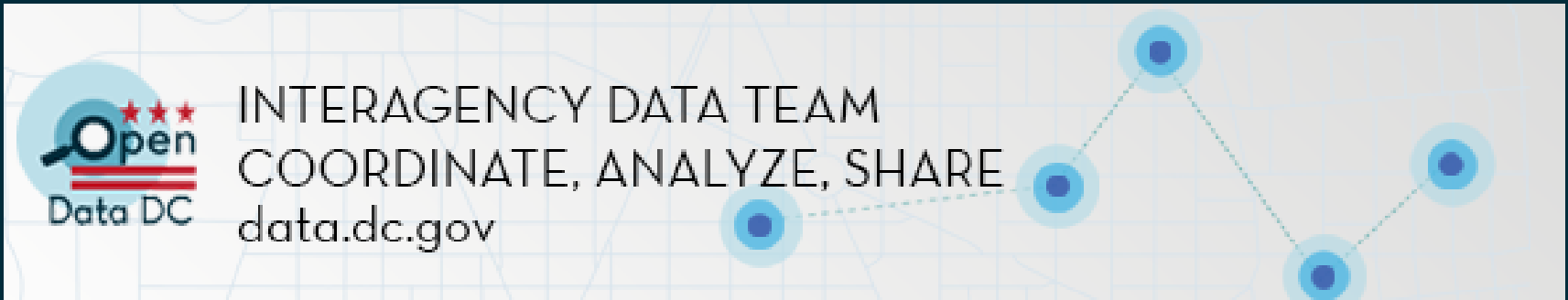




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Interagency Data Team

May 21, 2018

A horizontal banner with a light blue grid background. On the left is the 'Open Data DC' logo, which includes a magnifying glass icon, three red stars, and the text 'Open Data DC'. To the right of the logo, the text reads 'INTERAGENCY DATA TEAM', 'COORDINATE, ANALYZE, SHARE', and 'data.dc.gov'. On the right side of the banner, there is a network diagram consisting of five blue circular nodes connected by dashed lines, set against a faint map of Washington, D.C.

Open Data DC
INTERAGENCY DATA TEAM
COORDINATE, ANALYZE, SHARE
data.dc.gov



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WELCOME, AGENDA DATA TEAM NEWS

Michael Bentivegna
Data Visualization and Analysis PM
Office of the Chief Technology Officer



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AGENDA

- **Welcome, News & Updates**

Michael Bentivegna, Data Visualization and Analysis PM, Office of the Chief Technology Officer

- **Internal Data Search Tools for DC Government - Getting Your Design Input**

Weichi Xiong, Sr. Developer with Data API and Systems, Office of the Chief Technology Officer

- **Update on Mayor's Challenge: Consolidated Survey Platform**

David Yokum, Director at The Lab @ DC, Office of the City Administrator

- **Civic Analytics**

Jamie Chandler, Data Visualization Analyst, Office of Budget & Performance Management

- **CDO's Annual Report Recommendations to Mayor Bowser**

Barney Krucoff, Interim Chief Technology Officer, Office of the Chief Technology Officer



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BUSINESS INTELLIGENCE SOFTWARE UPDATES

- **Tableau Public** – w/automated ETL updates
- **Tableau version 2018.1 (Almost – still 10.5)**
 - Tips for analytics objects
 - Hide a Viz in Tooltip worksheet
 - Create dual-axis (layered) maps from generated and custom latitude and longitude
- **Tableau Data Prep Tool** (aka Maestro)



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BUSINESS INTELLIGENCE SOFTWARE UPDATES

- **MicroStrategy**
 - New DC Open data Plug-in
- MSTR version 10.11 testing complete (roll out to production within 2 weeks):
 - Dossier
 - library
 - Collaborations services
 - New connectors



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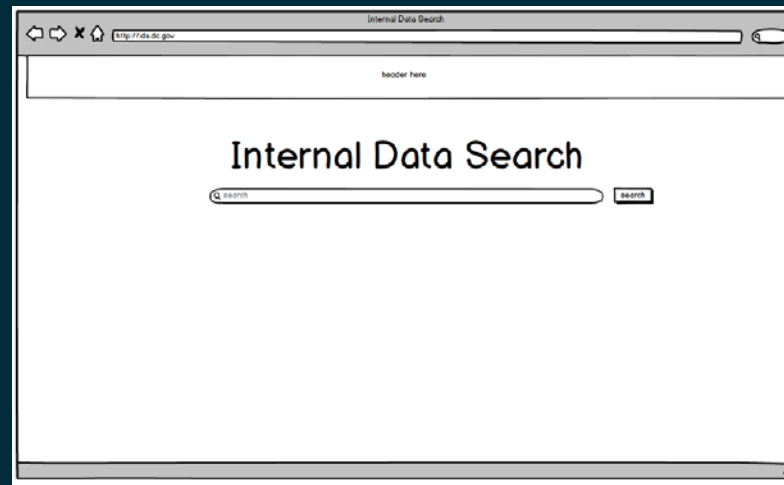
TRAINING

