Annual Open Data Report
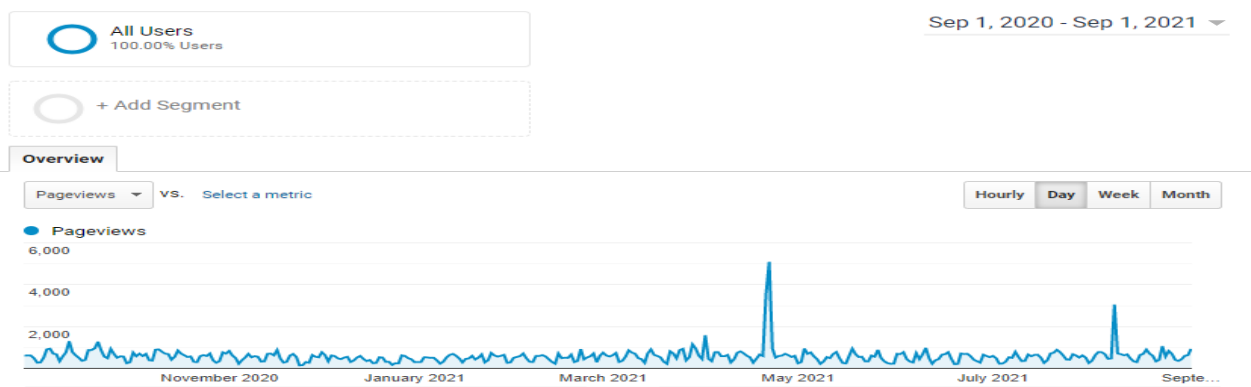**Louisville Metro Government**

September 1, 2021

This serves as the eighth OPEN DATA REPORT to the Mayor in accordance with the requirements set forth in Mayor Greg Fischer's Executive Order No. 1, Series 2013, dated October 11, 2013. The purpose is to summarize the current state of data availability from Louisville Metro Government (LMG) to the public and to outline opportunities for continued improvement of access to public information through our Open Data Platform (ODP) at https://data.louisvilleky.gov. Previous Open Data Reports can be found on our ODP on the Mayor's Executive Order page.

Louisville Metro employees collect and use data as part of their daily work to provide services and support to residents. Our open data program shares a portion of this data publicly, with a process for privacy concerns and legal requirements.
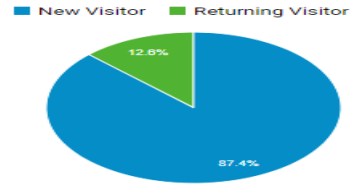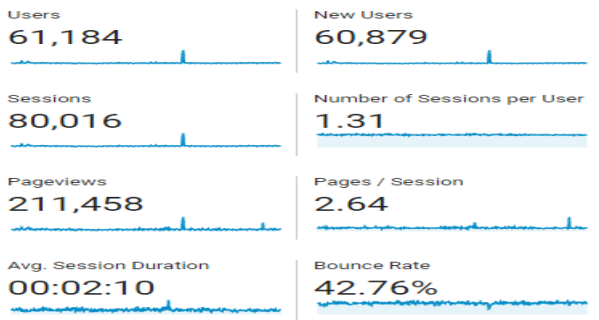
The Louisville open data program increases governmental transparency, accountability, and accessibility. It provides the public with data that residents, universities, researchers, community organizations, press, and media can access while reducing time and labor costs for fulfilling open records requests. Additionally, the empowerment of data-driven decision making aligns with city's government goals of providing transparency to improve services. Click the following for more information on how to use the open data site and terms and licenses.

ODP SITE TRAFFIC. Since the launch of the new ODP in Oct 2016, we've had 1,005,313 pageviews and 345,838 user sessions. This year we've seen usage of 211,458 page views due to releasing or improving datasets (COVID-19 in Jefferson County Louisville KY, All services Provided by RCS and LIHEAP), adding data visualizations (Facilities Idle Time, Facilities Mowing Cycle, American Rescue Plan Comments), participating online with data related meetings, and collaborative university data analytics projects.

