

# Interagency Data Team

May 24, 2021

<https://octo.dc.gov/page/interagency-data-team>



# Agenda

## Welcome, News & Updates

**Michael Bentivegna (OCTO)**

**Program Manager Data Visualization & Analysis**

## DC Demographics Hub & Overview of 2020 Census & Redistricting

**Jamie Chandler (OP)**

**Data Visualization Analyst**

**Travis Pate (OP)**

**Demographic Specialist**

## How 2020 Census & Redistricting Data Update in DC GIS

**Barney Krucoff (OCTO)**

**Chief Data Officer**

## Data Report

**Matthew Crossett (OCTO)**

**Interim Program Manager Data Curation &  
Governance**

# Business Intelligence

Tableau System Versions,  
Planned Upgrades &  
Site Administrators Meeting



- **Internal Production**
  - Version 2020.4.2
- **Public Production**
  - Version 2020.4.2
  - 13 Agencies embed ~ 95 Tableau Reports/Dashboards into 20 public-facing websites
  - Automatic Scripts

- **Test/Dev**
  - Version 2021.1.1
  - Secure Auth
- **Site Administrator Quarterly Meet**
  - June 24th 2-3:30

# Business Intelligence

MicroStrategy System  
Versions, Planned Upgrades  
& Stake Holder Meeting



## • Production Server

- Version 2020 Update 2
- Deploying new physical servers
- Upgrade to Version 2021 Planned for June 2021

## • Lower Environment

- Version 2020 Update 2
- Enterprise/Self Service
- Deploying physical IS server for Development

## • Public/Sharepoint

- COVID-19 public dashboard
- <https://coronavirus.dc.gov/page/coronavirus-data>

## • Stake Holders Meeting

- June 29th 2:00-4:00 pm

# Geographic Information Systems

DC GIS System Versions,  
Planned Upgrades & Data  
Highlights



- **ArcGIS Server Production**
  - Successful upgrade to 10.8.1 for Maps2 and Roads and Hwys
- **ArcGIS Portal**
  - Successful Update to Version 10.8.1 on 4/23/21
- **Esri GeoEvent**
  - Internal Version 10.7.1
  - External Version 10.7.1
  - Upgrade to 10.8.1 coming soon
  - Integrated with Data Lake

- **Annual Ortho & Planimetric**
  - Flight completed in one lift on March 11th
  - Data by Sept/Oct
- **Pictometry Aerial Imagery**
  - Flown 100% began Jan 2021
  - Data will be available via <https://explorer.pictometry.com/login.php> in late May (login in request)
- **Vaccination Sites**
  - <https://coronavirus-data-dcgis.hub.arcgis.com>

# Big Data & Data Integration

System Versions, Planned Upgrades & Administrators



## Data in DC

- **Mobility Data**
  - Over 13 Billion Records, Multiple Providers
- **Replica**
  - User Interface and Raw Data
  - DC Region Model Available
  - Accounts Available!
- **DDOT Digital Visitor Parking Permits**
  - TOPS
  - DCRA
  - DC Health
  - DMV
  - OCFO
  - Open Data

## • Cloudera Platform Upgrade

- Enhanced Security
- Easier Kerberos Authentication
- Apache Spark 2.x

## • Data Lake

- Docs for R-Studio, Excel, PowerBI
- More at <https://octo.in.dc.gov/node/47271>

## • Data Anonymization



# User Groups

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## GIS User Group

- June 17th, TBA (Your presentation here?)
- Meetings via WebEx
- Contact [Eva.Reid@dc.gov](mailto:Eva.Reid@dc.gov)
- [Join the Group](#)

## Data Science @ DC

- June 2021
- Meetings via Teams
- Contact [Tomash.Bukowiecki1@dc.gov](mailto:Tomash.Bukowiecki1@dc.gov)



