Data For Criminal Justice

Rajendran Seetharaman, Sneha Wadhwa,
Anuj Anand, Dhruv Parekh (MSIM - 2018)

Sponsor: King County Prosecuting Attorney's Office

1 Background

The Prosecuting Attorney's Office prosecutes all felonies and their decisions have a life-changing impact on the citizens of King County. These decisions are based on experience but with minimal statistics. The project introduces the power of data to the field of justice by empowering the attorneys to see trends in criminal activity and enable them to bridge gaps between different cases based on the historical data collected from different law enforcement agencies.

2 Information Problem

The sponsor receives data from multiple law enforcement agencies, in different formats which require standardization for analysis. Agencies provide incomplete data and are skeptical towards the organization's move towards data driven decision making. The sponsor possesses prosecution data which is not integrated with other sources and fails to add value. Minimal analysis has been done, due to an overall lack of understanding about the potential of the data.
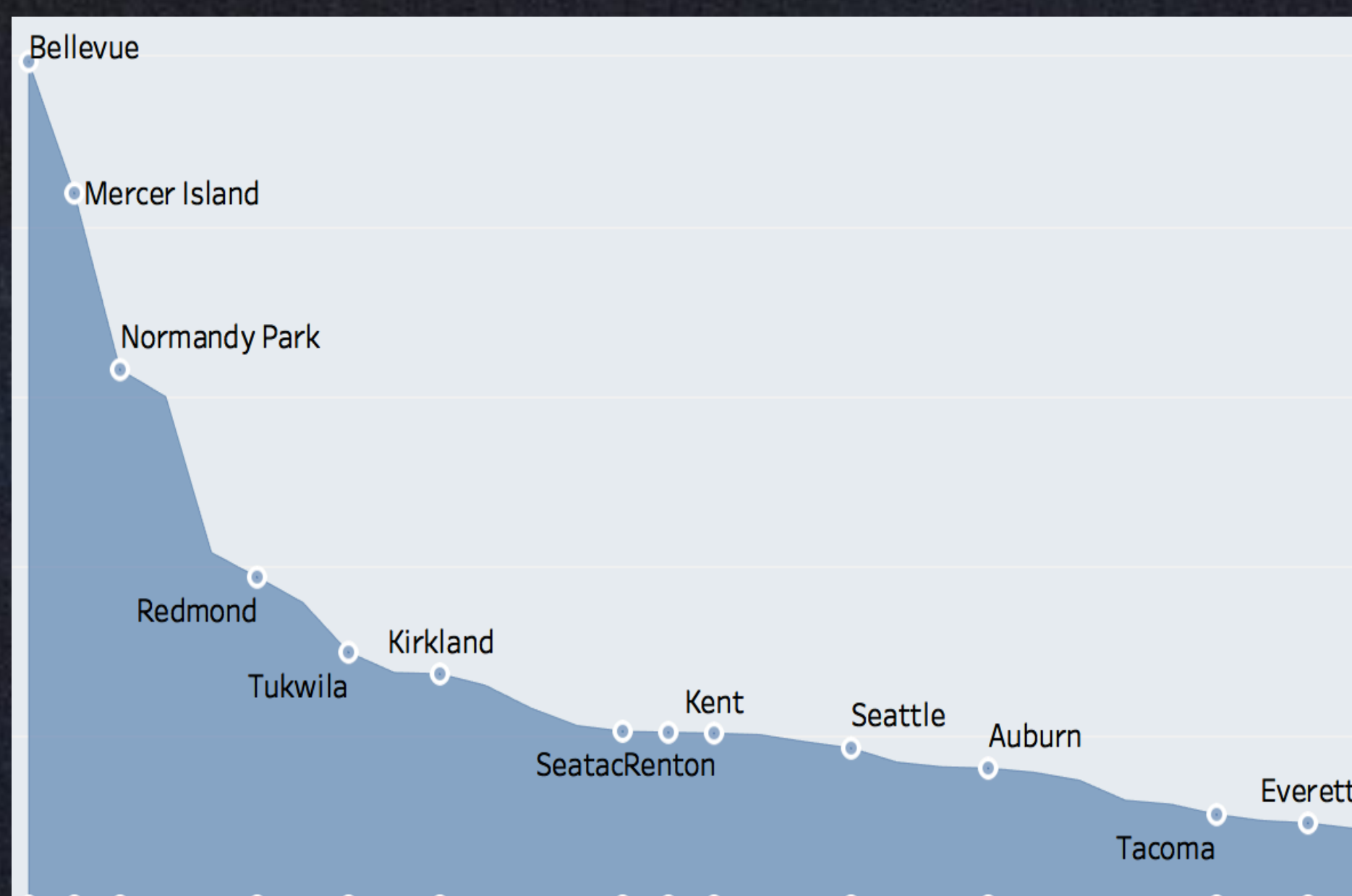
3 Results