**The images below show number of users, new users, pageviews and site traffic for the period September 1st, 2020-September 1st, 2021

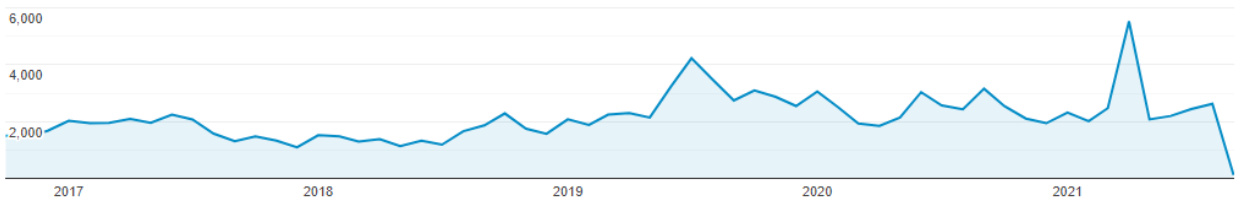Open data website pageviews over the last year

Users	New Users
61,184	60,879
Sessions	Number of Sessions per User
80,016	1.31
Pageviews	Pages / Session
211,458	2.64
Avg. Session Duration	Bounce Rate
00:02:10	42.76%

Statistics from September 1, 2020- September 1, 2021

QUALITY METRIC. We have a LouieStat Key Performance Indicator (KPI) called Open Data Usage, which tracks data set downloads. The goal of Open Data Usage KPI is to focus on quality and engagement. This KPI encourages us to release information that our departments and the public will find valuable by showing us what data is being accessed. Our most popular data downloads this year, in order, are salaries, crime reports, List of Locations with COVID Related Investigation Action, dockless trips,

COVID-19 in Jefferson County Louisville KY, Fire Incidents, Restaurant Inspections, foreclosure sales, sex offender registry, redlining Louisville, uniform citation data.

	Page	Pageviews ↓	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit	Page Value
		211,458 % of Total: 100.00% (211,458)	150,324 % of Total: 100.00% (150,324)	00:01:18 Avg for View: 00:01:18 (0.00%)	79,554 % of Total: 100.00% (79,554)	42.76% Avg for View: 42.76% (0.00%)	37.62% Avg for View: 37.62% (0.00%)	$0.00 % of Total: 0.00% ($0.00)
1.	/dataset/employee-salary-data	29,294 (13.85%)	21,975 (14.62%)	00:03:47	20,996 (26.39%)	52.17%	68.47%	$0.00 (0.00%)
2.	/dataset/crime-reports	15,447 (7.30%)	10,261 (6.83%)	00:01:29	9,278 (11.66%)	39.93%	50.64%	$0.00 (0.00%)
3.	/	13,712 (6.48%)	9,504 (6.32%)	00:01:06	7,378 (9.27%)	30.96%	32.11%	$0.00 (0.00%)
4.	/dataset/list-locations-covid-related-investigation-action	6,498 (3.07%)	4,451 (2.96%)	00:01:57	4,320 (5.43%)	19.77%	55.25%	$0.00 (0.00%)
5.	/search/type/dataset	5,709 (2.70%)	3,854 (2.56%)	00:00:37	1,900 (2.39%)	33.93%	20.35%	$0.00 (0.00%)
6.	/dataset/crime-reports/resource/ac1c25 67-aad3-46cf-be18-c8327c77e46d	3,643 (1.72%)	2,764 (1.84%)	00:02:15	377 (0.47%)	66.84%	44.72%	$0.00 (0.00%)
7.	/dataset/dockless-vehicles	3,628 (1.72%)	2,349 (1.56%)	00:02:57	1,889 (2.37%)	52.15%	49.28%	$0.00 (0.00%)
8.	/dataset/covid-19-jefferson-county-louisville-ky	3,594 (1.70%)	2,339 (1.56%)	00:02:02	2,029 (2.55%)	51.40%	50.86%	$0.00 (0.00%)
9.	/dataset/fire-incidents	3,393 (1.60%)	2,673 (1.78%)	00:02:12	2,487 (3.13%)	56.17%	67.64%	$0.00 (0.00%)
10.	/dataset/employee-salary-data/resource/821926ee-a3c3-44c3-b2cb-376beb0ce141	3,127 (1.48%)	2,185 (1.45%)	00:01:45	197 (0.25%)	48.40%	36.90%	$0.00 (0.00%)