- Tableau
 - June 13-14 (full), July TBD (Intro. – Intermediate class)
- MicroStrategy
 - Jun 19-20, July 10-11, August 7-8, September 11-12. (Intro. class)
- GIS
 - 230 Overview DC GIS Services 08/01/18 1 Day
 - 233 ArcGIS Online 08/08/18 3 hours



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INTERNAL DATA SEARCH TOOLS FOR DC GOV



Weichi Xiong
Sr. Developer with Data API and Systems
Office of the Chief Technology Officer
Demonstration



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UPDATE ON MAYOR'S CHALLENGE

David Yokum
Director at The Lab @ DC
Office of the City Administrator



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CONSOLIDATED SURVEY PLATFORM

- **The Problem**

In Washington, D.C., government leaders lack an easily accessible tool that will improve their responsiveness to the city's nearly 700,000 residents.

- **The Idea**

Washington D.C. will create a dedicated team within its current government structure that will support all city agencies in routinely conducting smart, sophisticated surveys that regularly integrate residential feedback into key decision-making processes.



CIVIC ANALYTICS

JAMIE CHANDLER
OFFICE OF THE CITY ADMINISTRATOR
202-727-9696



Overview

- ◆ Background
- ◆ Civic Analytics Vision
- ◆ Current State
- ◆ Future State
- ◆ Concept
- ◆ Focus
- ◆ Operating Framework
- ◆ Functions
- ◆ Resourcing

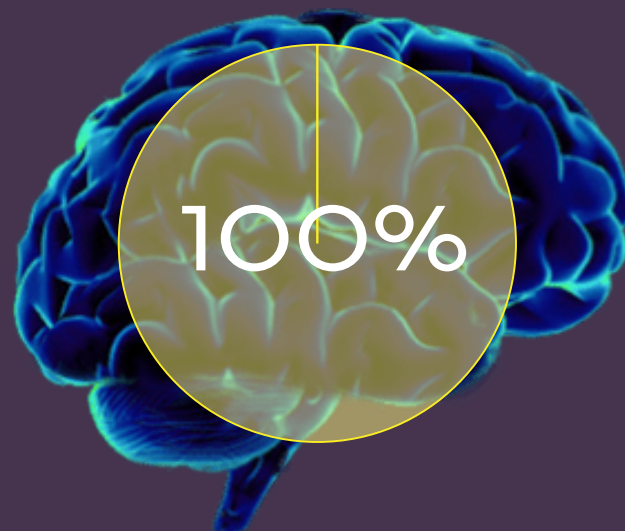
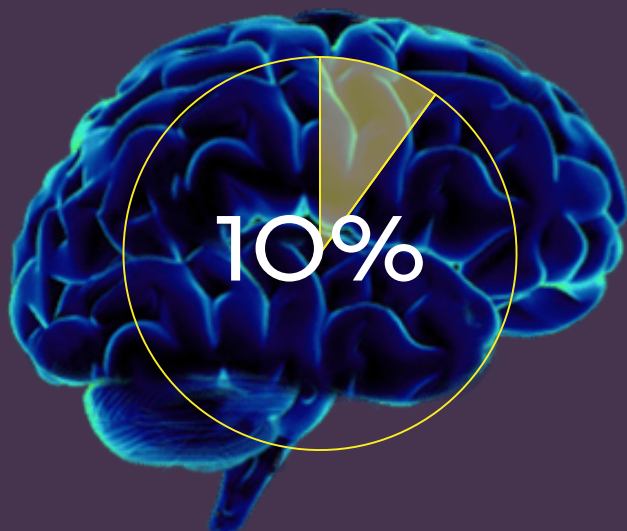
Background

The objective of this presentation is to:

- Layout an approach to building a data analytics competency within OBPM.
- One that focuses on predictive analytics, data visualization, and data communication and supports the needs of OCA, EOM, OCTO and agencies.
 - With a mission to unlock the potential of District data to support decision making and drive better outcomes of the District's priorities.

