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Traffic Statement
1060 Main Street Elderly Housing
1060 Main Street
South Windsor, Connecticut

Prepared For:
Up Realty, LLC
DPI Project Number 4512
June 1, 2021



Introduction

Up Realty, LLC, is proposing a re-development of the existing building located at 1060 Main Street, South Windsor, Connecticut. The site is located between Governors Highway and Newberry Road on the property with GIS No. 54901060. The proposed development will include the conversion of the existing 31,495 SF building, to an Elderly Housing Apartment. Associated site improvements will include but not be limited to new drive aisles, parking areas, sidewalks, landscaping, lighting, and stormwater management BMP's.

The 13.10-acre property can be classified as semi developed, semi undeveloped land. 3.03 acres of this area is proposed to be disturbed during construction. The proposed site plan shows a new sidewalk, coming from the proposed building reaching out to Main street. The driveway is not changing with its connection to Main street although there will be a new driveway path behind the building, encircling the building.

Refer to site plans entitled "1060 Main Street – Site Plan Modification & Special Exception" dated June 1, 2021, as amended, prepared by Design Professionals Inc., submitted separately, for more information regarding the proposed development.

Existing Traffic

The traffic number generated from Institute of Transportation Engineers (ITE) Trip Generation Manual 9th Edition. The manual provides Average and Fitted Curve trip generation estimates based on case studies for **Nursing Homes (ITE Land Use Code 620)**. The trip values were calculated using the number of beds inside the nursing home. A trip is defined by ITE as “a single or one-direction vehicle movement with either the origin or the destination (exiting or entering) inside a study site.” Results are as followed:

Existing (Nursing Home)

AM Peak Hour

Weekday Trips

Entering: 8 Trips

Exiting: 4 Trips

Total = 12 Trips

PM Peak Hour

Weekday Trips

Entering: 9 Trips

Exiting: 13 Trips

Total = 22 Trips

Refer to **Appendix A** for existing conditions ITE trip generation calculations.

Proposed Site Generated Traffic

The traffic number generated from Institute of Transportation Engineers (ITE) Trip Generation Manual 9th Edition. The manual provides Average and Fitted Curve trip generation estimates based on case studies for **Senior Attached Housing (ITE Land Use Code 252)**. Trip values were determined from the number of dwelling units. Results are as followed:

Proposed (Senior Adult Housing)

AM Peak Hour

Weekday Trips

Entering: 7 Trips

Exiting: 9 Trips

Total = 16 Trips

PM Peak Hour

Weekday Trips

Entering: 7 Trips

Exiting: 6 Trips

Total = 13 Trips

Refer to **Appendix B** for proposed conditions ITE trip generation calculations.

Discussion

As shown by the calculations, morning peak hour trips are expected to increase by about 4 trips/hour. Evening peak hour trips are expected to decrease in the afternoon by 9 trips/hour. Although an increase of 4 trips is expected in the morning peak hour, this will amount to an average of 1 additional car every 15 minutes. It is anticipated that this small increase in expected trips during the morning peak hour will not have an adverse effect to the adjacent roadway network.

Sight Distance

The field observed sight distances at the proposed entrance drive are as follows:

1060 Main Street Entrance

Looking North: 390 ft + (sight line to Governors Highway)

Looking South: 390 ft

Sight lines were found to be consistent with recommended minimum sight distances published in the CT DOT 2003 Edition Highway Design Manual. For a road that is 35 mph it is recommended that a minimum of 390 feet of site distance be provided. Field observed sight observations indicated that this was achieved looking both north and south from the site's entrance drive.

Crash Data

A search was conducted in the UCONN Crash Data Repository for incidents in the vicinity of the subject site. The study area focused on the section of Main Street between Governors Highway and Newberry Road (mile marker 1.7± to 2.2±). The property roughly sits at mile marker 2.0. From 2010-2014 there was one reported accident at mile marker 1.78 with no reported injuries. This accident involved a passenger car during clear conditions, hitting a fixed object. From January 1, 2018 to April 20, 2021 there have been 2 other reported accidents at mile markers 1.79 and 2.03. No injuries were reported for either. One of the two accidents occurred in front of our property on January 30, 2019. This accident involved a 55-year-old person who slid off the road, during snowy conditions and hit a traffic sign. The second accident, on September 10, 2018, involved a 41-year-old person who slid off the road during wet conditions and collided with a light pole. In both circumstances the driver was found to be intoxicated. All 3 accidents in scope did not involve car-to-car collisions.