Since the new ODP launched, the download counts had 92,026 files downloaded and 27,766 files downloaded from last year. Note these numbers are from people using a browser to download files, and do not include automated, direct file, or API downloads. Dataset raw downloads monthly over the past 5 years

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NEW DATA SETS. Since the last open data report, we have released or refreshed 20 key data sets to the public, either on our open data site or in coordination with Louisville/Jefferson County Information Consortium (LOJIC):

Jefferson County KY Zoning, Jefferson County KY Parcels, Louisville Metro KY Areas of Interest, Jefferson County KY Fiscal Court, Jefferson County KY Traffic Web Cameras, Jefferson County KY Recreation Areas - 2019, Jefferson County KY Street Centerlines, Homelessness Task Force Planning Table, Jefferson County KY Urban Heat Management Study, Jefferson County KY Urban Renewal Areas, Jefferson County KY Housing Quality Standards Inspection Assignment Districts, Jefferson County KY Property Maintenance Inspection Assignment Districts, Jefferson County KY Building Inspection Assignment Districts, Jefferson County KY HVAC Inspection Assignment Districts, Jefferson County KY Electrical Inspection Assignment Districts, American Rescue Plan Comments, Facilities Mowing Cycle, Facilities Idle Time, Fleet Auction List, LIHEAP, All Services Provided by RCS.

New Resources added to the newly added or existing data sets. Since the last open data annual report, we have released or added 41 new resources in the means of files, supporting documents and links to the previously created or existing data sets to the public, either on our open data site or in coordination with Louisville/Jefferson County Information Consortium (LOJIC):

Jefferson County KY Voting Precincts 2020, Jefferson County KY Zoning - March 2011, Jefferson County KY Parcels, Jefferson County KY Zoning - January 2004, Jefferson County KY Zoning - December 2002, Louisville Metro KY Areas of Interest, Jefferson County KY Fiscal Court, Jefferson County KY Traffic Web Cameras, Jefferson County KY Zoning - April 1999, Jefferson County KY Zoning - March 1997, Jefferson County KY Zoning - January 2012, Jefferson County KY Zoning - January 2005, Jefferson County KY Zoning - January 2016, Jefferson County KY Zoning - December 2020, Jefferson County KY Zoning - October 2001, Jefferson County KY Zoning - December 2017, Jefferson County KY Railroads - 2019, Jefferson County KY Recreation Areas - 2019, Jefferson County KY Street Centerlines, Louisville KY Dockless Regulated and Restricted Areas - Speed Regulated, Vaccination doses, by dose, distributed by Jefferson County, KY Agencies Weekly, Vaccination doses distributed to Jefferson County, KY residents Weekly, Vaccination Dose Rates in Jefferson County, KY, Vaccination by ethnicity in Jefferson County, KY, KYIR Vaccine Allocation Distribution for Jefferson County, KY Residents, Vaccination Rate by Zip code last Saturday in Jefferson County, KY Public, Percentage of COVID-19 Cases by Gender for the last 8 weeks in Jefferson County, KY, Percentage of COVID-19 Cases by Age Group for last 8 weeks in Jefferson County, KY, Homelessness Task Force Planning Table, Jefferson County KY Urban Heat Management Study, Jefferson County KY Urban Renewal Areas, Jefferson County KY Housing Quality Standards Inspection Assignment Districts, Jefferson County KY Property Maintenance Inspection Assignment Districts, Jefferson County KY Building Inspection Assignment Districts, Jefferson County KY HVAC Inspection Assignment Districts, Jefferson County KY Electrical Inspection Assignment Districts, Mowing Log, September 2021 Auction List, LIHEAP, All Services, Jefferson County Signalized Intersections.

Future Data Sets. The Office of Civic Innovation and Technology is working with internal departments and external agencies to potentially release the following data sets:

- 911 Fire Service calls.
- Police Use of Force.
- Library Collection Inventory.
- Veteran Owned Businesses.
- Minority Owned Businesses.
- Certified Vendors.
- Contractors with the City.