Civic Analytics Vision

- ◆ Help the District achieve the full analytical potential of its data through predictive analytics, data visualization and data communications



Fragmentary approach to data analytics
Lots of data, but unrealized potential
Focus on ad hoc reporting
Lack of automation and scale
Lack of interagency data sharing
Visualization not broadly adopted
Passive coordination with OCTO

Holistic approach to analytics
Maximize data potential
Predictive Analytics
Automation scale
Interagency data sharing
Ubiquitous data visualization
Active coordination with OCTO

Current State



Fragmented, ad hoc analytics; limited interagency data sharing

Unmet potential to answer strategic questions with available big data



Several beneficial analytics tools being developed by OCTO but without OCA engagement

Emphasis on labor intensive analytics not automation & scale



Lack of data analytics planning process that supports Budget, Performance Management, Lab @ DC and OCA Communications needs

Limited networking with analytical and visualization experts across the district



Future State



Enables OBPM to lead civic analytics

Unlocks data potential to answer strategic questions



New analytics tools drive sophisticated approaches to decision-making support

Holistic analytics and interagency data sharing



Analytical & visualization activities as outputs of analytics planning process

Stronger partnerships with agencies to collaborate on data analytics





PERFORMANCE MANAGEMENT



Monitors agency performance and facilitates implementation of the Mayor's policies.



BUDGET



Prepares the District's operating and capital budget to advance the District's priorities through investments.



THE **LAB** @ DC



Uses scientific insights and experimental methods to test and improve policies



CIVIC ANALYTICS



Uses data visualization and predictive analytics to support decision-making and drive better outcomes of the District's priorities



Predictive Analytics

Data mining, statistical algorithms and machine learning techniques to identify the likelihood of future outcomes based on historical data.

Example

- Simulating how urban patterns affect affordable housing & predicting future trends



Data visualization

Presentation of data in graphical format to enable decision makers grasp difficult concepts and drive outcomes

Example

- Spatial and temporal maps to reveal the effects of Mayoral initiatives on homelessness



Data Communications

The dissemination of analytics and visualizations to decision-makers, agencies, and the public to drive transparency and engagement

Examples

- Public Dashboard
- Visualizations to support agency testimony to Council; Commander presentations at ANC mtgs.



Training & Capacity Building

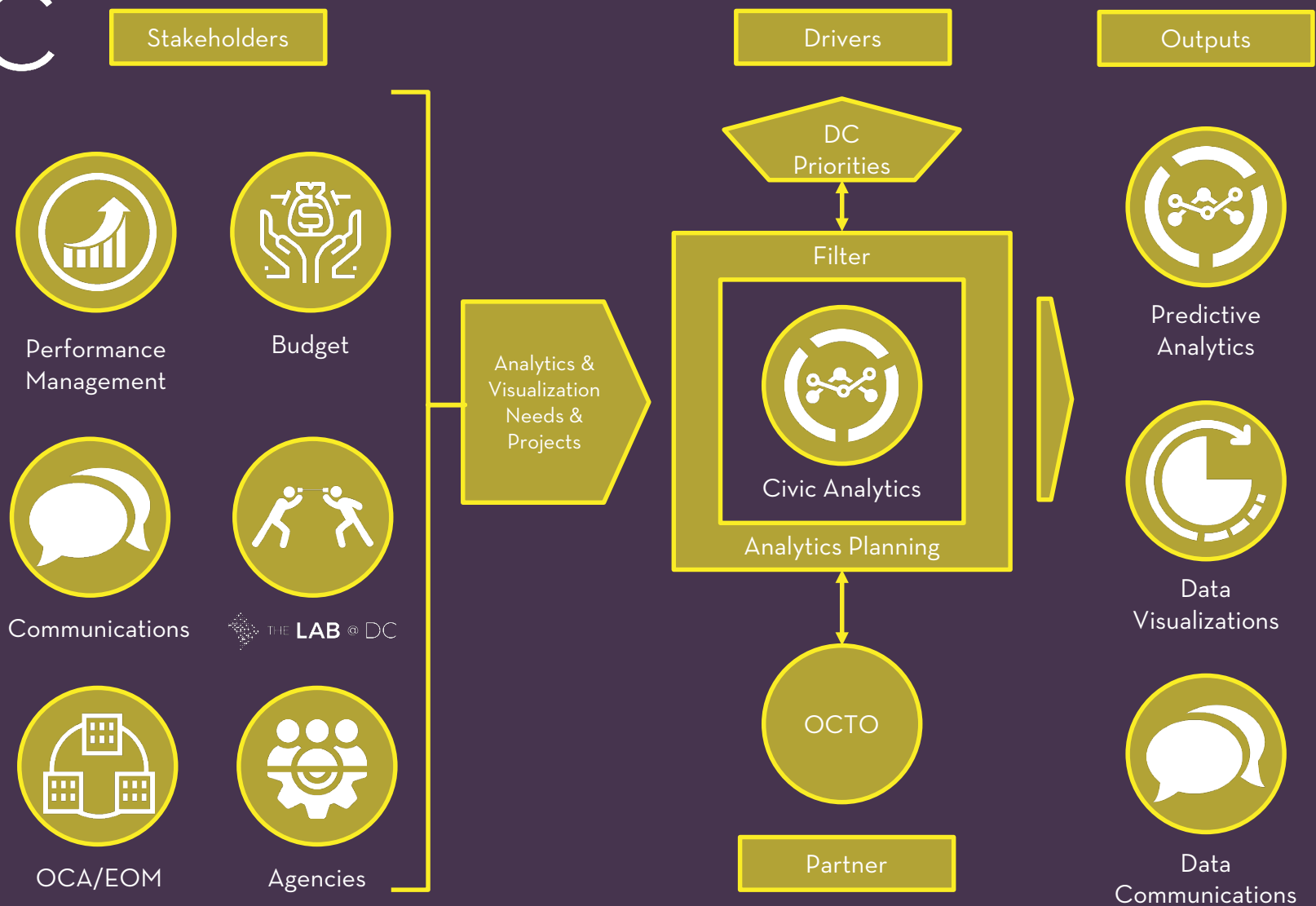
Working with DCHR & OCTO to develop a program to increase the data analytics skills of DC GOV workforce. Seek grant funding to develop a broader program to benefit Workforce, K-12, UDC, Project Empower, Seniors