# Training Virtual Tableau



<https://octo.in.dc.gov/service/tableau-training-courses>

- **Introductory Prep Builder**

- June 23
- July 20

- **Introductory Desktop**

- June 1-2
- July 13-14
- August 3-4

- **Intermediate Desktop**

- June 29-30
- August 10-11



# Training Virtual MicroStrategy



<https://octo.in.dc.gov/service/microstrategy-introductory-training>

- **Introductory Class**
  - May 25 (Full)
  - June 22 (Only 4 seats left!)
- **Intermediate Class**
  - Coming Summer 2021
- **Architect & Developer Class**
  - By invitation only, based on agency need
  - Next date early summer 2021

# Training Geographic Information Systems



Please submit an information request for more information. All courses require ArcGIS Online Access and/or ArcGIS Pro locally.

- [Info Request Form](#)

<https://octo.in.dc.gov/service/enroll-gis-training>

- **DC Government GIS Fundamentals**
  - [June 16, July 7, August 4](#)
- **DC Government Learning Paths available via ESRI Training Portal**
  - Employees with ArcGIS Online access
- **DC GIS Learning Paths**
  - [DC Government: ArcGIS Online Fundamentals](#)
  - [DC Government: ArcGIS Pro Fundamentals](#)
  - [DC Government: Migrate to ArcGIS Pro](#) (for current ArcGIS Desktop users)
  - [DC Government: ArcGIS API for Python Fundamentals](#)
  - [DC Government: Esri Hub Fundamentals](#)





# OP Demographic Data Hub Demo & 2020 Census and Redistricting Overview

Presenters: Jamie Chandler & Travis Pate

# OP Demographic Data Hub



- Website is a complete revamp of DC Data Viz.
- Created using ESRI tools: Data Hub, Arc GIS Online, Business Analyst & Experience Builder
- Development partnership with OCTO & ESRI & DAV Team
- Took several months to create websites
- Content focuses on ACS & Census data
- Primary audience is DC government Agencies, researchers, students and Residents.

The screenshot shows the website's navigation bar with links for DC Data Analysis & Visualization, Home, Profiles, Maps, Data, Library, and FAQs. Below the navigation is a header with the title 'OP Demographic Data Hub' and subtitle 'Data Analysis & Visualization Resources'. A welcome message follows: 'Welcome to the Office of Planning Demographic Data Hub - your one-stop shop for data, analyses and resources about the District of Columbia.' The main content area is titled 'DC Demographic Data At A Glance' and features a table of key statistics.

Population (#)	Households (#)	Median Household Income (\$)	Public Transportation Use (%)
689,545	291,570	92,266	34.2
<small>2020 Census</small>	<small>ACS 2019</small>	<small>ACS 2019</small>	<small>ACS 2019</small>
Employer Establishments (#)	Poverty Rate (%)	Median Age (Years)	Median Rent (\$)
23,585	13.5	34.3	1,603
<small>CBP 2017</small>	<small>ACS 2019</small>	<small>ACS 2019</small>	<small>ACS 2019</small>

