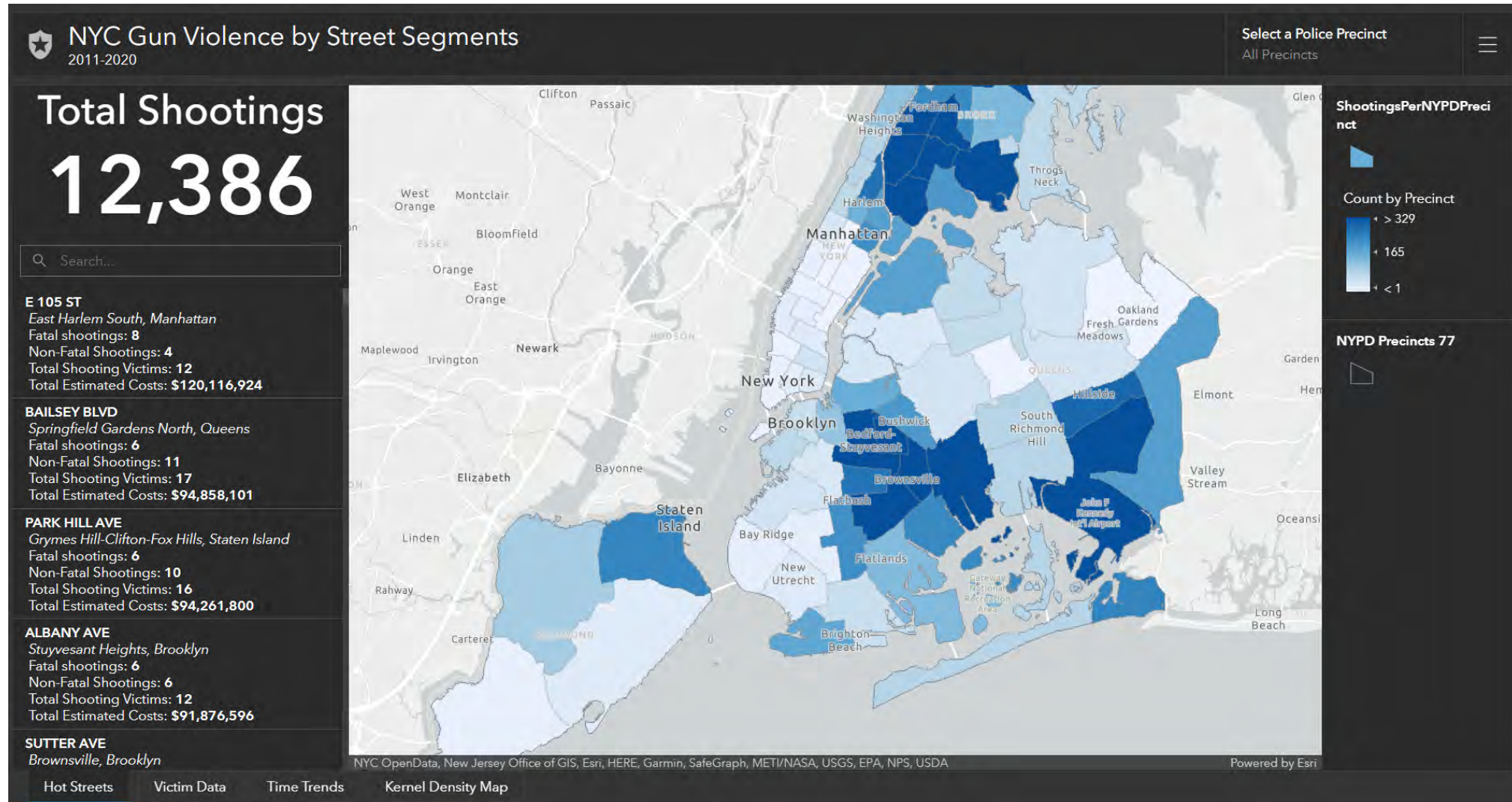# How to Create Your Own Crime ArcGIS Gun Violence Dashboard
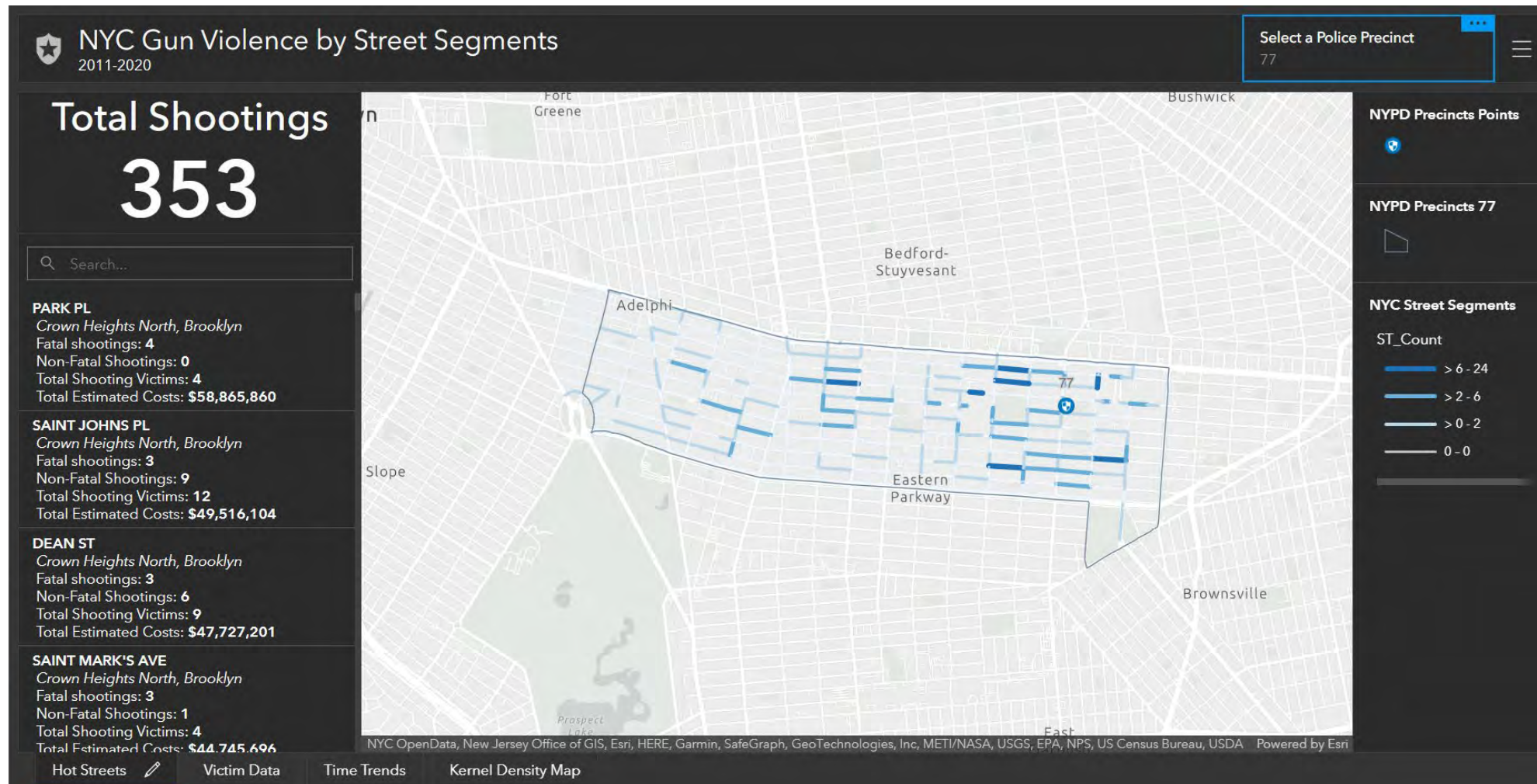
Dr. Christopher Herrmann, John Jay College of Criminal Justice