If you have a request for a data set to be added to our open data portal, please let us know by using This Form

WHAT WORKS CITIES CERTIFICATION. Louisville continued with Platinum certification for data-driven decision making through Bloomberg Philanthropies What Works Cities (WWC), only one of two cities to receive this highest level of recognition available. Our certification included scoring 100% in the general management, open data, data governance, and public stakeholder engagement categories. Over the years, we have achieved Silver, Gold and Platinum, all our reports are posted on open data website.

DATA INVENTORY. Our Data Governance group has undertaken a project as part of our WWC certification and they are constantly maintaining their data sets and updating data set links and metadata. The data governance team attend trainings and monthly meetings to discuss future data sets and continuously maintain, updating the data inventory, visit our Comprehensive and detailed inventory process and progress report. The inventory is published as open data and aids in data discovery both internally and externally.

Department	Designated Lead	Inventory Progress	Verified	Updated Open Metadata	Percent Published	Total Progress
Air Pollution Control	✔	●	⚑	⚑	◔	
Animal Services	✔	◔	⚑	⚑	◔	
Codes & Regulations	✔	◔	⚑	⚑	◔	
Community Services	✔	◔	⚑	⚑	◔	
Corrections	✔	◔	⚑	⚑	◔	
Develop Louisville	✔	●	⚑	⚑	◔	
Economic Development	✔	◔	⚑	⚑	◔	

Sample of our data inventory progress report card for departments

PARTNERSHIPS. We have continued our data sharing agreements with Waze, Yelp, Develop Louisville, LOJIC, the Harvard Ash Center's Civic Analytics Network, the Louisville Downtown Partnership, the USDOT, University of Louisville's Speed School of Engineering, School of Public Health and Information Sciences and Christina Lee Brown Envirome Institute. We are always working on new partnerships with local non-profits, corporations, state agencies, and federal agencies to improve data sharing, allow access, and do analysis projects.

PUBLIC FACILITIES. Prior to the lockdowns driven by COVID-19, we had great public usage of the LouieLab, a co-working space co-located with our offices and managed by us. We have had some limited re-openings and hosted the meetings for the Civilian Review Board and JCPS Staff Retreat. With the opening of the Entrepreneurship Center by SIDIS, we expanded our network of public spaces to host open data related events such as city sponsored hackathons, data governance meetings, data ethics training for government employees, public meetups, and collaborations with local and national organizations.

OPEN DATA Services.

Our Open Data Platform uses free and open source software called DKAN. We think of services that provide data to the public as part of building our open data platform. We are constantly creating open source projects and sharing them online with residents and other governments as posted on Github, repositories. In 2022, we will begin a process of migrating the Open Data Portal due to lack of ongoing vendor support for DKAN.

ODP VISUALIZATIONS. We work to provide more than just raw data, adding visuals and tools to help non-technical residents understand the data, as was pointed out by a local news station WFPL. We worked with the DKAN community to add new features like public comments on each dataset, an integrated forum, API improvements, and better data visualizations on the site. In the recent years, we have embedded custom interactive visualizations directly on dockless vehicle, and LouVelo Bicycles, also instructions on how to use the embedded visuals to filter and export data are added for each dataset, we have embedded and included other visualizations like the Power Bi embedded

dashboards in Employee Salary Data, Fire Incidents, Fire Property Damage, Facilities Mowing Cycle, Facilities Idle Time In addition to maintaining and enhancing the Jefferson County Public COVID-19 Dashboard.

PUBLIC FEEDBACK. We have Open Data Contact and Open Data Gallery Submission forms and Data Collaboration and Partnership form. Additionally, we have an integrated feedback page where people can suggest and discuss new datasets and features, and discussions on individual dataset pages; Also a meeting was conducted on 07/16/2021 with University of Louisville Graduates and IQSresearch to provide full information on Open Data Portal and how suggestions and recommendations can be submitted, this meeting was an opportunity as well to interact with and get feedback from public and what public would like to see in Open Data Portal.

OPEN MOBILITY FOUNDATION. Louisville is a founding member of the global non-profit, the Open Mobility Foundation (OMF). Louisville is one of 15 founding cities that are working together with private companies to develop policy, open source tools, and standards that benefit residents in the mobility space. The foundation includes private companies like Microsoft, Bird, Stae, Spin, Lacuna, and Blue Systems, and is partially funded by the Rockefeller Foundation.

