INFO6210: Data Management and Database Design
Project Report (Tableau)

Group 15
Massachusetts Emergency Response System

By:

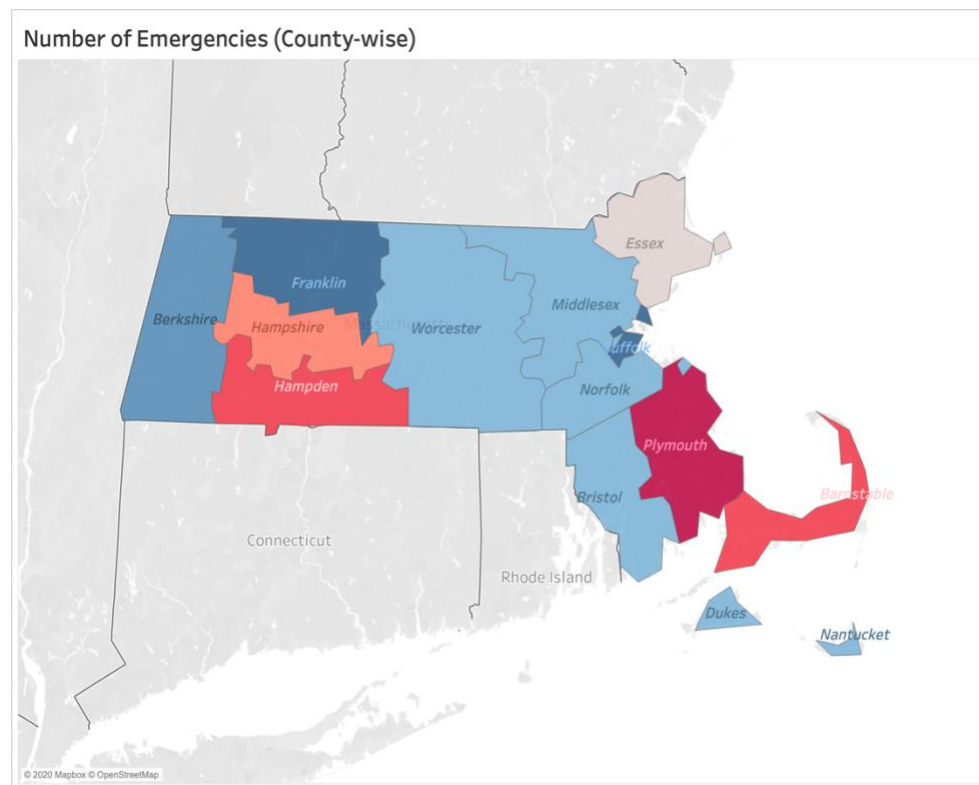Aviral Agrawal   Vaibhavi Khammar   Zichun Wang

Key Points to remember:
- The data stored in the database is randomly generated and does not reflect the actual emergency response behavior of Massachusetts federal, medical, and fire department.
- We established a live connection between Tableau and our database which means that all the changes that we do in our database will get reflected in our visualizations automatically.
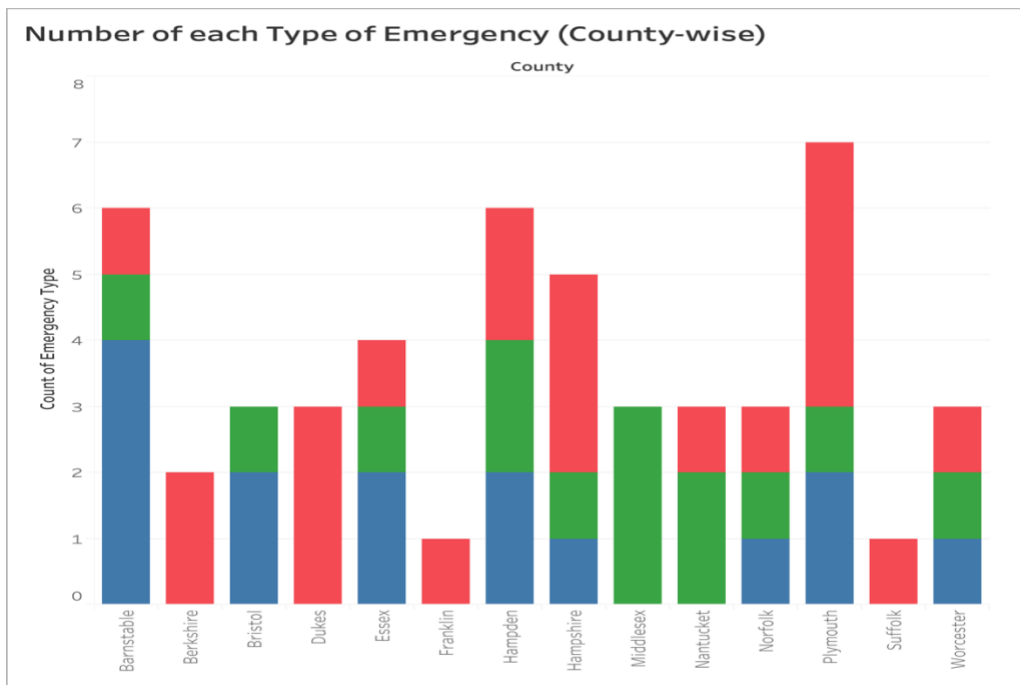
Dashboard 1:

In this dashboard, we have created 2 plots to show county wise count of emergencies that have occurred so far.

The plot on the left gives the map of Massachusetts divided into deferent counties. The color here represents the number of emergencies that have occurred so far in each county where darker shade of red gives higher number of emergencies and darker shade of blue gives the lesser number of emergencies.

The plot on the right gives the count of different types of emergencies that have occurred so far in different counties.
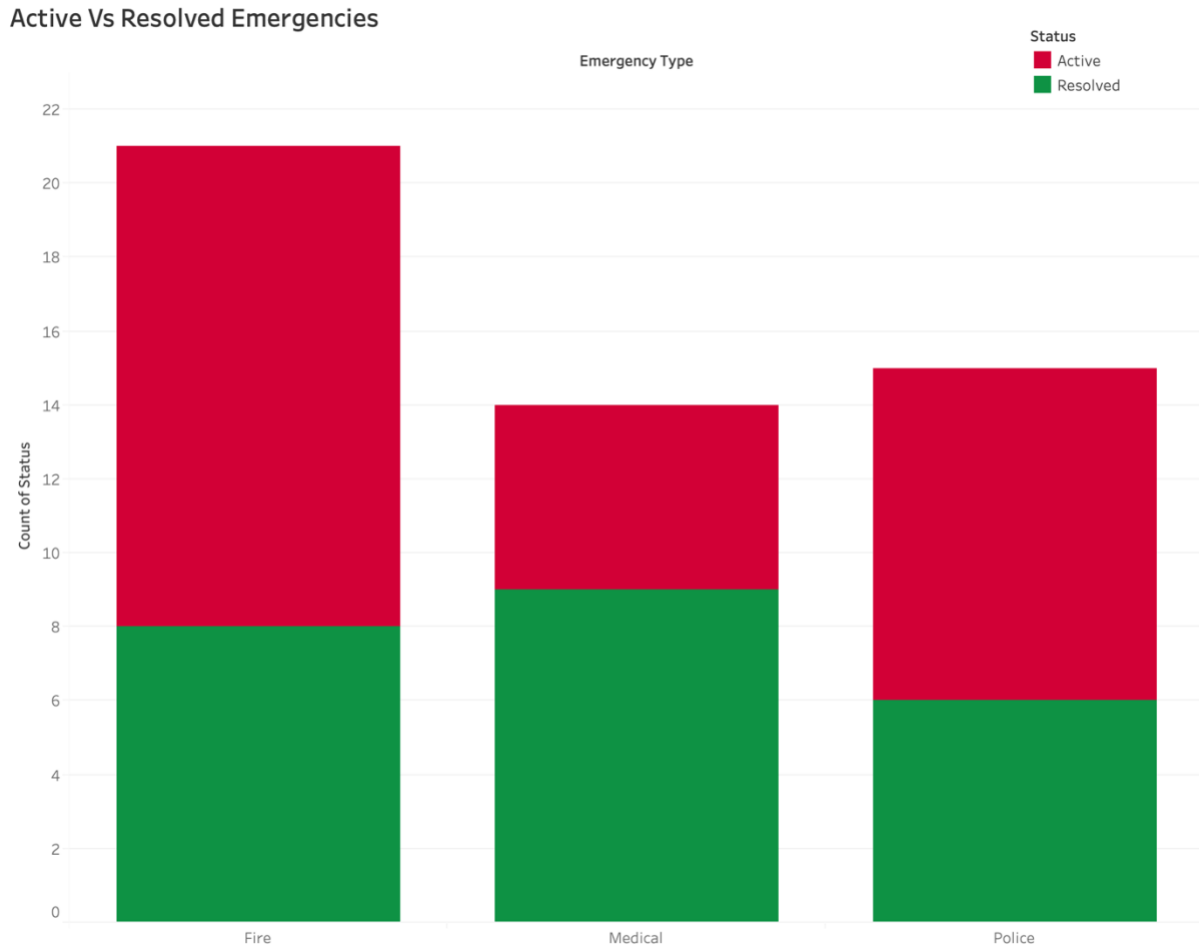
The red color gives the number of fire emergencies, green gives the number of Medical emergencies, and the blue gives the number of Police emergencies which have occurred so far in a given county.