Hayley Miller, Esri Sr. Solution Engineer

Introduction to the NYC Gun Violence Dashboards project

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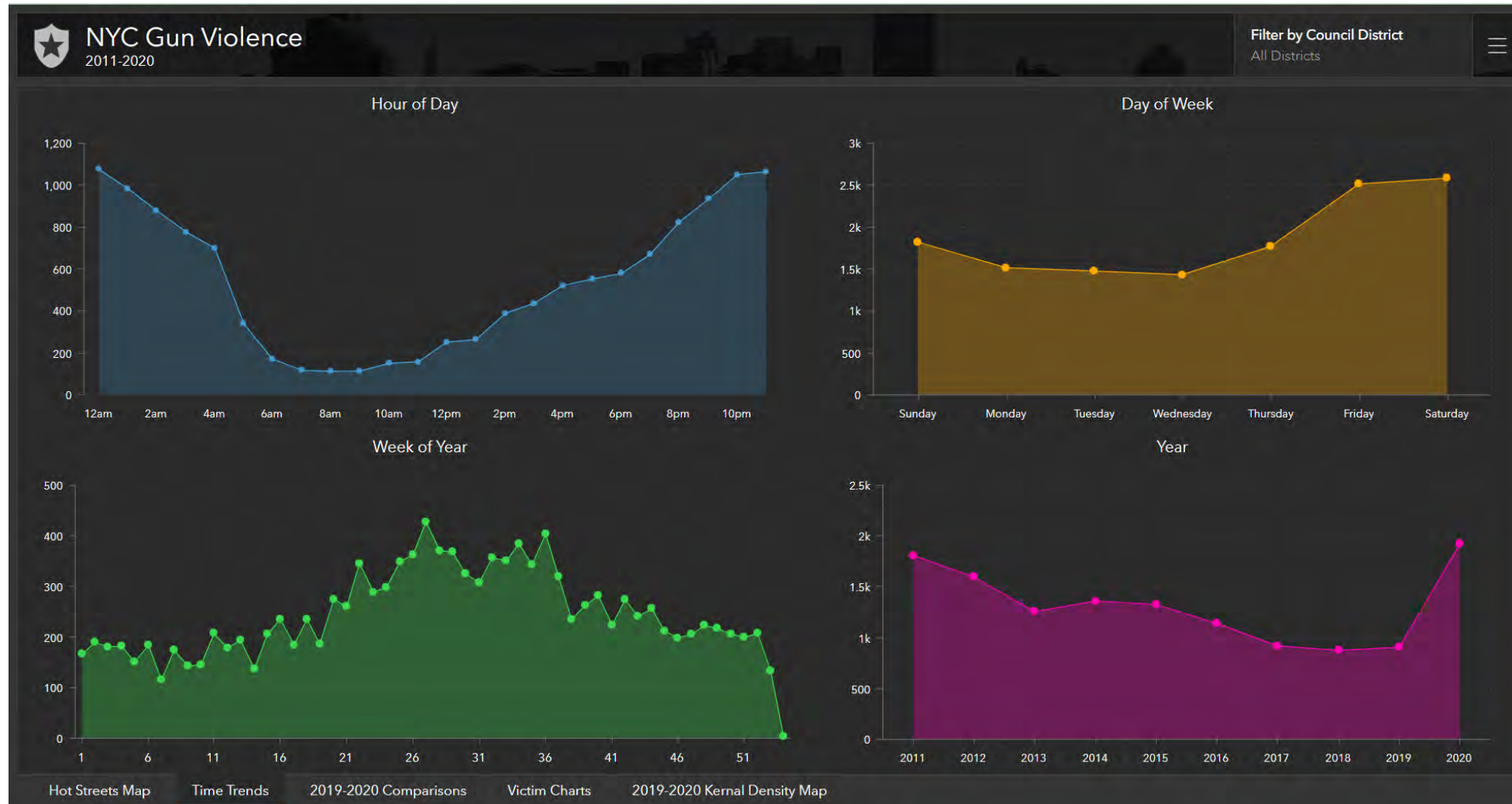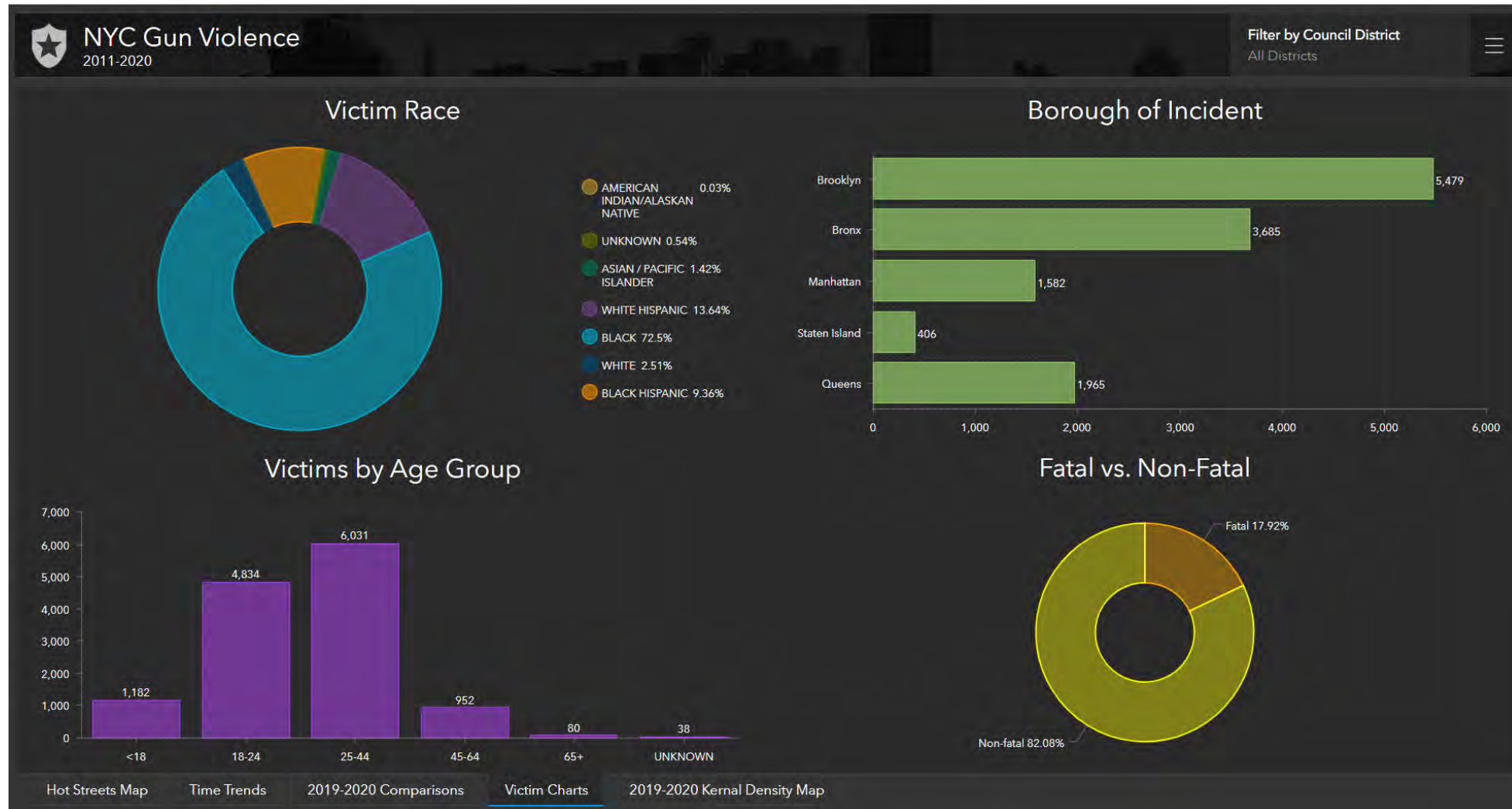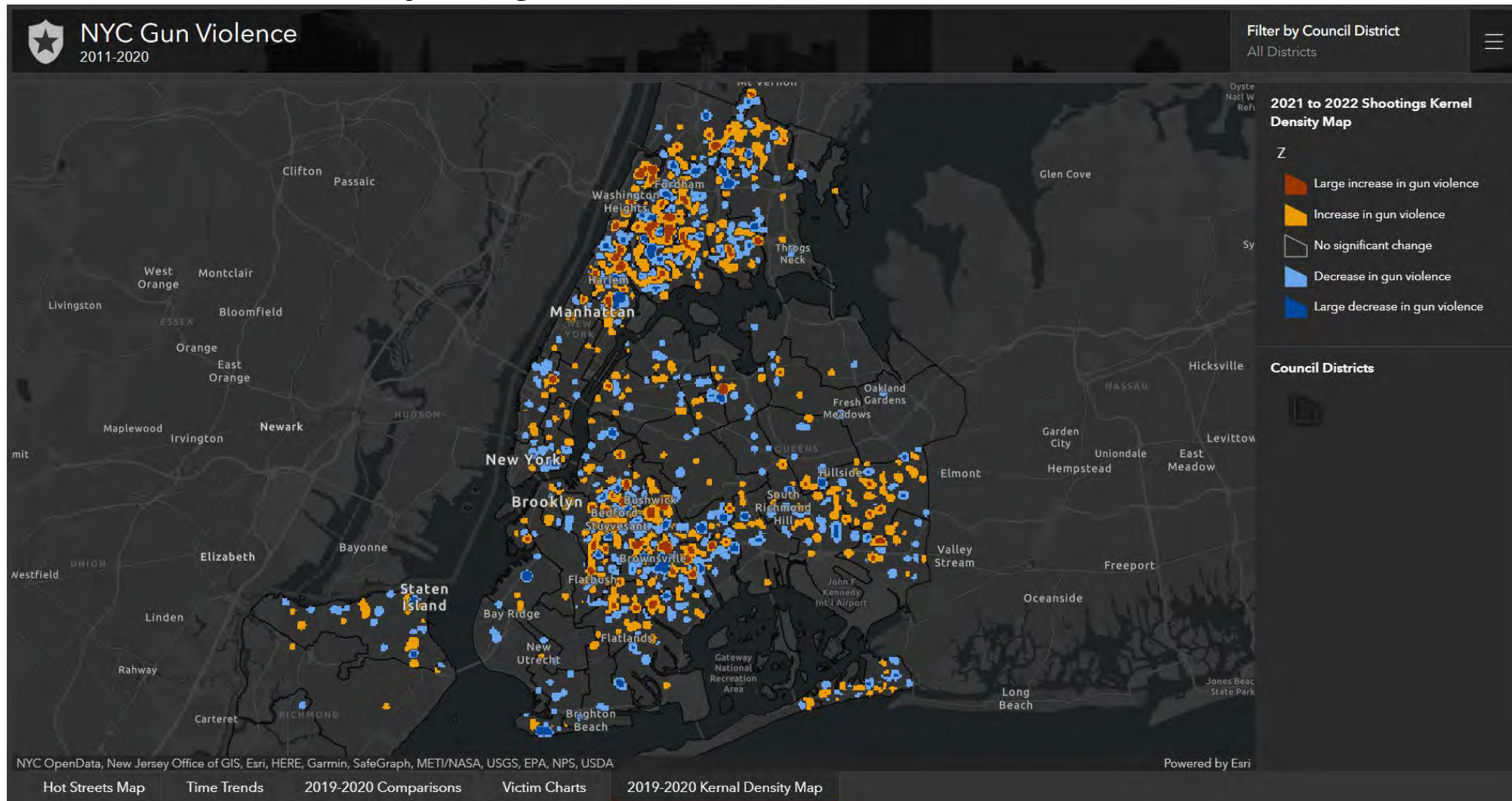
Introduction to the NYC Gun Violence Dashboards project