Louisville Metro has attended OMF meetings for MDS, for using Mobility data to solve Pandemic challenges, and Scooter patterns across different cities and MDS data privacy.

RESEARCH AND JOURNALISM. This year a number of universities and journalists used our open data for their projects, analysis, and stories using our open data sets like Dockless Vehicles, Expenditures Data, LMPD Hate Crimes, Assaulted Officers, Employee Salary, Lien Holder, Health Inspections, Restaurant Inspections, Syringe Exchange program , Short Term Rental and LMPD Stops Data.

DATA STANDARDS. Louisville continues to align our data to useful data standards like MDS, GBFS, GTFS, LIVES, Waze CCP, and Open311, and is working alongside cities and communities to expand existing standards and define new ones where needed. We have created a data standard policy for how we collect Sex and Gender information, and are working on Street Addresses, Date/Time, and Race/Nationality among others. These standards help us align our data across departments, align to best practices, meet WWC recommendations, and automate our data warehousing efforts.
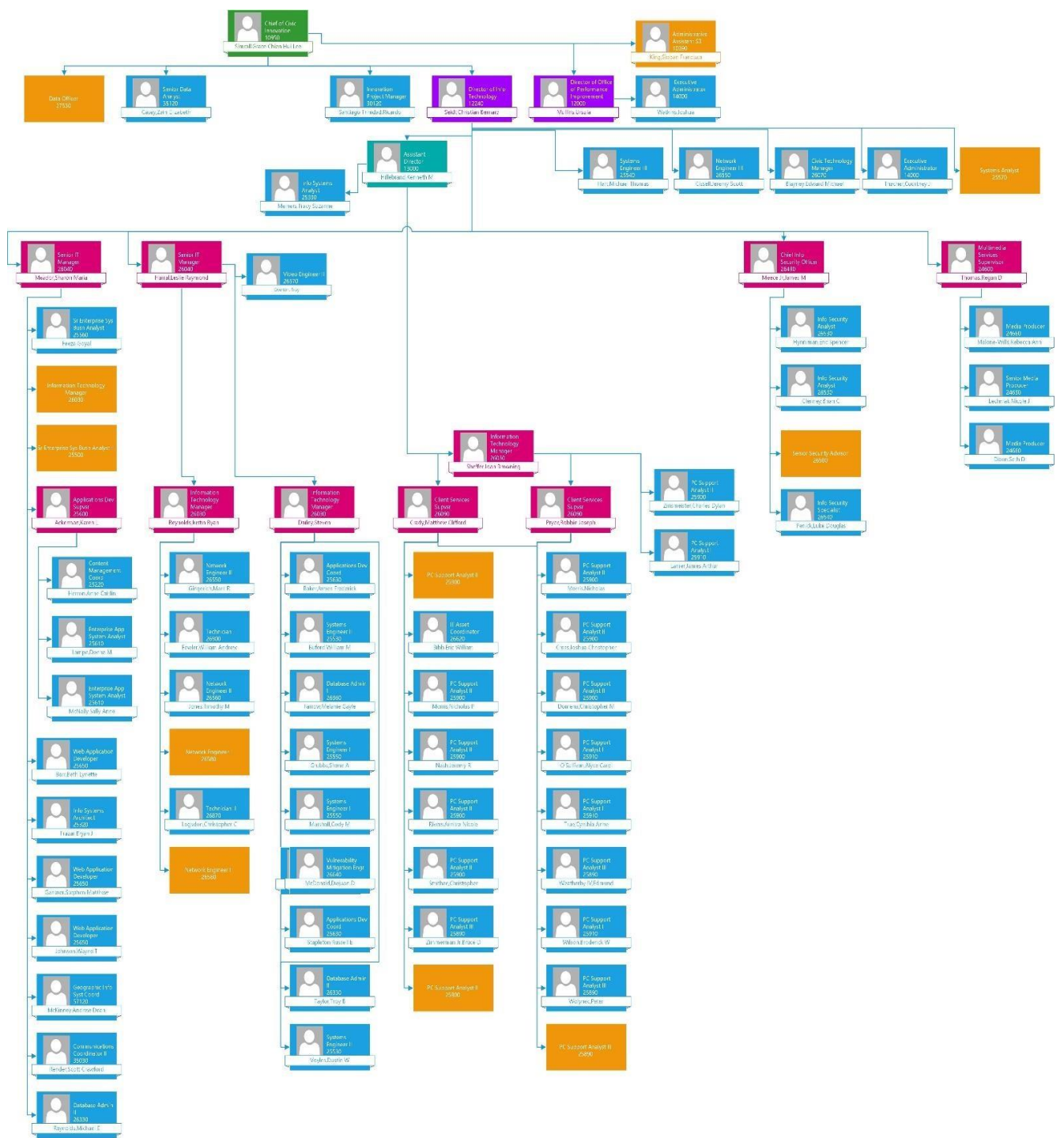
DATA GOVERNANCE. Due to the COVID-19 pandemic, meetings on monthly basis were held remotely via Cisco WebEx and will be resuming remotely for now until it is safe to convene publicly. Currently there are 66 employees cross-departmental Data Governance team members responsible for maintaining their department's data, integrating into LouieStat, participating in working groups, writing data policy, and doing data tool/ethics/best practice trainings.

