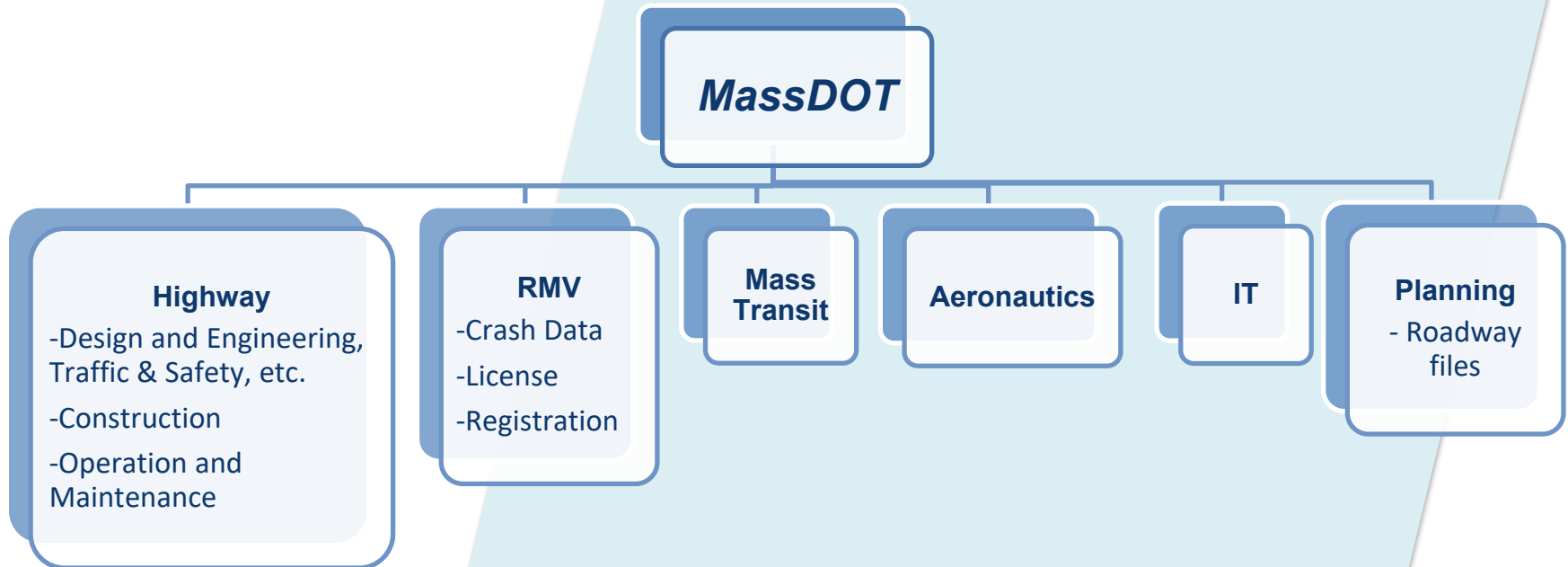


# ***The impact of IMPACT***

***MassDOT's new Interactive Mapping Portal for Analysis  
and Crash Tracking system***

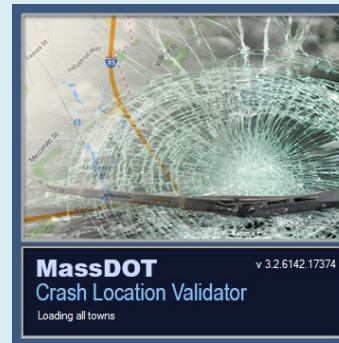
***Jennifer Inzana  
MassDOT Traffic Safety  
April, 2019***

## *MassDOT Structure*



## Existing Crash System

- Implemented 2004, 15 years old
- Old servers that IT is moving which continuously creates issues with antiquated program
- Geocodes 96% of all crashes, but we want better!
- Geocoding system links crashes to road segments and pulls roadway data from road inventory
- Police submit through 14 different vendors and 80% are electronic, but coordinates are POOR and front-end location information could be improved



Manually 10%



Automatically



## Welcome to MassDOT Crash Portal



### Standard Reports



### AdHoc Query Tool



### Mapping

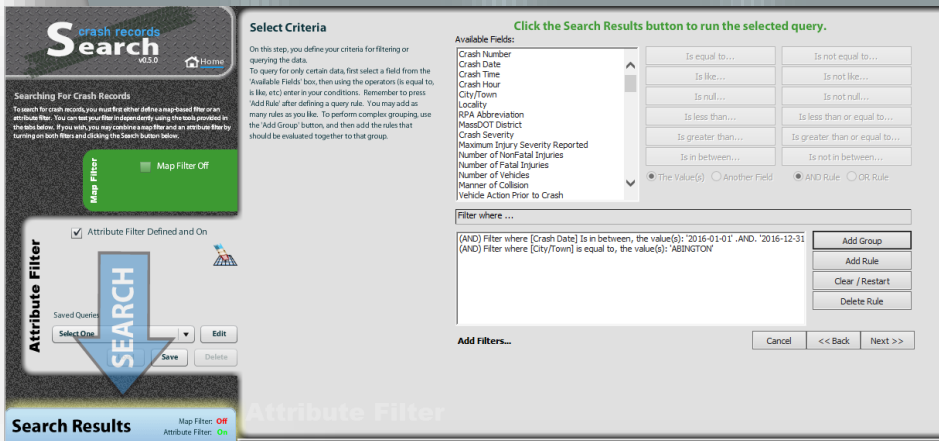


### Crash Tabulation and Charting



## Existing Crash System

- Analysis tools are outdated and not intuitive which require MassDOT Highway staff assistance
- Thousands of public users annually, but the system has a lot of down time and does not accommodate users of various skill levels
- Utilizes existing RMV Crash Data System (which was proposed to be updated)
- Uses Highway resources to pull crashes for Road Safety Audit
- Network Screening, Hot Spot, Safety Analysis involves manual intervention and inputs from Highway staff



**Search records v0.0.0**

Searching For Crash Records

To search for crash records, you must first define a map-based filter or an attribute filter. You can test your filter independently using the tools provided in the filter boxes. If you wish, you may combine a map filter and an attribute filter by turning on both filters and clicking the Search button below.