# Introduction to the NYC Gun Violence Dashboards project

Introduction to the NYC Gun Violence Dashboards project

ArcGIS Dashboards

- Monitor assets, events, or activities for 'at-a-glance' decision making
  - Provides key insights to your data on a single screen
  - Includes many data visualization elements
- Configurable user experience, no programming
- Web browser-based app
  - Works on desktops, tablets, and smart phones
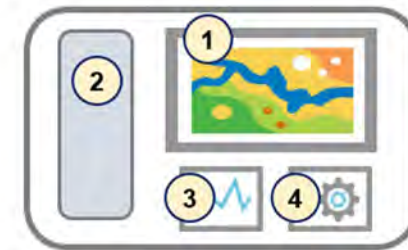- Integrated with ArcGIS Online and ArcGIS Enterprise (10.6 and later)
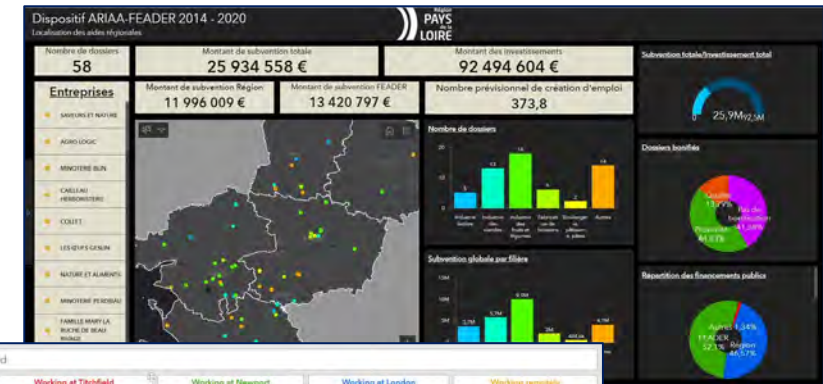
Dashboard Item

- Brings data together in a single display
- Composed of elements
  - E.g., map, list, chart, etc.
- Works with many ArcGIS data source
  - Online content and web services
  - Field collection data
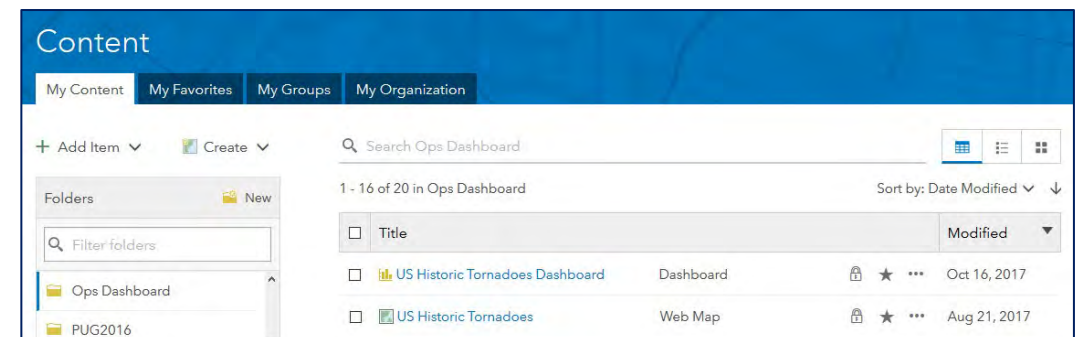 - Sensor data, social media, GPS locations, etc.
 - Real-time data

Dashboard item

Elements:
1. Map
2. List
3. Serial Chart
4. Gauge

Content

My Content | My Favorites | My Groups | My Organization

+ Add Item ∨   Create ∨   Search Ops Dashboard

Folders   New

Filter folders

Ops Dashboard
PUG2016

1 - 16 of 20 in Ops Dashboard   Sort by: Date Modified ∨ ↓

	Title					Modified ▼
☐	US Historic Tornadoes Dashboard	Dashboard	🔒	★	⋯	Oct 16, 2017
☐	US Historic Tornadoes	Web Map	🔒	★	⋯	Aug 21, 2017