Working Groups include efforts on automation, data inventory, data standards policy, data warehousing, data visualization, and open data policy revisions.

SITUATION UNIT. It was clear in the early days of our COVID-19 response that we would need data to monitor and manage the pandemic in Jefferson County. As part of our Incident Management Team structure, the Situation Unit within the Planning Section was tasked with identifying data sources and building both internal and public facing COVID-19 dashboards. Resources from across Louisville Metro Government have continued the effort in 2021: Beth Allen from Metrosafe; Andrew McKinney, Mike Reynolds, Beth Barr, Zain Casey from CIT; Dondre Jefferson from Parks and Recreation; Yu-Ting Chen and Taylor Young from Louisville Metro Public Health and Wellness. The team built an almost fully automated system from the ground up and assisted the Commonwealth on their data management and visualization efforts.

BUSINESS INTELLIGENCE. The Office of Civic Innovation and Technology has provided number of training sessions for the employees of The Office of Civic Innovation and Technology and Office of Performance Improvement to provide necessary skills for quality data and visualization in Power Bi platform and in creating dashboards and the use of different techniques for data analysis, also the Office of Civic Innovation and Technology continues to provide trainings on open data portal, techniques used and data analysis tools for the data governance members.

Agency Structure. The Office of Performance Improvement (OPI) and Civic Innovation and Technology organizational chart shown below

GOALS FOR NEXT YEAR. The ODP is continuously expanding with more datasets and resources and will be focusing on the following goals in the coming year:

- A return to an active presence in the open data and civic tech community by hosting at least 1 learning session or hackathon.
- Increasing engagement with the public by posting at least once a month on the Office of Civic Innovation and Technology's social media accounts. This will allow us to communicate with the public on new and upcoming datasets, and drive traffic to the open data portal to receive feedback and suggestions for additional data sets.

- Adding 10 more visualizations to open data datasets. This will provide the public with easy visualizations to navigate and to spark their own ideas.
- Creating 2 more data stories to showcase the work being done in our community.

In addition, the Office of Civic Innovation and Technology will be migrating to a new ODP platform that will provide us with more stability, functionality, and enhanced user experience. During the migration process, each dataset will be reviewed thoroughly for accuracy and timeliness. Our goal will be to add at least 20 new datasets to the ODP with a focus on automation and quality.

RECOGNITION. The above successes required the collaboration and hard work of many city employees. Thanks to the department chiefs and directors, Mayor Fischer and his staff, and the members of our Data Governance Team for their focus and dedication to doing great data-driven work in the city.

CONCLUSION. Open data, public transparency, and data-driven efficiency in Louisville remain a strong and continuing priority for Mayor Greg Fischer, the employees of LMG, and the Office of Civic Innovation and Technology. LMG will continue to release new data the public values, improve existing data sets, and increase the frequency of data updates. We will drive usage and adoption by hosting public events, driving usage internally, communicating via press and social media, partnering with the civic tech community, and improving our data services. The goal is a transparent government, improved services for citizens, an informed and educated populace, and empowered data-driven decision making.

Respectfully submitted on   September 1, 2021
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Office of Civic Innovation and Technology

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