



Introduction

Two projects :

- 1- Creating first DDOT Utility Manual
- 2- Collecting and processing Data from API, created by Virginia Tech to DDOT Database server.

Objectives

Establish standard procedures:

⇒ For coordination of utilities on DDOT construction projects to improve project development procedure

Establish Safety Environment:

⇒ Help utility owners accomplish their work in a safe manner with the least delay and minimum interference with DDOT contractors or other utilities;

Ensure the Proper Performance:

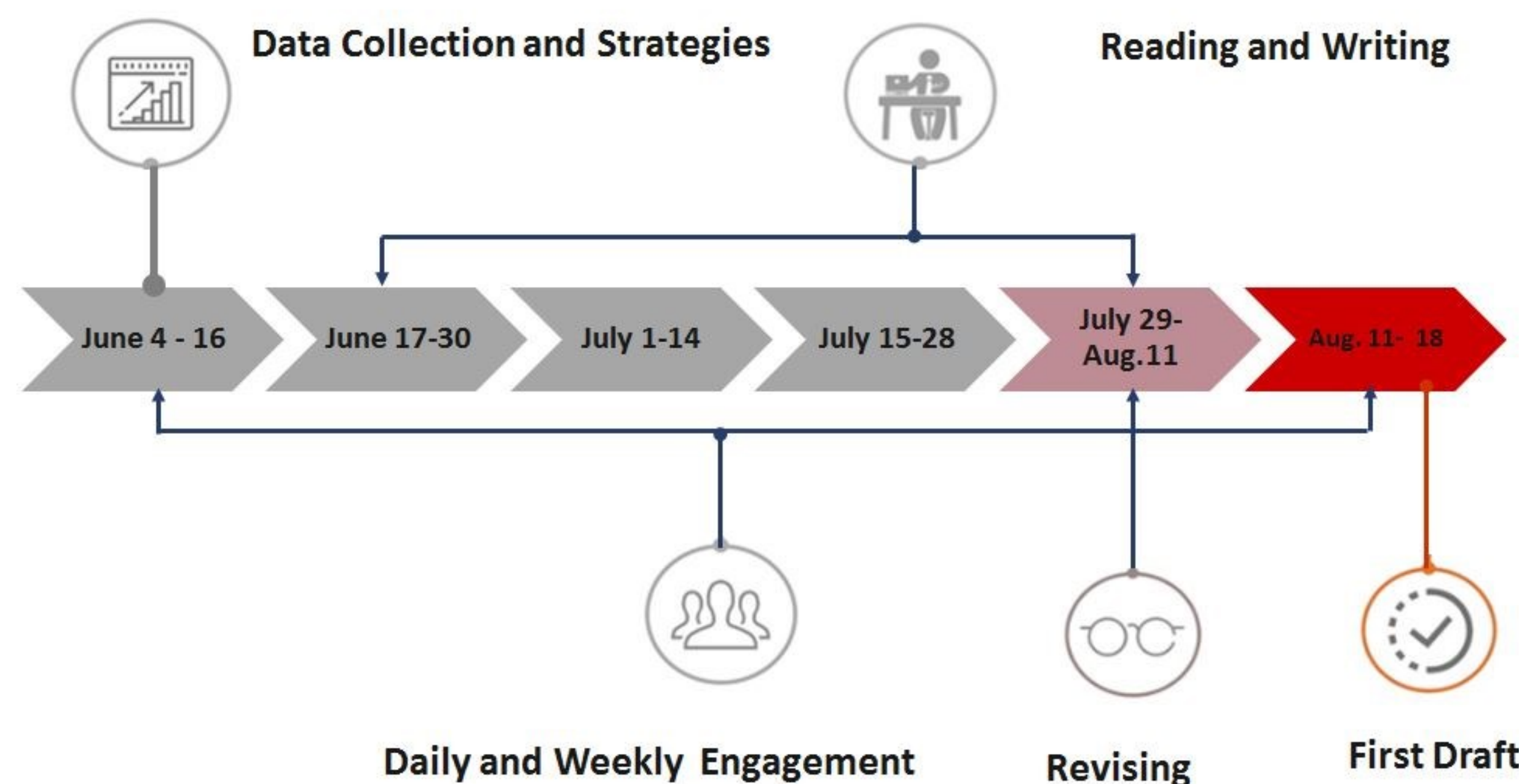
1. Prevent service disruptions
2. Prevent damage to utility facilities
3. High quality workmanship
4. Efficient flow of information and reduce possible misunderstanding between DDOT ,Utilities, and other stakeholders