Type of Dashboard Elements

- Header
- Filters
- Map and Map Legend
- Serial chart
- Pie chart
- Indicator
- Gauge
- List
- Details
- Rich text
- Embedded Content
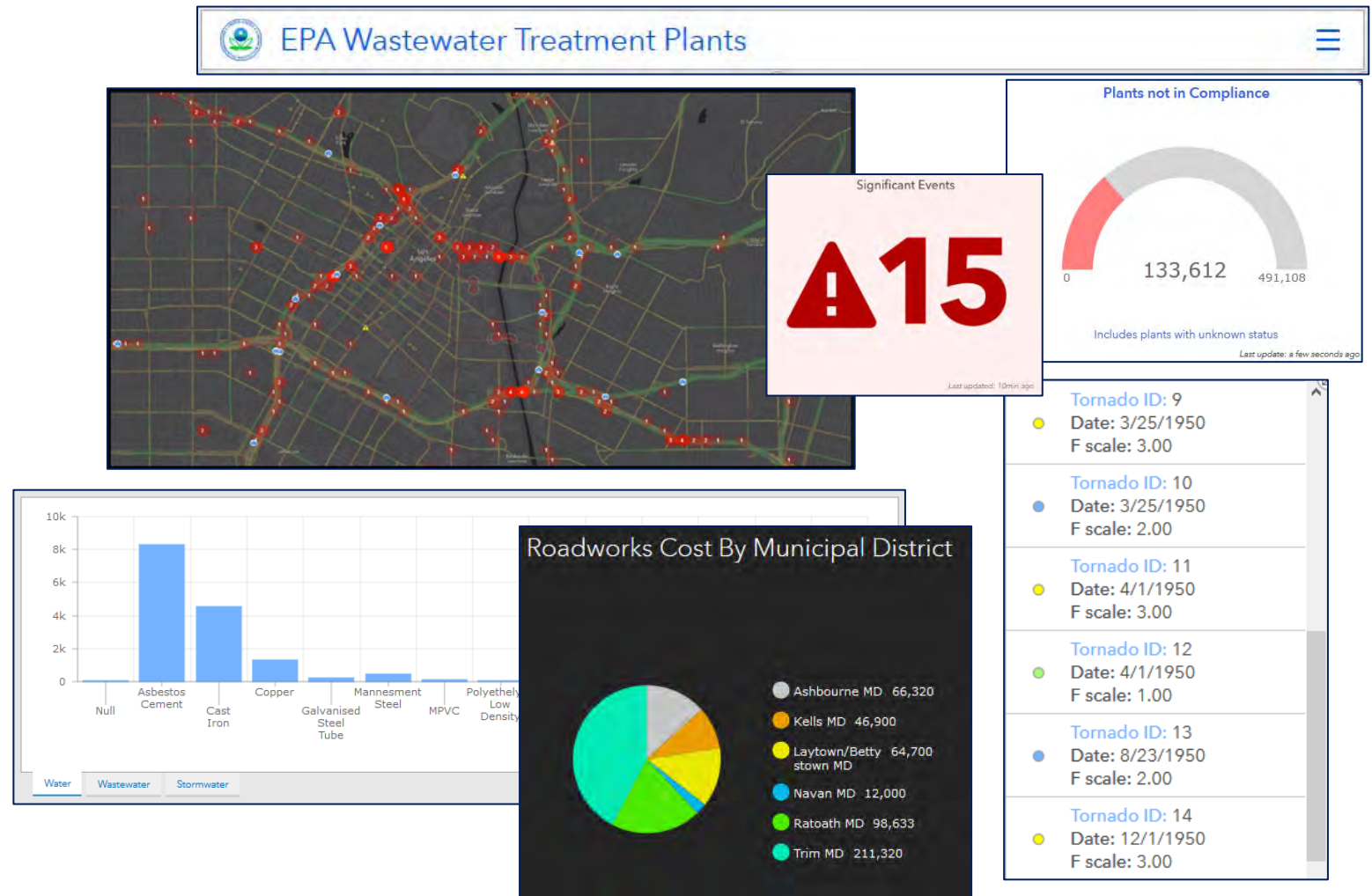
Dashboards - Patterns of Use
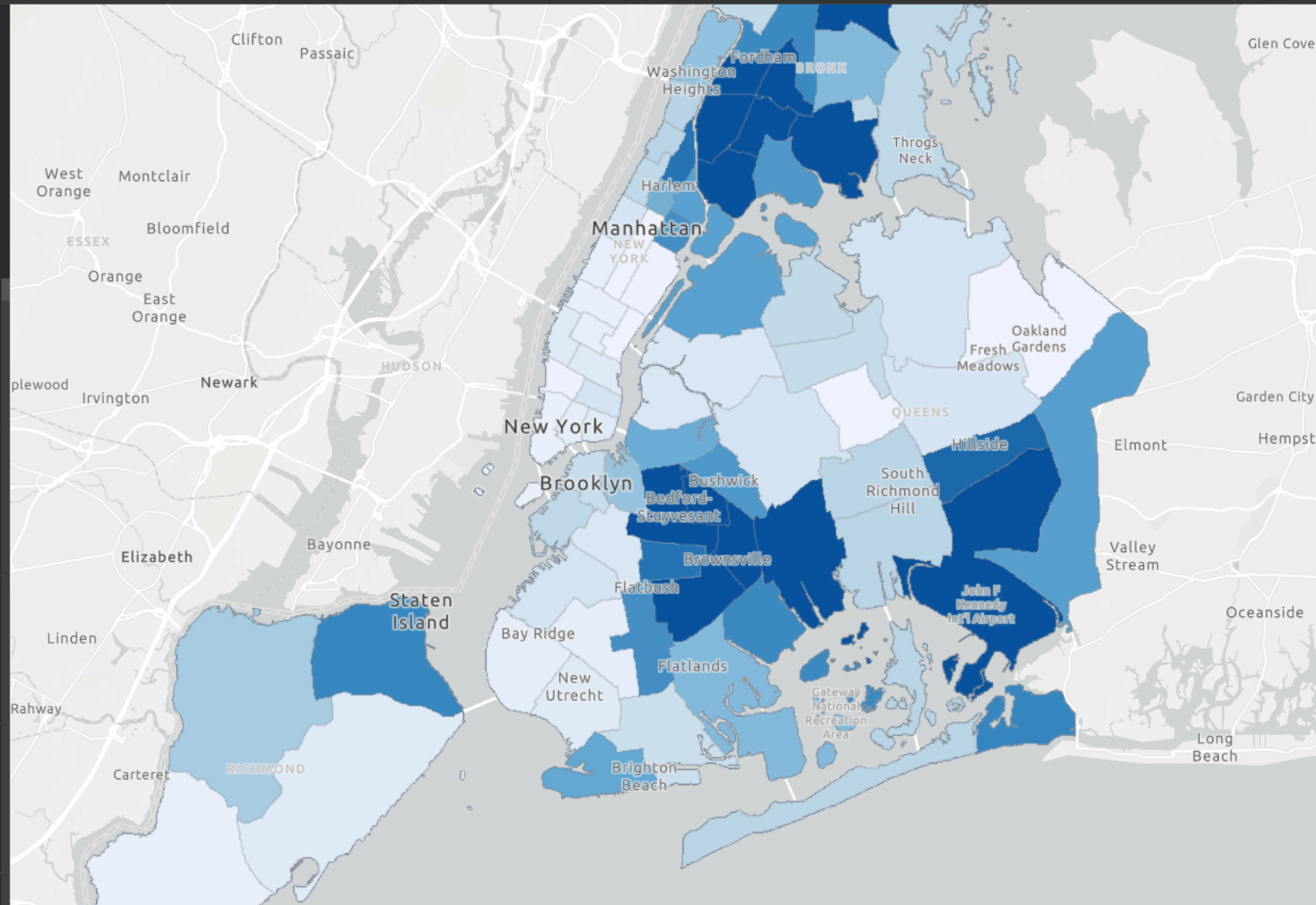
Total Shootings

12,386

Search...