Eight Tableau dashboards were developed to explore trends in firearms violence compared to other crimes. Further, the attorneys can analyze bullet casings to link different incidents and select an individual to track their Firearms Violence background. The sponsors can also audit key performance metrics of law enforcement agencies and courts which helps them improve their efficiency. The project was instrumental in improving data literacy at the Office.
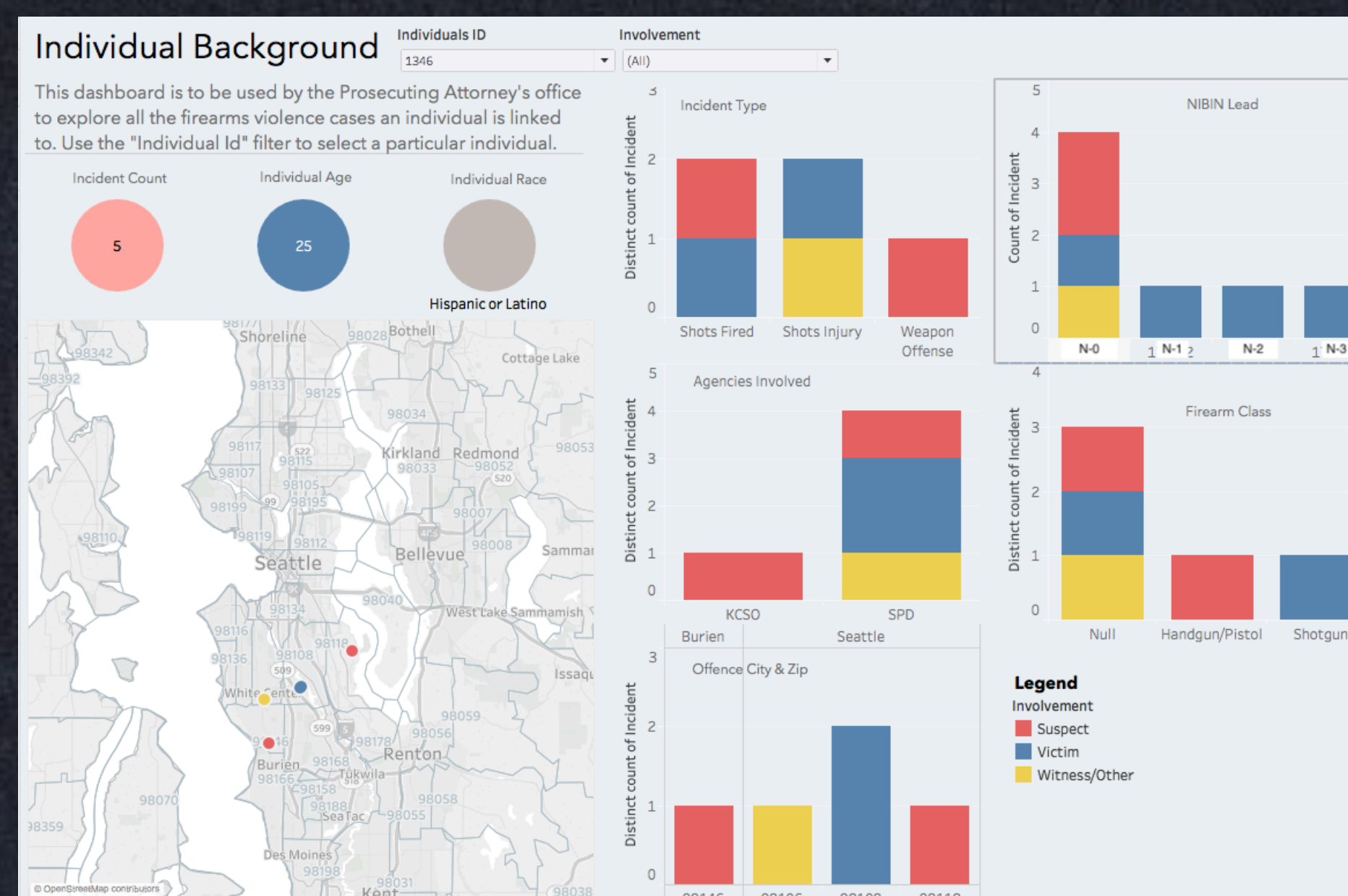
4 Impacts

The project encouraged a data-driven approach at the King County Prosecuting Attorney's Office and pushed for organization-wide analytics adoption. It helped attorneys understand key trends and relationship between cases thereby improving the process of dispensing justice. The project also aims to motivate other law enforcement agencies to share their firearms violence data with the Prosecuting Attorney's Office for improved crime analysis in King County.

Outcomes

One of the 12 areas of interest was to understand the performance of law enforcement agency was the average number of days taken to refer a case for every city.

The sponsor needed an interface to trace the Firearms Violence background of an individual. This helps the attorneys to prosecute felons based on their historical criminal activities.

Offense City	Shots Fired	Shots Property	Shots Injury	Shots Homicide	Weapon Offense	Found Casings	Test Fire
Seattle	1,054	473	424	91	39	7	3
Kent	118	73	48	20	9	1	1
Auburn	48	28	15	9	15		
Renton	55	13	25	4	10	1	
Federal Way	41	29	19	8	2	2	
Tukwila	29	13	12	1	11		
Burien	13	24	8	4	3		1
SeaTac	13	14	5	4	6		
Des Moines	14	3	1	2	9		
White Center	1	1	1	4	1		
Shoreline	3	1	2				
Pasco	3	1					
Redmond		1			2		
Tacoma		1			2		

The project aimed to provide attorneys with tools to implement targeted social reforms and improve police patrolling by understanding trends of criminal offenses by cities and zip codes.

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