Refer to **Appendix C** for UCONN Crash Data.

Conclusion:

The proposed development as discussed herein and shown on the referenced plans should not pose any detrimental impacts to the adjacent roadway network. Additionally, with adequate sight distance provided for the proposed development and negligible crash data within the last five years, no major safety concerns are expected as a result of this proposed development.

APPENDIX A
ITE Existing Trip Generation Estimates

Nursing Home (620)

Average Vehicle Trip Ends vs: Beds
On a: Weekday,
A.M. Peak Hour of Generator

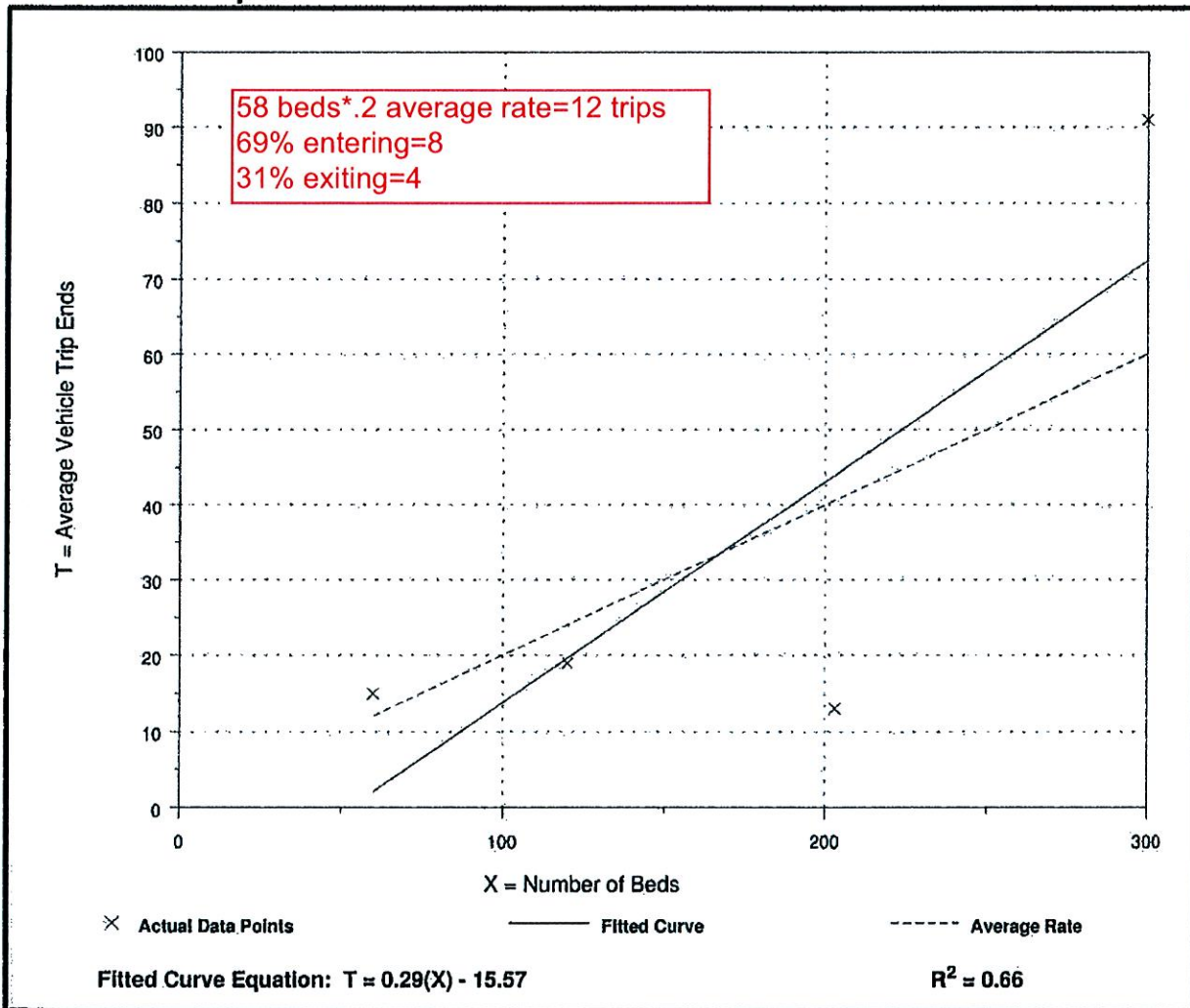
Number of Studies: 4
Average Number of Beds: 171
Directional Distribution: 69% entering, 31% exiting