E 105 ST
East Harlem South, Manhattan
Fatal shootings: **8**
Non-Fatal Shootings: **4**
Total Shooting Victims: **12**
Total Estimated Costs: **$120,116,924**

BAILSEY BLVD
Springfield Gardens North, Queens
Fatal shootings: **6**
Non-Fatal Shootings: **11**
Total Shooting Victims: **17**
Total Estimated Costs: **$94,858,101**

PARK HILL AVE
Grymes Hill-Clifton-Fox Hills, Staten Island
Fatal shootings: **6**
Non-Fatal Shootings: **10**
Total Shooting Victims: **16**
Total Estimated Costs: **$94,261,800**

ALBANY AVE
Stuyvesant Heights, Brooklyn
Fatal shootings: **6**
Non-Fatal Shootings: **6**
Total Shooting Victims: **12**
Total Estimated Costs: **$91,876,596**

SUTTER AVE
Brownsville, Brooklyn

ShootingsPerNYPDPrecinct

Count by Precinct

◄ > 329

◄ 165

◄ < 1

NYPD Precincts 77

NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA   Powered by Esri

| Hot Streets | Victim Data | Time Trends | Kernel Density Map |

Audience Types

Demo

How did we make it?

The Shooting Victim Data

- 12,386 victims between 2011-2020
- 6% of NYC streets contain 100% of shootings

RACE	GENDER	AGE		Fatal vs. Non-Fatal
• 73% Black	• 91% Male	<18	9%	18% 82%
• 23% Hispanic	• 9% Female	18-24	37%	
• 3% White		25-44	46%	
• 1% Asian		45-64	7%	
		65+	<1%	

City of New Berlin, WI

http://bit.ly/2YmkqHu

- Crime Statistics Dashboard
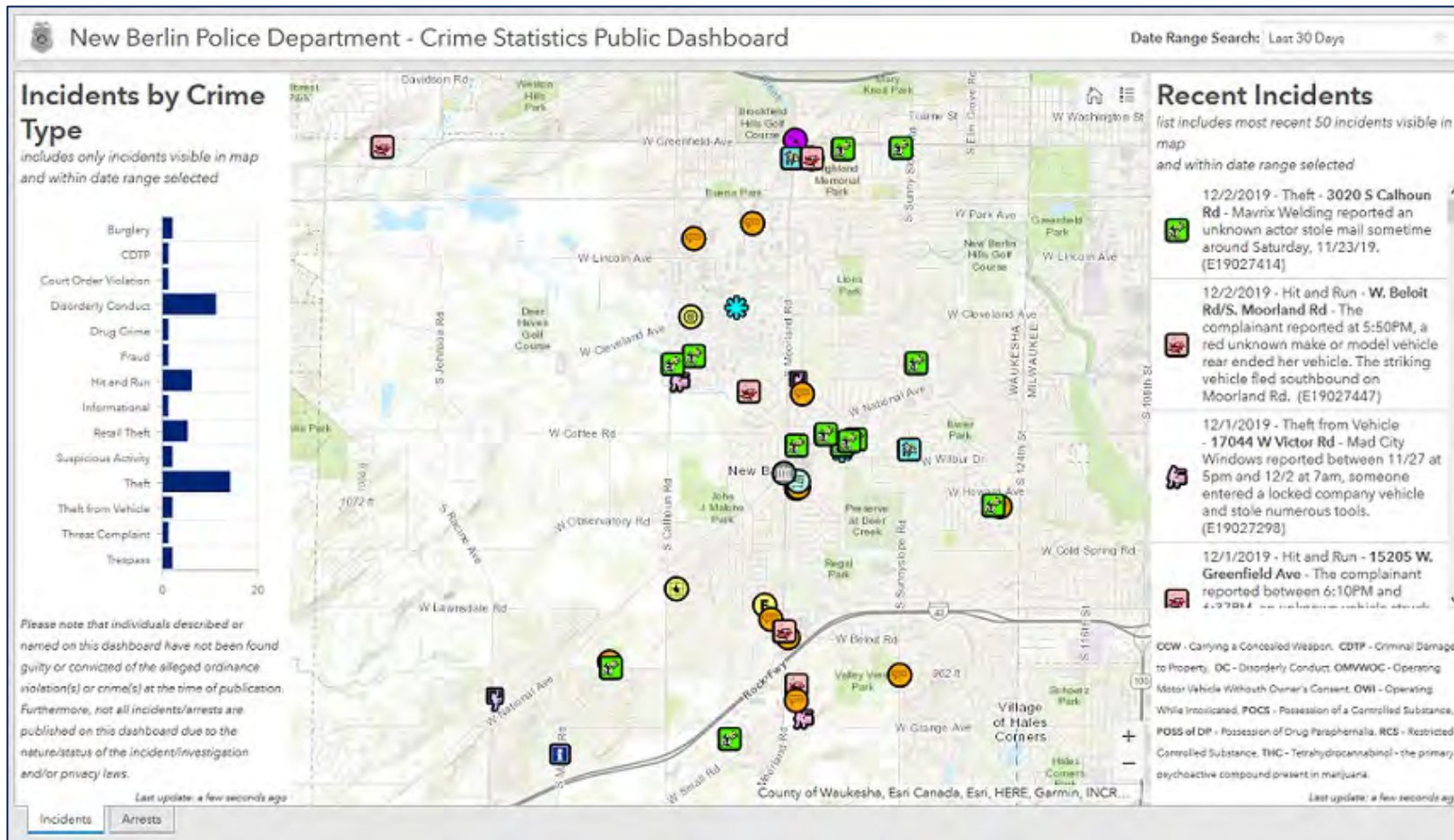
City of Tempe, AZ