Data Analytics Strategy & Evangelism

OCA Analytics planning process and active coordination with OCTO, Budget, Lab and agencies to drive win/win analytics.

Operating Framework



Functions



Doing

- Partnering with OCTO to shape data infrastructure to facilitate analytics
- Exploring large datasets to look for patterns, trends and insights.
- Developing sophisticated models applying decision sciences to District problems.
- Promoting analytics across the organization



Templating

- Working with stakeholders to develop methods to operationalize predictive analytics and visualizations.
- Deploying templates to empower decision-makers & subject matter experts



Communicating

- Using visualizations to communicate insight to decision-makers and the public.
- Fostering data-driven conversations and outcomes

Resourcing

LAYING FOUNDATION
 THROUGH FY 2018 & 19



Matrix Resources
 During planning phase work with helpers and interested people in OCA* on discrete activities to lay the foundation for this new competency

BUILDING
 FY 2020 - 2023



Grant Funding
 To enable team & technological solutions build and broader integration with agencies

or

Budget Funding
 To enable team & build with some integration with agencies

POTENTIAL TEAM ROLES

- Team Leader
- Data Scientist
 - Predictive Analytics Expert
 - Data Analyst
 - Visualization Expert
 - Data Communications expert
 - Graphic Designer
 - Subject matter expert/ agency relationship manager

Projected Timeline

LAYING FOUNDATION
THROUGH END FY 2018

- **Assess needs and develop service model**
- **Develop an Operating Statement & Plan**
- **Finalize & deploy**
 - Mayor's Interactive Dashboard
 - Budget Dashboards
 - DC Priorities website
 - Public Dashboard
- **Develop grant concepts and form grant committee**
- **Intra agency data sharing project**

FY 2019

- **Define and implement Analytics Planning Process**
- **Produce 2 to 3 predictive analytics proofs of concepts**
- **Test data communications concepts**
- **Finalize grant target list, prepare grant proposal and begin writing**
- **Complete Intra agency data sharing project**
- **Form inter-government Analytics Network**
- **Resource Planning & Submit Grant**

FY 2020

- **Grant Award**
- **Build Team**
- **Full launch of program**
- **Expansion of analytics and visualization to collaboration with agencies**



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CDO ANNUAL REPORT RECOMMENDATIONS

<http://opendata.dc.gov/pages/cdo-annual-recommendations>

Barney Krucoff
Interim Chief Technology Officer
Office of the Chief Technology Officer



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Move EDI and CDO Report Deadline to the Monday of Sunshine Week

It is recommended that the Mayor of the District of Columbia update the Data Policy to change the annual due date for the EDI and CDO report from November 1 to the Monday of **Sunshine Week**. "Sunshine Week is a national initiative spearheaded by the American Society of News Editors to educate the public about the importance of open government and the dangers of excessive and unnecessary secrecy. It was established in March 2005 with funding from the John S. and James L. Knight Foundation. Sunshine Week occurs each year in mid-March, coinciding with James Madison's birthday and National Freedom of Information Day on the 16th." It is simply fortuitous that the initial EDI and report are being published March 11, 2018, the start of Sunshine Week 2018. Nevertheless, the goals of Sunshine Week and of the Data Policy closely align, and Sunshine Week activities offer significant opportunities to call attention to the District's progress on open governance.