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.20	0.06 - 0.30	0.46

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Nursing Home (620)

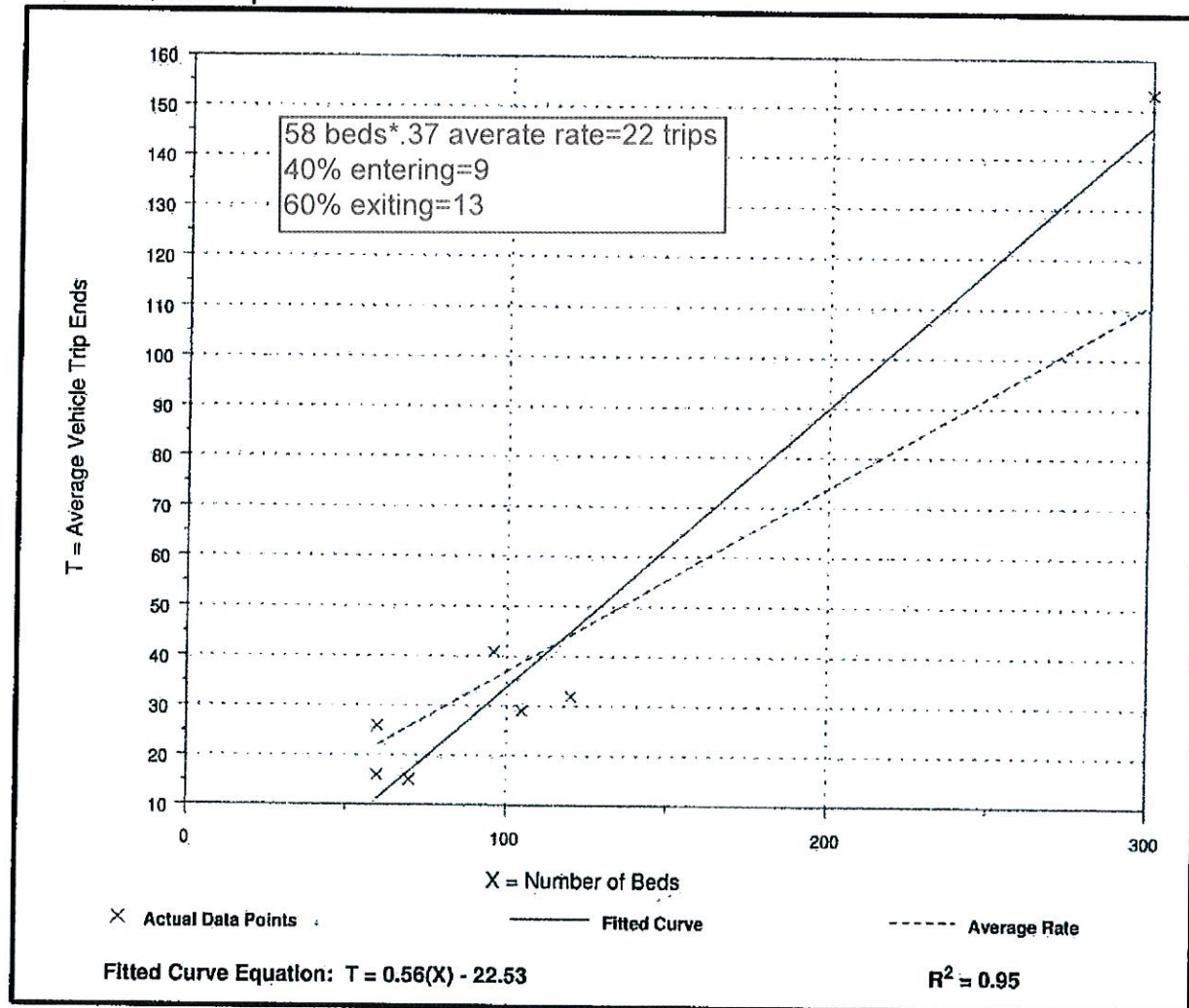
Average Vehicle Trip Ends vs: Beds
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 8
 Average Number of Beds: 116
 Directional Distribution: 40% entering, 60% exiting

Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.37	0.21 - 0.51	0.62

Data Plot and Equation



APPENDIX B
ITE Proposed Trip Generation Estimates

Senior Adult Housing - Attached (252)

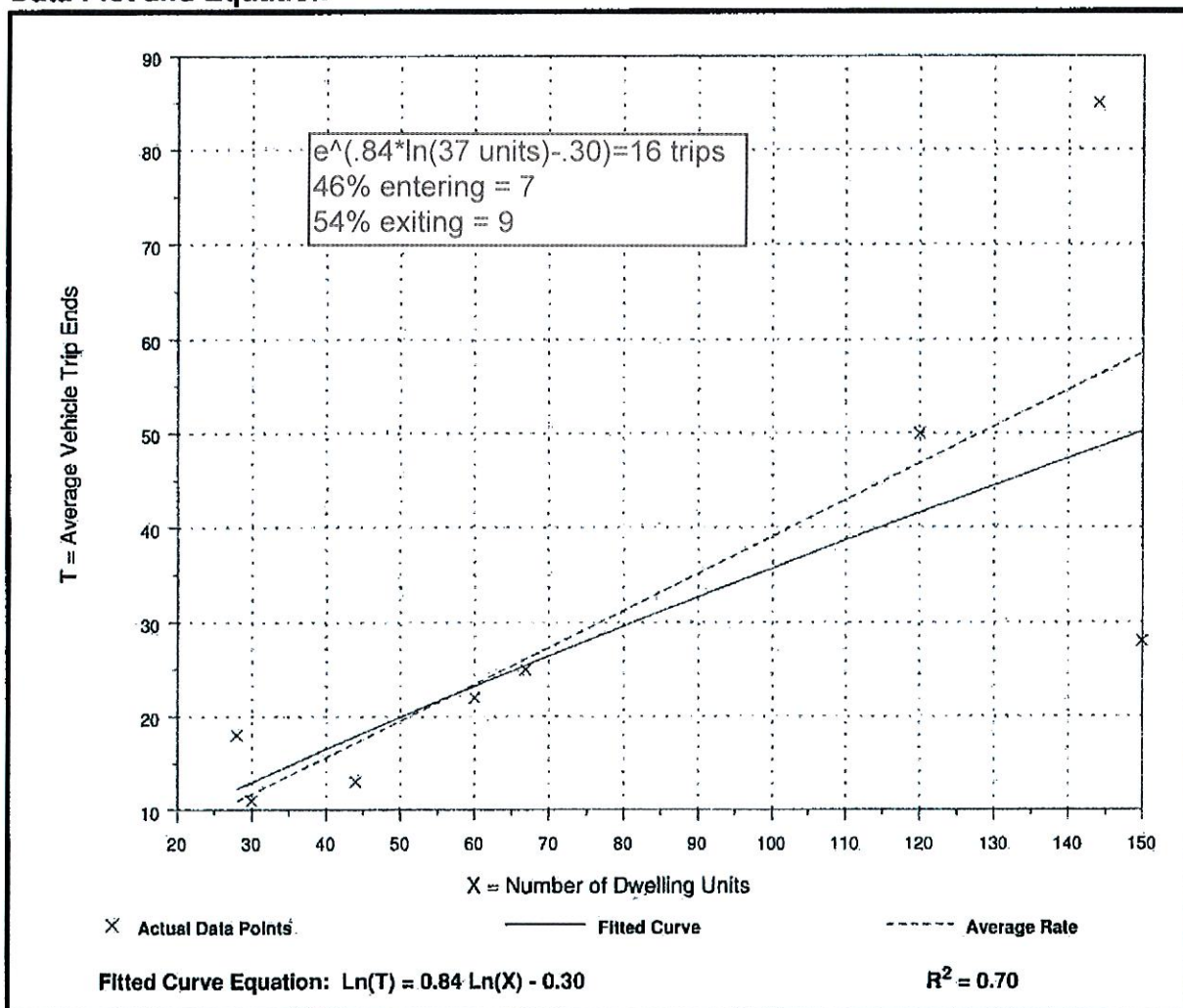
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 8
Avg. Number of Dwelling Units: 80
Directional Distribution: 46% entering, 54% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.64	0.64

Data Plot and Equation



Senior Adult Housing - Attached (252)