- Opioid Abuse Probable EMS Call Dashboard
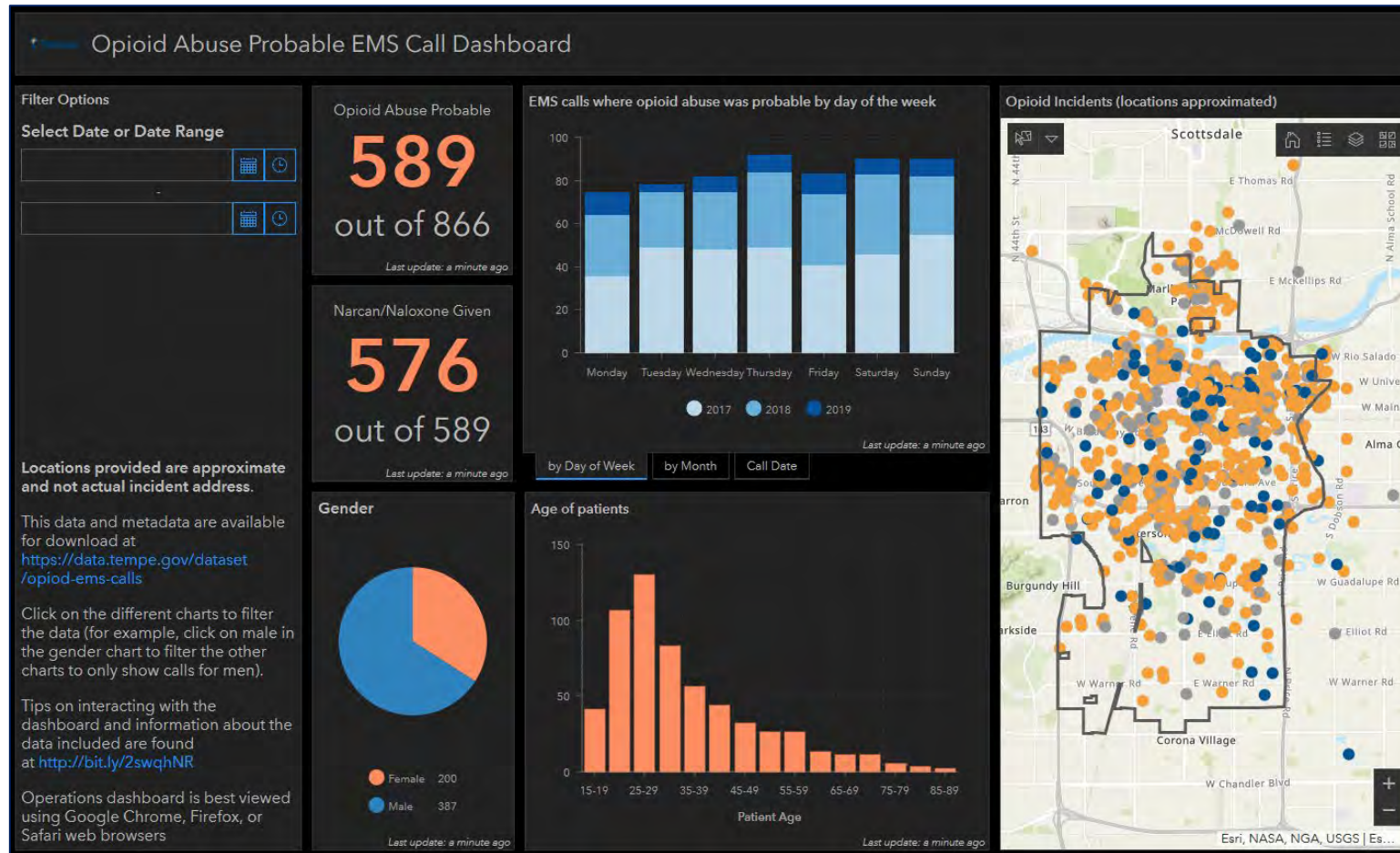
Stark County, OH

- Fatal Overdoses Dashboard
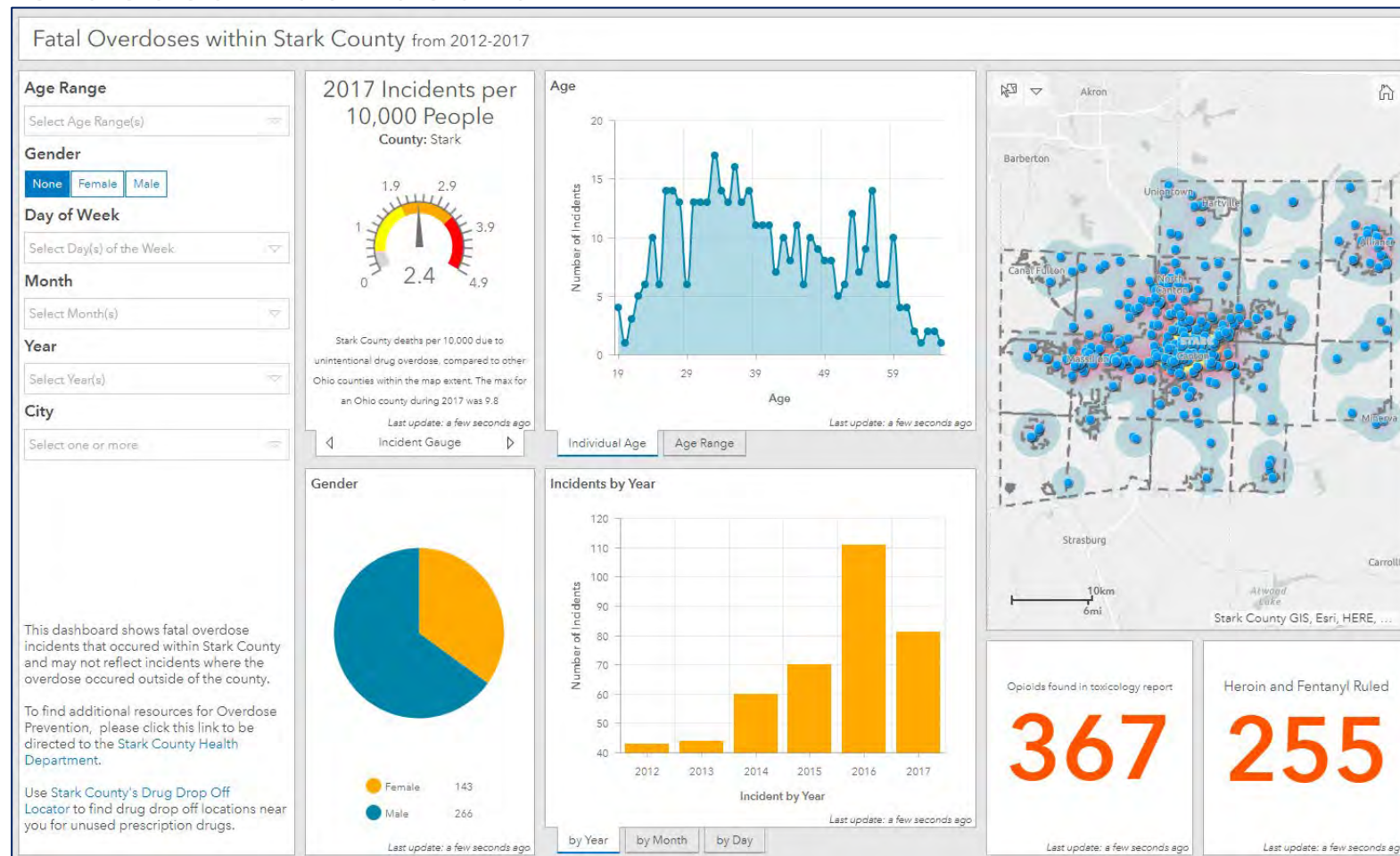
City of Vancouver Police, BC, Canada

