence in the workplace policies?

The Municipal Association's technology use policy is available to use as a template and can be found at www.masc.sc (keyword: technology policy).

Municipal Social Media Still Growing More Important

ities and towns are accelerating their adoption of social media as a communications tool, and the panel at a social media session during the Municipal Association of South Carolina's Annual Meeting showed how this can involve many people, including the city's leadership and staff.

The panel featured Newberry Mayor Foster Senn, whose Twitter account works alongside all the City of Newberry social media channels. Mayor Senn was joined by Christopher George who is the communications manager for the City of Spartanburg and Shawn Bell who serves as city administrator, complete with social media duties, for the City of Fountain Inn.

Over time in Spartanburg, George said, "social media has become, without a doubt, our number-one way of reaching

He said the original build-up of the social media audience occurred around

"We were very keen on pushing downtown development at a time when it was really just getting started for us," he said. "The local media wasn't paying quite as much attention to it. They are now. We thought the way to build our audience was to talk about our downtown business community, sort of become a news outlet for it. That was very successful for us."

George added that business development may have gotten the audience subscribed, but they are now engaged in communication for other topics. Spartanburg routinely gets thousands of views for city council meetings on Facebook Live.

Topics addressed by the panel included the importance of finding a way to make a city or town's voice consistent and limiting the total number of channels when possible to maintain better control of the city's overall message. They also discussed the challenge of handling questions through



The City of Spartanburg's social media includes videos and updates about city council meetings.

Comment

⇔ Share

not unusual for an elected official. Pushing out information, he said, promotes transparency and helps keep residents informed.

"They want to know about their town, they want to know that they're a part of it. If they're informed, they feel more a part of it," he said.

Social media channels now do much of the heavy lifting for special event promotion, and Bell drew attention to Fountain Inn's Facebook promotions of its Saturday farmers market, Fourth of July celebration, Christmas events and Coffee with Council gatherings. He also uses it to promote "Ask the Administrator" sessions, an idea he said came to him from Goose Creek City Administrator Jake Broom. In Fountain Inn, those sessions take the form of a quarterly appointment for Bell to answer questions on Facebook for a couple of hours on a Thursday evening.

Social media is a two-way communication. The panel discussed the careful and thoughtful responses to negative posts, and only removing those posts that are blatantly abusive or profane after documenting them, as social media is subject to the SC Freedom of Information Act. Senn noted that announcements of new businesses are often met with at least some comments that are negative or expressing a wish that some other business was coming to town, but he said he knew that other cities were having precisely the same experience.

George described the efforts in Spartanburg to maintain an open forum, "and



The City of Spartanburg shares photos and information about current development projects.

definitely never silence anybody's opinion on a local topic."

Negative comments, he said, can provide an opportunity "to deliver accurate information ... It's not really for the person who's posting the negative comment, it's for everybody else. If somebody says something that's blatantly incorrect, you're not just correcting them, you're correcting for anybody that's going to see that."

Social media statistics

- YouTube is highly popular among social media users, with 83% of all consumers preferring it as a form of social media marketing, according to Hubspot.
- Facebook is still widely used, with 68% of U.S. residents using it, according to the Pew Research Center, but a dropping percentage of teen users -71% in 2015, and 51% in 2019.
- Instagram is doing well among young audiences, with 59% of all of its users under the age of 30, according to Statista.
- Twitter draws in a relatively narrow audience. Statista counts 24% of U.S. adults as Twitter users.

Managing Ransomware Risks

herever it occurs, the ransomware attack on a city or town government follows a familiar pattern.

An employee of the local government accidentally exposes the city's IT infrastructure to a hacker - maybe by clicking an email attachment that contains a virus or by providing authentication information like a password over email to someone posing as a coworker.

Once the hackers have broken in, they might encrypt the city's files or its entire computer system, and then demand a ransom through the untraceable Bitcoin cryptocurrency in exchange for reopening the city's badly needed computer access. In a worst-case scenario, this could leave the city without the ability to conduct its business by email and phone systems and access records and files.