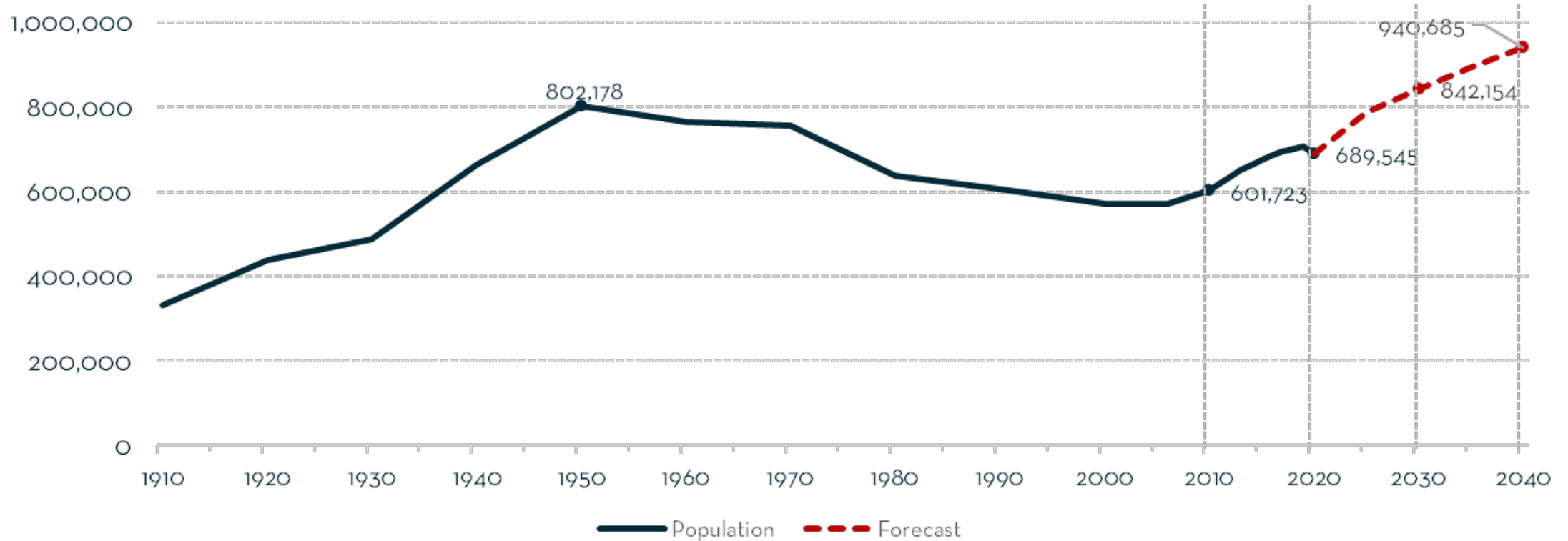
Below the table is a section titled 'Data Profiles' with the subtitle: 'Data Profiles draws from a comprehensive set of DC data to summarize some of the most frequently requested statistics on the District.'



# The District is Growing



## Washington, DC Population Trend: 1910 - 2040 Forecast



The District's population grew about 88,000 residents (14.6%) between 2010 and 2020 (from a population of 601,723 to 689,545, respectively).

# Redistricting



Redistricting data is the second main data product released after the apportionment data in each decennial census.

## What is Redistricting?

- Redistricting refers to the process by which census data are used to redraw the boundaries of electoral or legislative districts within states and local jurisdictions with the aim of giving residents a fair and equal share in the way they are governed. For the District of Columbia, this involves redrawing the boundaries of the eight wards, Advisory Neighborhood Commissions (ANCs), Single-Member Districts (SMDs) and Voting Precincts.
- The planned delivery date for the redistricting data is mid-August when a legacy data product (text format) will be delivered. This will be followed by a more detailed product (excel format) by September 30, 2021.



# The District is Growing

Each state can set its own standards for legislative redistricting but the most common criteria are:

- Compactness – extent to which a district’s geography and population is dispersed around its center
- Contiguity – a requirement that a district be in one piece, boundaries must touch each other
- Equal population
- Preservation of existing political communities
- Partisan fairness
- Racial fairness

## District of Columbia specific criteria:

- The District of Columbia Official Code 1-1-11.01 requires that the Council divide the District into 8 compact and contiguous election wards, each of which shall be approximately equal in population size.
- D.C. Code requires that the Wards fall within a range of plus-or-minus five percent of the average Ward population size, unless the deviation results from the limitations of census geography or from the promotion of a rational public policy, including but not limited to respect for the political geography of the District, the natural geography of the District, neighborhood cohesiveness, or the development of compact and contiguous districts.