p.ctx.ly/r/90w8

- GeoDASH Crime Statistics Dashboard
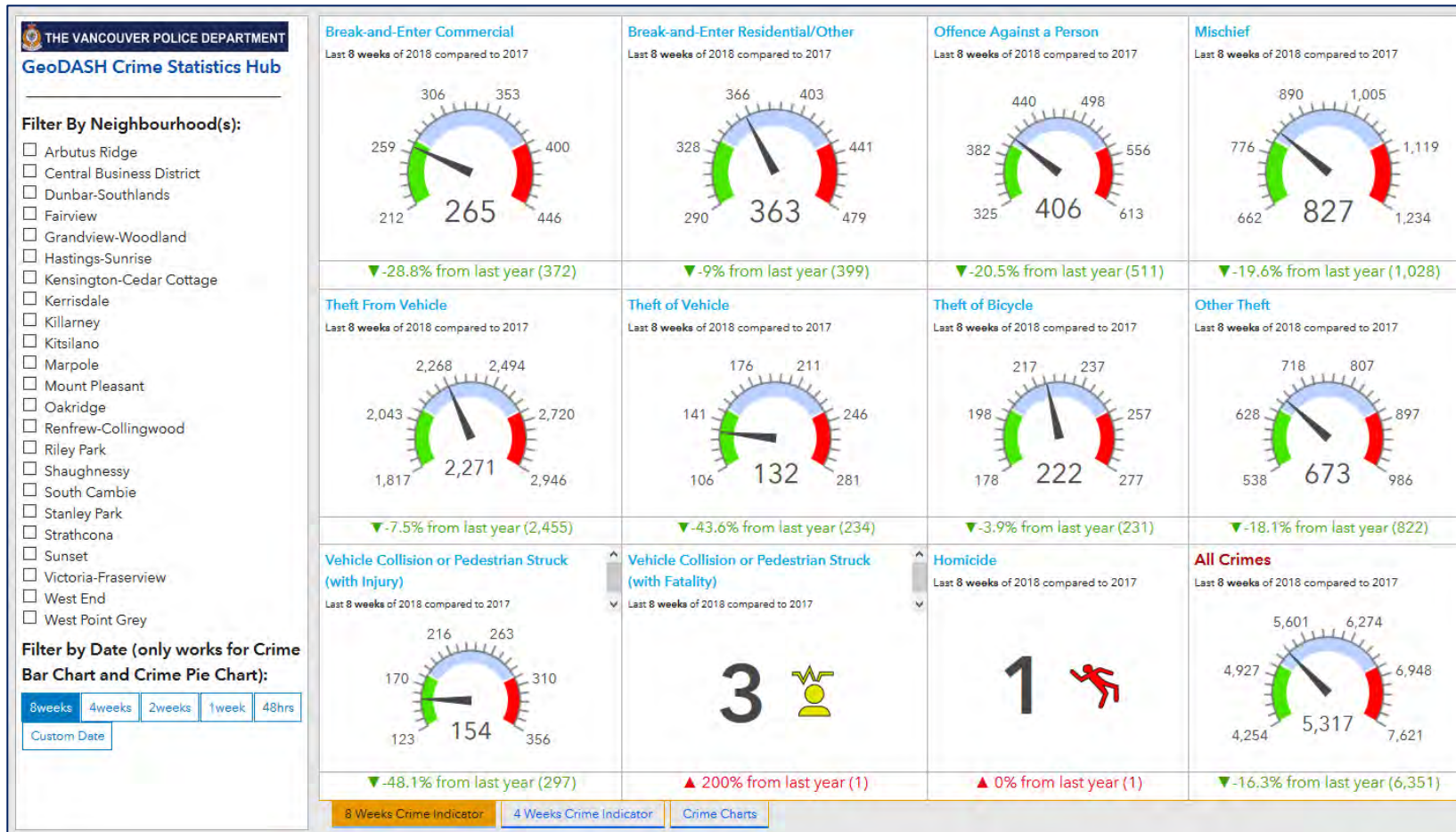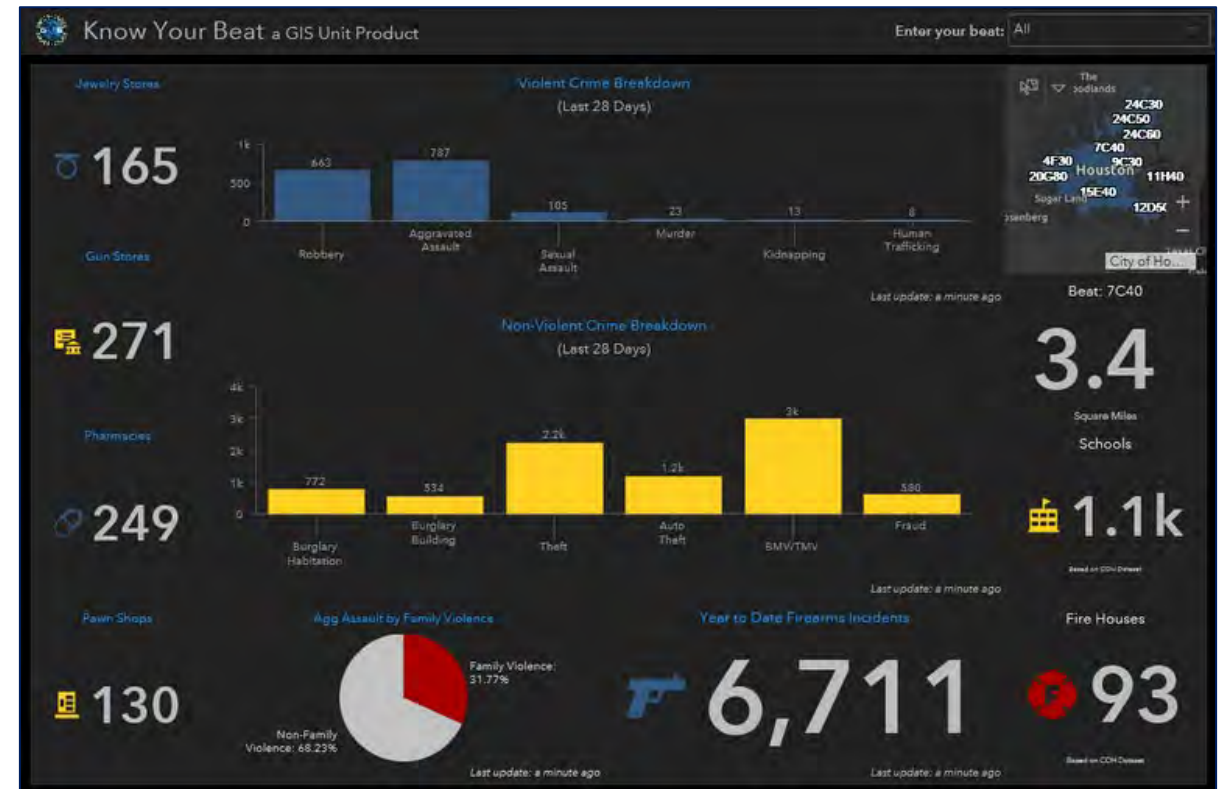
Police Dept - City of Houston, TX

