

data requests as citizen scientists and community groups understand and harness the power of geospatial data.

2. When and how was the program, policy or initiative originally conceived in your jurisdiction? *100 word maximum.*

Our initiative to modernize our GIS started three years ago. We began with one internal GIS app that was ten years old, and we had no external apps. Data were outdated, and there was a clear need to reinvent our information delivery methods using web GIS. Doing so would make us ready for the future of address-centric service delivery, which is almost exclusively online and increasingly through mobile devices.

3. How exactly is the program or policy innovative? How has your innovation changed previous processes, products or services? *100 word maximum.*

GIS is a core tool that has broken down barriers between our departments so they can readily consume each other's data. We've also broken down barriers between internal staff and the public by creating a rich, open GIS portal. Since it's fully integrated with our city systems, we deliver the same, up to date spatial information in all of our applications. And more than just delivering data, we're presenting information in new, engaging ways, such as in our time-aware Traffic Accidents app and our one-stop shop Neighborhood Info app.

4. Explain how the program or initiative substantially stretched or improved the boundaries of ordinary governmental operations. *200 word maximum.*

We've expanded our public map gallery from 9 static pdf maps in 2012 to over 30 interactive apps today. With them, the public can look up city service information, elected officials, and more. We also have a crowdsourcing app for adopting fire hydrants. Perhaps our most visually stimulating apps are our story maps like the Liberia Trip journal and the Summer Blossom tour.

Furthermore, we've taken projects we used to outsource and brought them in house. Internally, we have improved mailing label tools that let us select areas spatially and create custom mailings (instead of relying on outside sources to mail entire ZIP codes). Publicly, we used to outsource our garage sale to a consultant, and now we do an even better job ourselves on printed and web maps, incorporating community feedback all the while. In 2015, our garage sale apps got nearly 1,500 views in a one week period. These are all examples of new government operations we can deliver thanks to GIS.

5. What individuals or groups are considered the primary initiators of your program? How does the innovation engage stakeholders or demonstrate high performance teaming? Were strategic partnerships and/or community networks developed as a result of the innovation? *200 word maximum.*

We have a GIS Steering Committee with members from all city departments. Every department plays a role in maintaining data, making decisions about app design, and promoting the use of GIS among staff and the public. Working together, we enable mid-level staff from different departments to find solutions to public information access and demands. We've also expanded our GIS partnerships by building and hosting apps for use by third parties like Waste Management and the LRT Blue Line Extension group. All of these partnerships have helped to open up department data siloes.

6. If a private consultant was used please describe their involvement, identify the consultant and/or firm and provide contact information. *100 word maximum.*

We do not privately consult for GIS services.

7. To what extent do you believe your program or policy initiative is potentially replicable within other jurisdictions and why? To your knowledge, have any other jurisdictions or organizations established programs or implemented policies modeled specifically on this project? Please provide verification of the replication. *200 word maximum.*

We use ArcGIS Online, which is a highly accessible and affordable cloud GIS tool. Thousands of organizations around the world use the service; we've connected our online mapping platform to over 60 map layers hosted by third parties. Building the apps requires no programming or IT experience, and the open community (us included) is often happy to share their experiences and recommendations when designing online maps.

We know that other organizations (MNDoT, City of Minneapolis, etc.) have implemented similar programs because many of our ideas have come from researching and talking with them, which we continue to do even though our program is well established. There's always room for improvement!

8. What were the costs? What were the savings? *100 word maximum.*

We've been using ArcGIS software for years, so we didn't need to purchase additional software to modernize at the desktop and web levels. We purchased Geocortex Essentials (around \$25K) to help us build GIS apps without needing to hire a consultant or developer. We measure the savings in the amount of time saved by city staff looking up information and the amount of phone calls reduced to City Hall for information that's now readily available online.

9. Please describe the most significant obstacle(s) encountered thus far by your program. How have they been dealt with? Which ones remain? *200 word maximum.*

There has been resistance to switch to using modern GIS tools compared to the old pen and paper methods of data collection and tracking. The best way we've found to address the issue is by providing targeted examples to show departments how they could use GIS to collect the same information faster, analyze their data more effectively, and share the results easily across the organization. When we're successful, we create a mutually beneficial cycle in which modern technology helps our staff collect valuable information, which they need modern technology in order to consume. Doing so is spiraling us toward more data driven decisions that will make our operations both more future ready and objective.

10. What outcomes did this program or policy have? What baseline data did you collect? How did you measure the change based on the intervention, and why do you believe in the credibility of this assessment? *200 word maximum.*

We track daily views on all of our internal applications and weekly views of our public applications. Doing so, we're able to see which map layers and apps are more popular and make sure we're focusing on developing the highest demand content. With all of these measurements, we know that 25% of our staff use our GIS apps daily, and we get around 200 views a week of our public apps. We can make credible plans because we have the hard data

to prove which applications people are using. Knowing all of these metrics informs our future work and increases the shelf life of our apps.

11. Has the program received any press or other media coverage to date? If yes, please list the sources and briefly describe relevant coverage. *100 word maximum.*

We've had newspaper articles in the Sun Post and Star Tribune and multiple interviews on Northwest Community Television (Channel 12) about our map gallery and apps. We also received a Special Achievement in GIS Award from Esri for our efforts in using GIS and a community engagement tool.

12. Please provide web links where the innovation can be seen/tested (in the case of something that is web-based) *100 word maximum.*

<http://www.brooklynpark.org/maps>
<http://brooklynpark.maps.arcgis.com>

13. Please provide any key references and their contact information who can be interviewed/called to discuss the innovation and its impact. *100 word maximum.*

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14. You've been to a lot of conferences. TLG should be a unique experience for everyone. Describe how your case study presentation will be different than other conference presentations. *200 word maximum.*
- How will you make the session creative and unique?
 - How do you plan to be both entertaining and educational?
 - Include a description of how your session will facilitate group activities and/or interaction.

Our session will include engaging images and demos of modern GIS apps both on PCs and mobile devices. We'll tell the story of how we did it and, more importantly, how other organizations can do it too. For interaction, we'll provide URLs and QR codes for people to be able to try our apps on their phones and tablets as we talk about them.

We'll also have quiz slides where we challenge the audience to open one of our apps and find information for an address. For example, we'll ask a question like, "When is recycling day for 8412 Douglas Drive?" The first person to tell us the right answer will win a small prize.

For technical audience members, we'll briefly touch on what our GIS back end looks like and how that enables us to support our GIS collection.

15. Anything else you would like to add? *200 word maximum.*

We have a lot of great examples to share of how to create a rich online map collection. We've learned a lot from peer cities across the country by reaching out to them with questions on their map galleries and getting recommendations for best practices. We like to pay that forward by sharing our own experiences and recommendations as well as providing examples for others to replicate in their own organizations.

Brooklyn Park is demographically where many other cities will be in 20-30 years, so we have some unique challenges. These challenges make our community engagement work all the more important. We work hard on community engagement, and GIS is one of the key ways we're innovating that impacts both staff and our community.