Methodology

- * Reading through state's Manuals and collect the best material that fits with DDOT procedures
- * Weekly Progress Meetings
- * Research various Codes and Manuals
- * Projects site visits



Monthly Utility Meeting ,
Source: Faris Alsaeedi



Methodology

Codes

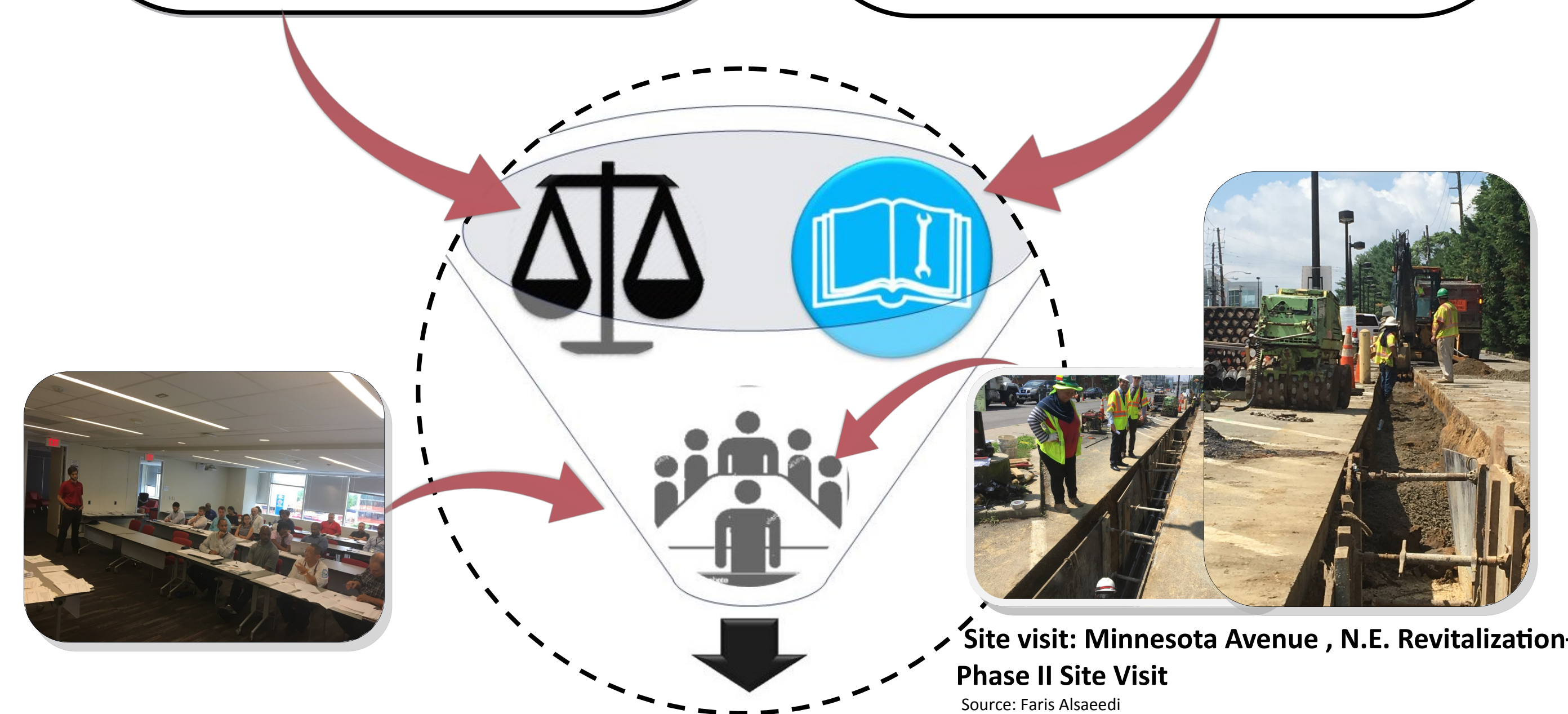
- * United States Code (USC)
- * Code of Federal Regulations (CFR)
- * National Electric Code (NEC)
- * National Electrical Safety Code (NESC)
- * Eclectic Deregulation Act
- * Buy America (FHWA, USC)
- * High Voltage Line Act
- * DC Administrative Code
- * U.S. Department of Transportation American Welding Society
- * American Society of Civil Engineers
- * American Gas Association
- * Other Polices and Guidance