http://bit.ly/37iVc0v

- Houston Police GIS Dept StoryMap

Arizona Dept of Emergency Management Agency

https://bit.ly/2J1fP5j

- Governor's Briefing Journal
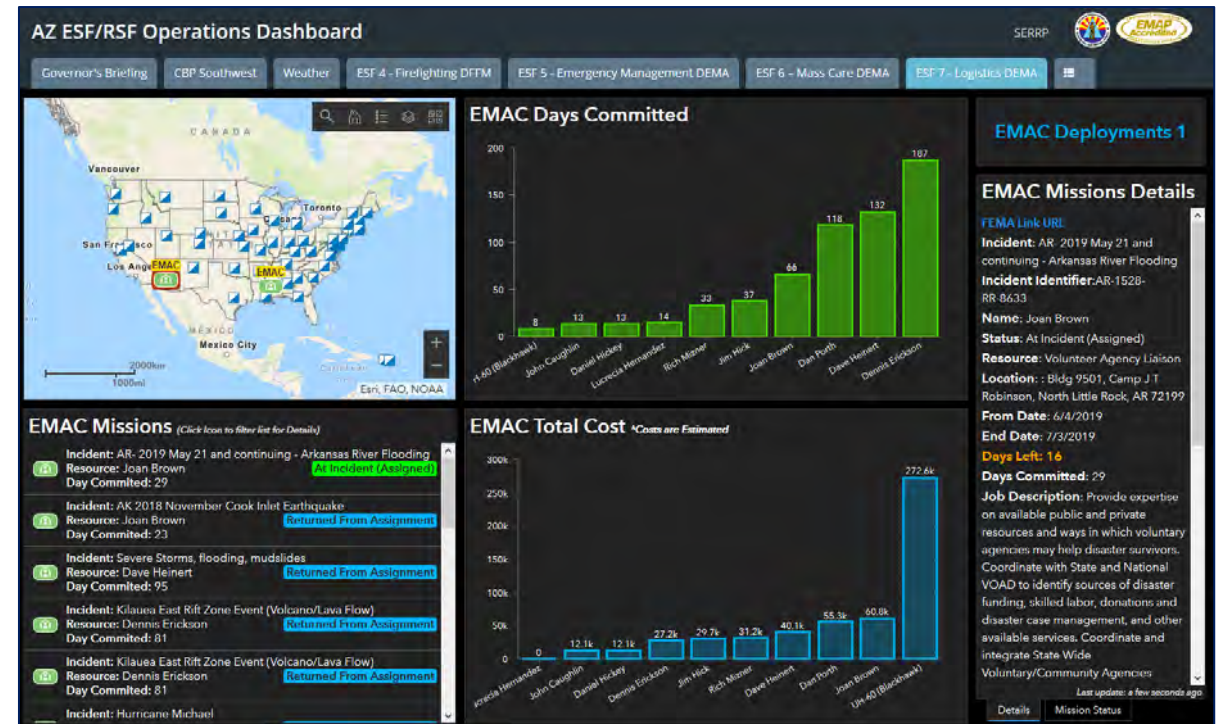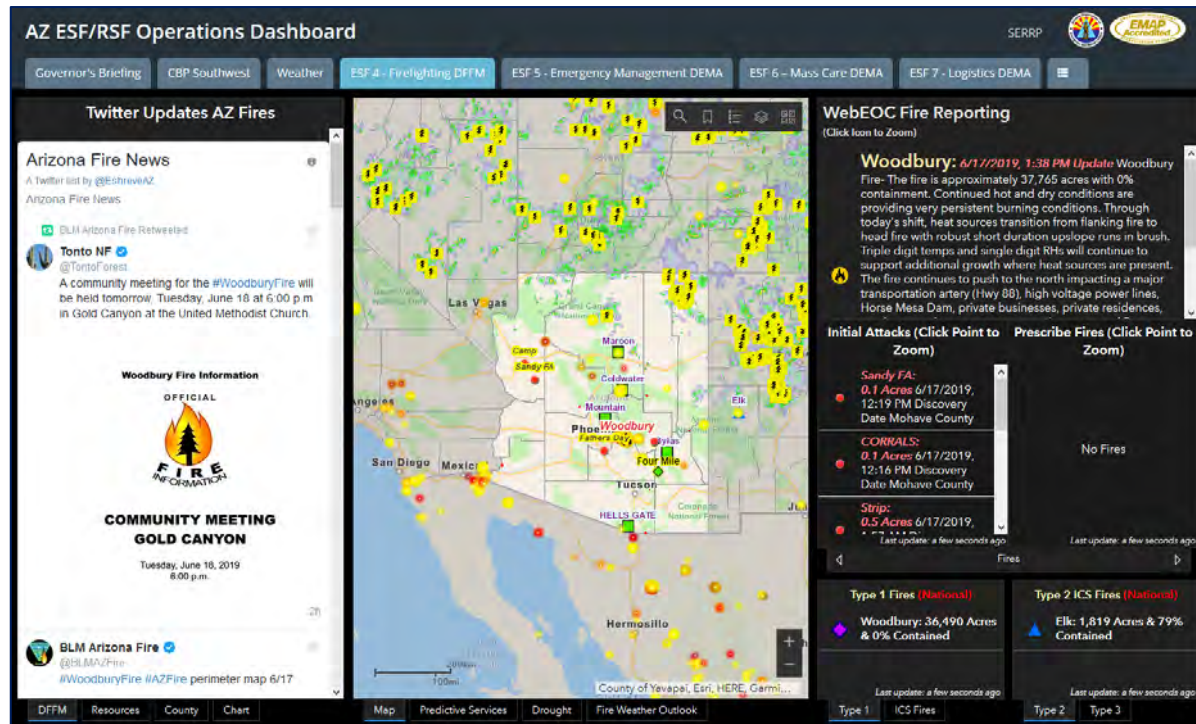
Dashboards bring data together

- ArcGIS platform:
  - Real-time data
    - Coordination of work across an organization
    - Sensor data, social media, GPS locations, etc.
  - Other data
    - GIS Server
    - Online content and services

- Dashboards present the data in intuitive/compelling ways

Field Apps

GIS Server

Online content / services

GeoEvent Server
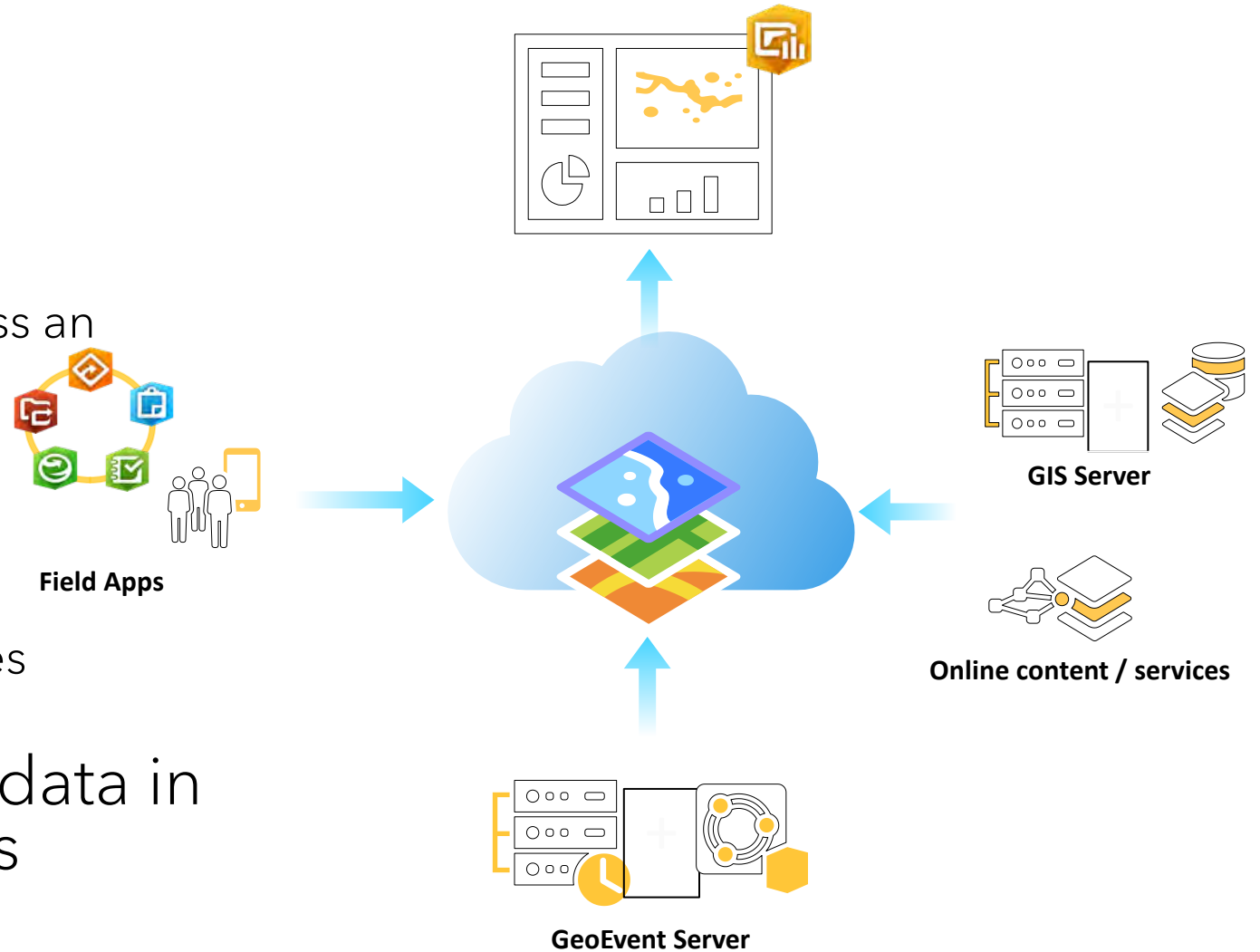
Thanks!

Hayley Miller

Esri Solution Engineer

hmiller@esri.com

Chris Herrmann

John Jay College

Crherrmann@gmail.com