Increasingly, city governments are considered prime targets for this type of attack. Once hackers have done their damage, the city is faced with difficult choices. Pay the ransom, which some cities do, or refuse the ransom and then rebuild from a backup if one is available, or for those without a backup, attempt to rebuild everything.

The cost of the choices cities make can be high. In June, Atlanta Mayor Keisha Lance Bottoms testified to Congress about an attack that struck the City of Atlanta in early 2018, in which the hackers demanded \$51,000 in bitcoins, and the city refused. By the time of Bottoms' testimony, Atlanta had spent \$7.2 million on recovery costs, and the attack had wiped out, among other things, vast amounts of camera footage from police patrol cars.

Municipalities have steps they can take to help reduce the threat of a ransomware attack, beginning

with staff training. Krystal Dailey, information technology manager for the Municipal Association of SC, often shares with the Association's staff examples of phishing attempts sent to someone on staff to illustrate the warning signs email users can detect.

For example, hackers can pull organizational information from a website, Facebook or Linkedin account to create an email address and signature that makes the message appear as though it is coming from a high-ranking member of the organization. The hacker, posing as that person, might provide a virus disguised as an attachment or make a request for personal or authentication information while using high-pressure language.

"There's always an urgency in the email that there's some kind of action required, so that puts you in a panic state," Dailey said.

Some other "red flags" she described include a failure to address the reader by name, as well as a large number of writing errors or typos.

Dailey pointed to backups as another valuable precaution. Data backups can be handled through an IT contractor, but if handled by the city itself, she said, should at least be offsite or in a physically separate location from where the primary copies of the city's data are stored.

"A municipality that has been hit but that has appropriate backups could be able to go back and restore its data in order to continue conducting its business," she said. "The sad fact, though, is that it would still cost you time and resources to get back up and running. A municipality that does not perform nightly backups, though, would have nothing it could turn to."



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Calendar

For a complete listing of training opportunities, visit www.masc.sc to view the calendar.

OCTOBER

8 – 11 SC Municipal Finance Officers, Clerks and Treasurers Association and SC Business Licensing Officials Association Joint Academy. Myrtle Beach Marriott at Grande Dunes. Topics include the 2020 Census, financial reporting requirements and ethics in business licensing.

9 SC Utility Billing Association Customer Service Training and Networking Luncheon. Newberry Firehouse Conference Center. Topics include health and wellness, customer service and dealing with hostile customers. 10 SC Community Development Association Fall Meeting. Newberry Firehouse Conference Center. Topics include affordable housing, community engagement and an update from the SC Housing Trust Fund Advisory Committee.

16 Advanced Municipal Elected Officials Institute of Government. Marriott Columbia. Courses include "Municipal Utility Policy and Administration" and "Advanced Advocacy and Intergovernmental Relations."

16 Municipal Elected Officials Institute Advanced Continuing Education.

Marriott Columbia. Sessions include "Parliamentary Procedure: Do You Know Your Role?" and "All the Queen's Horses: Screening and Discussion – How did one woman steal \$53 million from a municipality?"

29 Communications Workshop.

Municipal Association of SC, Columbia. Topics include economic development, visual storytelling, content planning, public speaking, and branding and marketing. **30 Managers/Administrators Fall Forum.** Marriott Columbia.

NOVEMBER

7 SC Association of Stormwater Managers Fourth Quarter Meeting. Seawell's, Columbia.

12 Risk Management Services Annual Members Meeting. Embassy Suites, Columbia.

13 – 15 SC Municipal Human Resources Association Annual Meeting. Hyatt

Regency Downtown Greenville. Topics include coping with stress, the value of a class and compensation study, updates from the SC Criminal Justice Academy, law enforcement recruitment and retention, an overview of federal and state laws regarding LGBTQIA, best practices for hiring and firing, legal updates and an exhibitor showcase.

DECEMBER

4 SCMIT and SCMIRF Public Works Risk Management Training. DoubleTree by Hilton Hotel Columbia.

16 uptown: october 2019