In addition to this, the current report date of November 1 means that the EDI will coincide with many District reports that are due at the end of the fiscal year. There are also many personnel, procurement, and financial actions due during the same time. Moving the EDI deadline to mid-March will mean that the EDI will not conflict with the other priorities facing District managers.

Finally, having just completed the initial inventory, it is too soon for agencies to revisit their work for November 1, 2018. The data inventory can be beneficial to agencies, but only if it is not too burdensome.





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Adopt EDI Participation as a Key Performance Indicator for All Agencies

The Office of the City Administrator should develop Key Performance Indicators (KPIs) that encourage agency participation in the EDI:

- City-wide: total number of datasets logged in the EDI.
- City-wide total number of datasets classified as Level-0; total number of datasets posted on the online data portal.
- Each agency: number of datasets in the inventory.
- Each agency: total number of datasets classified as Level-0; total number of datasets posted on the online data portal.





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Adopt Reasonable and Uniform Retention Policy for Email

Currently the District of Columbia does not have a retention schedule for email. Absent a policy, OCTO stores all email for all agencies indefinitely. Currently, OCTO stores more than 293 terabytes of email and attached documents. The oldest email in OCTO's collection is from 1998. This results in two problems:

- Email storage must be spread among multiple servers, and searching for old emails is cumbersome. When District agencies fail to meet legislated requirements for processing FOIA requests, slow email searches often constitute a large portion of the delay.
- Storing that much email is expensive, and costs continue to mount.

Therefore, the Mayor should adopt a reasonable email retention policy that requires email be stored for a fixed period of time. Ideally, the Mayor can also adopt a uniform standard that applies to all agencies and types of email content. A uniform standard can be cost effectively administered.





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Encourage Independent Agency Participation in the Enterprise Dataset Inventory

The current Data Policy is a Mayor's Order and therefore cannot be enforced for independent agencies. During this first EDI, 95.7% of mayoral agencies participated, including all large agencies, but only 24.2% of independent agencies participated. It is therefore recommended that OCTO do more to encourage participation. This should include seeking support from Deputy Mayors. If that fails, seeking legislation would be an option.





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Legislation to Clarify FOIA-Exempt Critical Infrastructure Information

During the course of the EDI, it became clear that multiple agencies have enterprise datasets that they believe contain "critical infrastructure information" and should not be publicly released. The District's exemptions to FOIA, D.C. Official Code §2-534, does not define "critical infrastructure." It does exempt "Any critical infrastructure information or plans that contain critical infrastructure information for the critical infrastructures of companies that are regulated by the Public Service Commission of the District of Columbia." Other DC agencies that clearly have critical infrastructure information, including DGS, DDOT, OCTO, and OUC, are not covered by the exemption. It is therefore recommended that D.C. Official Code §2-534 be amended to clearly define and exempt critical infrastructure information.





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DATA REPORT

Mario Field

Data Curation Program Manager
Office of the Chief Technology Officer



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DATA POSTINGS - UPDATES

- *Adopt-A-Block*
- *American Community Survey*
- *Bridge Line*
- Building Permit (2009 -2011)
- Business Improvement District
- Charter School
- Commission of Fine Arts Review Area
- DC Property
- *Felony Arrest and Crime*
- Fire Station
- Fitness Center
- Heliport
- Historic Preservation Trust Fund
- HIV/AIDS Clinic
- Hub Zone
- *Juvenile Arrest*
- Library
- Leaking Underground Storage Tank
- Main Street
- Military Area
- Moving Violation
- Notary Public
- *Parking Meter*
- Public School
- Public School - Closed
- Public School - Next Year
- Public School Summer
- School Garden
- *Shotspotter*
- *Stop and Frisk*
- Summer Crime Initiative Area
- Summer Camp
- Supermarket Tax Credit Zone
- Traffic Volume (2010 - 2016)
- University Area
- Underground Storage Tank



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DATA POSTINGS - WHAT'S NEXT

- DVD Product Archive
- Cooling Center
- DC Property
- Opioid Center
- Parking Violation
- Planimetric - Archive
- Public Housing
- Summer Event



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OPEN DISCUSSION 😊