The Base of DDOT Utility

- * South Capitol Street Corridor Utility Manual
- * Design and Engineering Manual

States Utility Manuals

- * Utility Manual of Instruction (VDOT)
- * Utility Policy (MDOT)
- * ROW Utility Manual (TXDOT)
- * Project Development and Design Manual (FHWA)
- * Right of Way Policies and Procedures manual (DDOT,2011)



DDOT Utility Manual



Second Project

Technology Overview



Objectives

Collect and Store following data to DDOT Database:

- 1- Potholes location and condition
- 2- Vehicle locations and speed
- 3- Road Surface Temperature
- 4- Basic Safety Message (BSM) extension

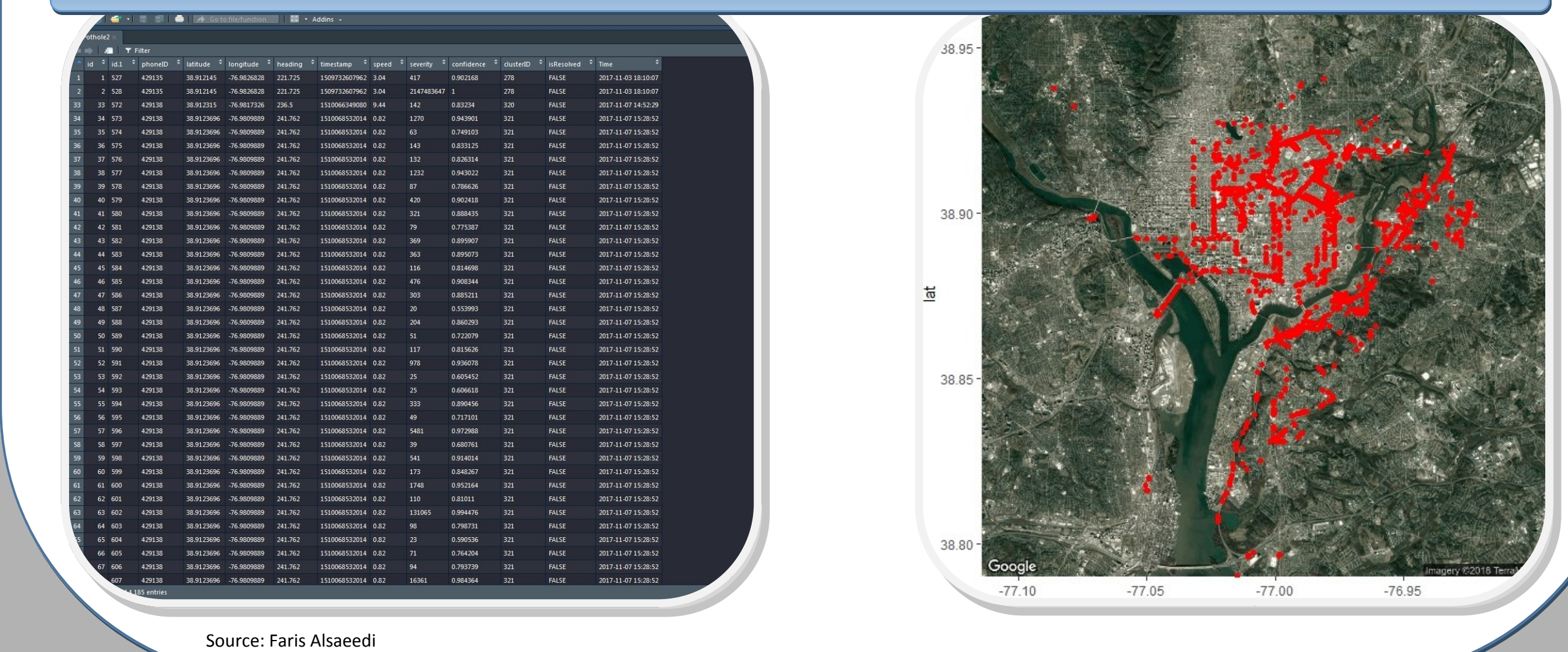
Methodology

- 1- Using RStudio software to access Virginia Tech API



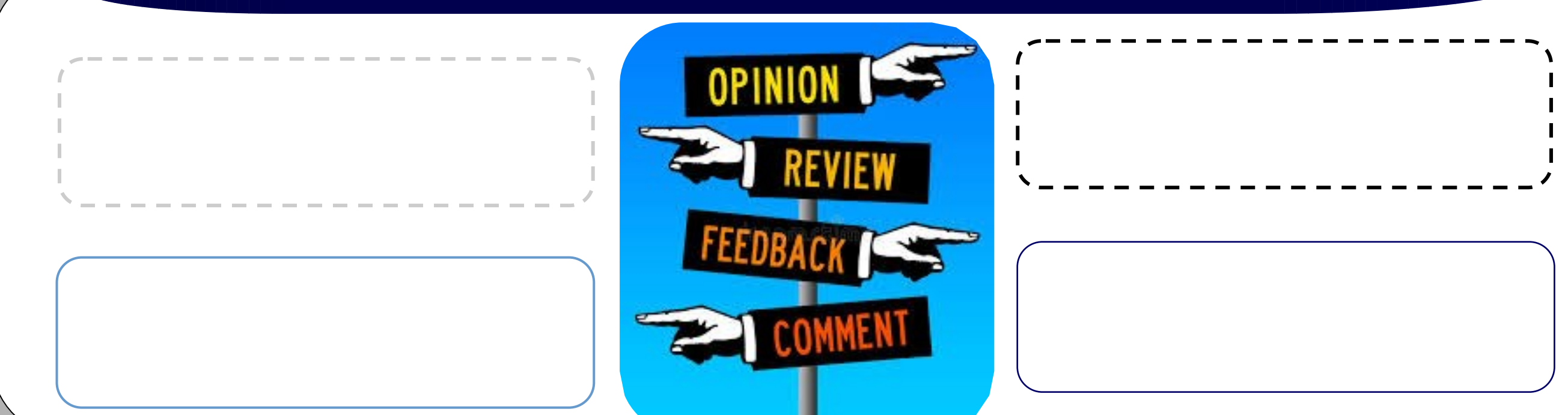
- 2-Using Studio software and SQL server Management Studio to store extracted data

Results



Source: Faris Alsaeedi

Comments



Acknowledgment

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- ⇒ All DDOT Members whose who help me to make this possible.
- ⇒ Howard University Transportation Research Center (HUTRC)

References

- Design and Engineering Manual
- United States Code (USC)
- DC Administrative Code
- Stated DOTs Utilities Manual