☐ Map Filter ☐ Map Filter Off

☒ Attribute Filter Defined and On

**SEARCH**

Attribute Filter

Save Filter:

**Search Results** Map Filter: ☒ Attribute Filter: ☒

**Select Criteria**

On this step, you define your criteria for filtering or querying the data. To query for only certain data, first select a field from the Available Fields box, then using the operators (is equal to, is like, etc.) enter in your conditions. Remember to press Add Rule after defining a query rule. You may add as many rules as you like. To perform complex grouping, use the Add Group button, and then add the rules that should be evaluated together to that group.

**Click the Search Results button to run the selected query.**

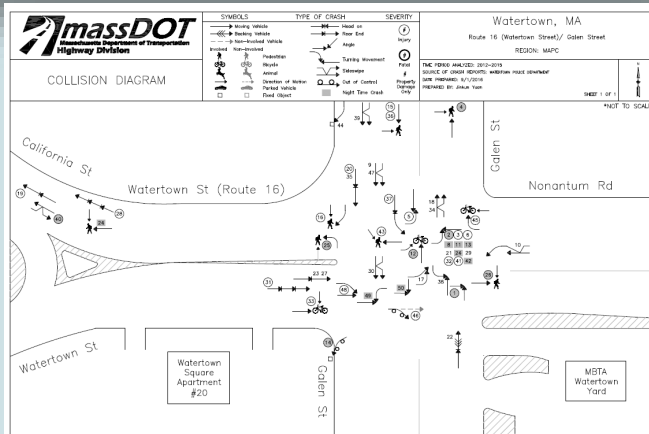
**Available Fields:**

- Crash Number
- Crash Date
- Crash Time
- Crash Hour
- City/Town
- Locality
- RPA Abbreviation
- MassDOT District
- Crash Severity
- Maximum Injury Severity Reported
- Number of Nonfatal Injuries
- Number of Fatal Injuries
- Number of Vehicles
- Manner of Collision
- Vehicle Action Prior to Crash

**Filter where ...**

(AND) Filter where [Crash Date] is in between, the value(s): '2016-01-01' AND: '2016-12-31'  
(AND) Filter where [City/Town] is equal to, the value(s): 'BOSTON'

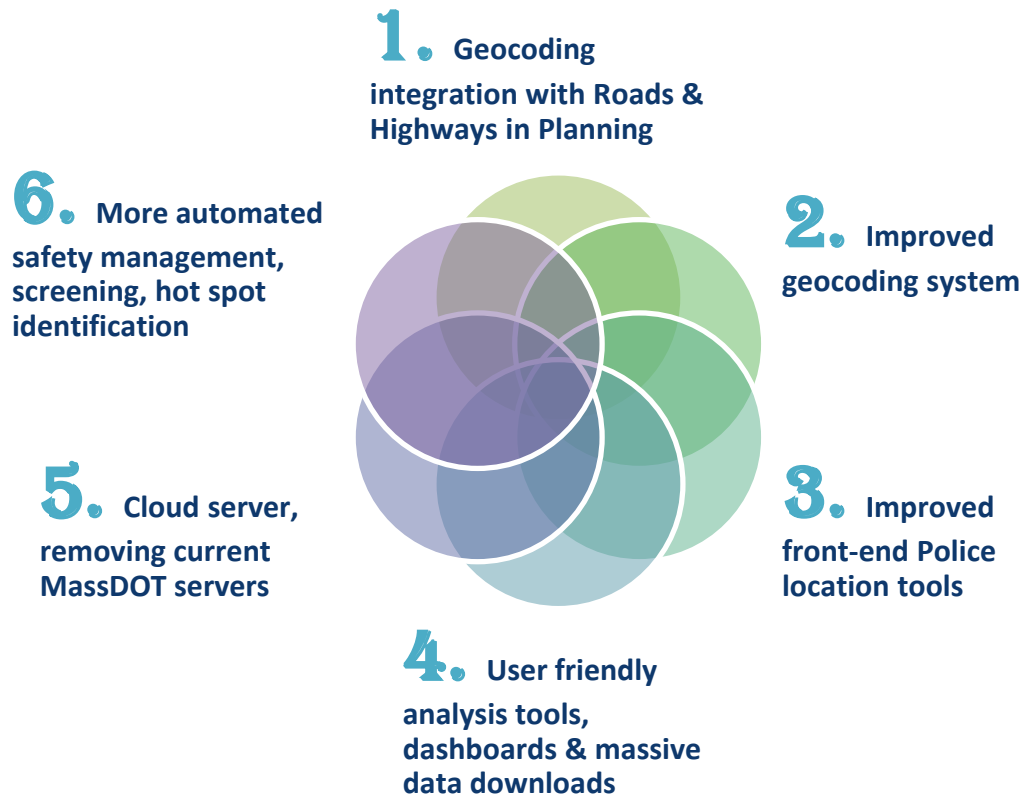
**Add Filters...**



## 2019 New Crash System

*...Initially proposed to be integrated with new RMV crash system but then that was delayed and projects decoupled, SO, we built IMPACT.*

*What are the improvements of IMPACT?*



## New System Timeframe

- *RFP - February 2017*
- *Interview - May 2017*
- *Contract - September 2017*
- *Working copy - April 2019*
- *Full deployment- June 2019*