Both the graphs can be used as a filter to highlight details of a particular county.

Dashboard 2:

In this dashboard, we have created a bar graph which gives us the count of active and resolved cases for each department. The red bar gives us the number of active cases and the green bar gives us the number of resolved cases for each department.

Active Vs Resolved Emergencies

As we can see, majority of the fire and police emergencies are active, and majority of medical emergencies are resolved.

Dashboard 3:

This dashboard gives us the vehicle details and the details of the officers assigned to them. It is divided into two parts:

Officer Details

Fire Officers

VID (FireO..	OID (FireOf..	LastName (Fi.. Ⓩ	FirstName (Fir..	Contact (FireOf..	FID (Fire..	Type Of Veh..	
V23508	OF02081	Weedall	Garvin	236-476-6989	F50336	Truck	
	OF29339	Scurman	Danny	743-220-8860	F29004	Truck	
	OF61175	Laurentino	Baron	635-197-0494	F09054	Truck	
	OF10291	Gaskin	Denney	511-216-9108	F50336	Truck	
	OF37250	Bernardoux	Ronni	739-356-2788	F93476	Truck	
V32244	OF73870	Swithenby	Inge	560-333-2302	F61701	Car	
	OF05781	Simonutti	Tobias	922-675-5899	F08927	Car	
	OF75659	Rotherham	Artie	394-182-5172	F14181	Car	
	OF65419	Giacoppoli	Felicdad	134-614-2802	F36066	Car	
V49762	OF79301	Stiegar	Georgie	722-548-9233	F78729	Car	
	OF45075	Searson	Roosevelt	700-795-6042	F97684	Car	

Medical Officers

VID (Medic..	OID	LastName (Me..	FirstName (..	Contact (Medic..	HID (Medic..	Type Of Veh..	
V01023	OH67197	Aldam	Corny	768-545-3662	H08529	Car	
	OH87924	Gelletly	Tobit	826-968-4632	H96358	Car	
V07117	OH01043	Sarsfield	Katherina	539-144-9947	H07687	Car	
	OH11453	Brandacci	Callida	719-683-4484	H32139	Car	
V07377	OH55934	Playfoot	Tannie	241-983-4083	H60660	Ambulance	
V13550	OH15139	Chetter	Mohandis	367-344-7368	H41348	Car	
	OH78431	Jeacock	Brenden	722-595-7178	H90512	Car	
V21994	OH73911	Humblestone	Florrie	642-347-7844	H17095	Ambulance	
V25273	OH16035	Collimore	Steward	589-117-3592	H70607	Car	
	OH98330	Dacchelle	Otho	305-693-9296	H70607	Car	

Police Officers

VID (Police..	OID (Police..	LastName (..	FirstName (..	Contact (Police..	PID (Police..	Type Of Vehicle	
V06018	OP66500	Dreakin	Rolland	229-694-9998	P75955	Car	
	OP99319	Somes	Cherilyn	761-292-8004	P61193	Car	
V06845	OP04315	St Ledger	Heath	442-952-7718	P74541	Car	
V16159	OP95975	Stoute	Madelon	404-455-8048	P93753	Car	
V16938	OP24527	Vyse	Carrissa	886-701-1121	P06404	Car	
V19861	OP23568	McMurtyr	Kenna	699-190-9457	P43965	Bus	
V22231	OP09622	Ivashinnikov	Dall	573-364-9662	P64645	Car	
	OP19676	Blakebrough	Abramo	717-346-2696	P30624	Car	
	OP21056	Putten	Doti	704-860-8431	P48280	Car	
	OP23136	Matteo	Halsey	305-132-9871	P48280	Car	

The plot above gives the details of the officers assigned to a particular vehicle. The information includes the OID, LastName, FirstName, Contact Number, Department ID and the type of Vehicle assigned. The colored bars give us an idea about the miles that a particular vehicle has covered during its service tenure. The darker the shade of red gives the higher mileage and the darker the shade of blue gives lesser mileage value as compared to other vehicles.

The graph below helps us to compare vehicles from different departments based on the mileage they have driven for so far.

Vehicle Mileage

Both the visualizations can be used as a filter for each other to retrieve the data related to a particular vehicle.