# OP's Role in Redistricting



- Provide technical and analytical services necessary for redistricting by assisting with redistricting data from the U.S. Census Bureau and providing mapping services needed by the Redistricting Subcommittee;
- Oversee procurement and deployment of the web-based redistricting tool (ESRI's Redistricting), facilitate user log-in credentials, and liaise as needed with);
- Coordinate with ESRI to provide documentation, guidance, and remote custom training for district staff and the Redistricting Subcommittee; and
- Coordinate public feedback process and tool to ensure residents and stakeholders can provide feedback.

# 2020 Census & Redistricting Calendar



- Geographic products released – February 2021
  - Newly created 2020 census tracts, block groups, blocks, voting precincts
- Apportionment data released – April 2021
  - Total population, 18+ population
  - Data quality metrics
- Redistricting data to be released – Mid-August & September 2021
  - Legacy product (mid-August) and detailed product (September)
- New Wards – early 2022
- New ANCs and SMDs – mid-2022





# Live Demonstration of Hub Site

# Redistricting Geography Role Out

Barney Krucoff  
Chief Data Officer  
Office of the Chief Technology Officer

# Redistricting Geography Role Out

- When redistricting becomes law, dates will be set when new boundaries go into effect (early to mid 2022):
  - Wards
  - State Board of Education
  - Advisory Neighborhood Commissions
    - Single Member Districts
- **OCTO to-do** - On the appointed dates the Master Address Repository and GIS feature services will be updated. If you are connecting live to those services, you will have the latest data.
- **User to-do** - If you have stored data with old boundaries or based on old boundaries, you will have to decide how you want to handle that.



# Redistricting Service Naming/Publishing

- On the appointed dates the Master Address Repository and GIS feature services will be updated. If you are connecting live to those services, you will have the latest data.
  - Census geography will update with the same layer ID. The description of the current Tracts/Block Groups/Blocks will update to 2020. We will publish a new feature service with the 2010 geography for historical comparisons.
  - If you subscribe to Wards 2012 (layer ID-31) it will automatically point to the current 2022 Wards. A new Wards 2012 feature service will be created for historical comparisons. The same thing will happen for ANCs, SMDs and SBOE.
  - If you call the MAR, it will start to return the correct Census.../Ward/ANC/SMD on the correct day. We will publish new a feature service with address that changed Wards.
- If you have stored data with old boundaries or based on old boundaries, you will have to decide how you want to handle that in your system or reports.

# Data Report

Matthew Crossett  
Interim Data Curation Program Manager  
Office of the Chief Technology Officer

# New Datasets

- **Building Energy Performance**
- **COVID-19 Vaccine Demographics**
- **COVID-19 Vaccine Coverage by Ward**
- **COVID-19 Vaccine Coverage by Neighborhood**
- **COVID-19 Outbreaks**
- **Cumulative FOIA Report Data FY2020**
- **DHS Shelter Vaccine Summary**
- **Digital Visitors Parking Permit (coming soon)**
- **Enterprise Dataset Inventory - 2021**
- **Families First**
- **Liquor License Cancellations**
- **2020 Traffic Volume**

All available at  
<https://opendata.dc.gov>

Published since last meeting,  
3/9/2021

Contributors:

DMV  
DOEE  
ABRA  
DDOT  
DC Health  
DHS  
CFSA



# Updated Datasets

- **Ambulatory Surgical Centers**
- **Building Energy Benchmarks**
- **Capital Bike Share**
- **DC Property**
- **DC Main Street Corridors**
- **Felony Sentences**
- **Fire Stations**
- **Hospitals**
- **Juvenile Arrests**
- **Liquor Licenses**
- **Metro Bus stops and Routes**
- **Moving Violation**
- **Parking Violation**
- **Roadway Intersection Approach**
- **Roadway Block and SubBlock**
- **Shot Spotter Gun Shots**
- **Small Business Robust Retail Grant**
- **Stop Incidents**
- **Washington DC Economic Partnership Development Report**

All available at <https://opendata.dc.gov>

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# Thank You for Joining

For notes and presentation material visit:

<https://octo.dc.gov/page/interagency-data-team>