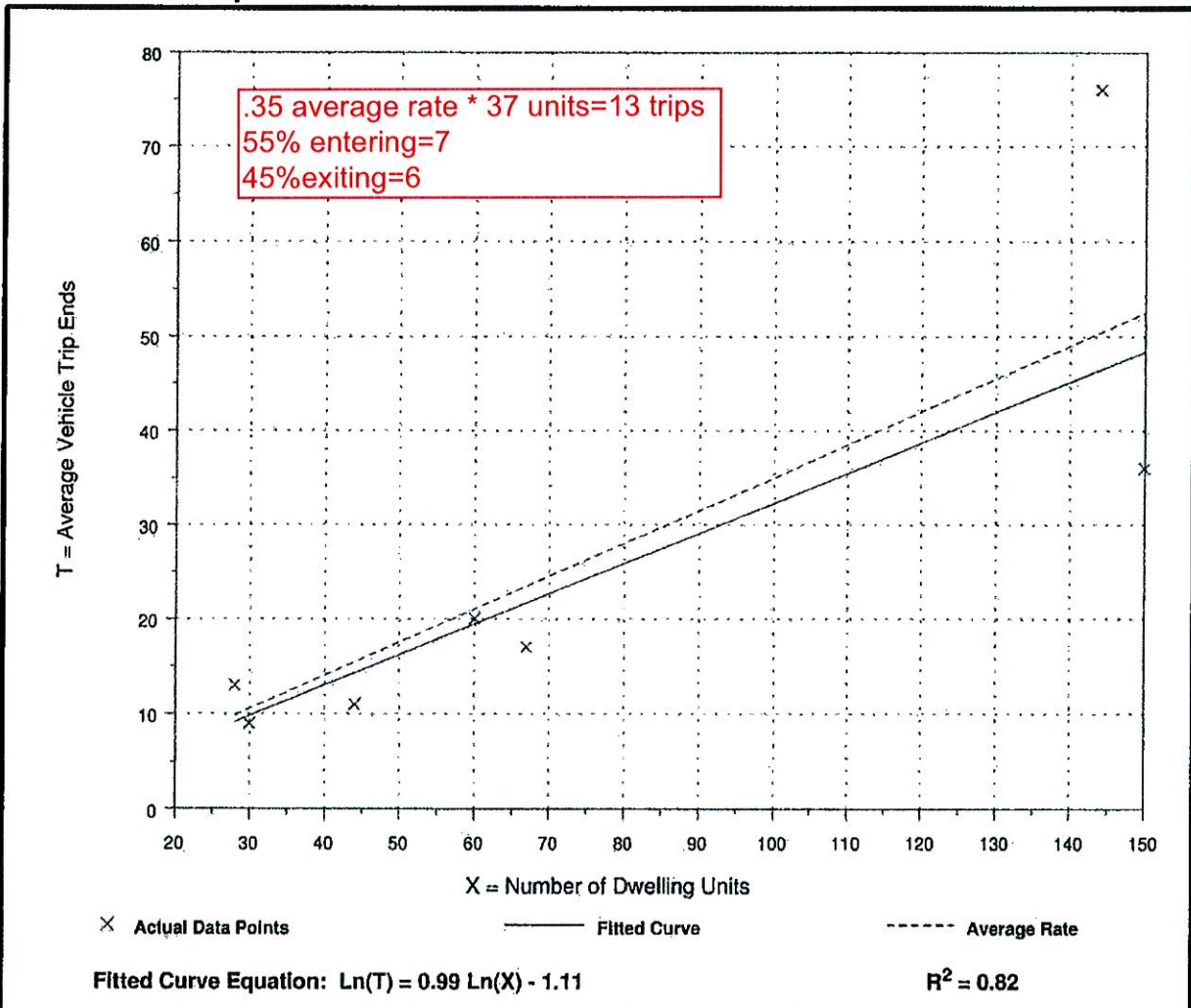
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 7
 Avg. Number of Dwelling Units: 75
 Directional Distribution: 55% entering, 45% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.35	0.24 - 0.53	0.60

Data Plot and Equation



APPENDIX C
UConn Crash Data

CAST Dashboards: 2010 - 2014

The Collision Analysis Summary Tables (CAST) is a summary dashboard where the crash data can be filtered to the road, town, crash severity, or time period of interest and explored along a variety of aspects, including but not limited to crash locations, time and date of crashes, vehicle types, demographics of persons involved, and driver distraction.

[Search Criteria](#) | [Table of Contents](#) | [Report](#) | [Census Data Synthesis](#)

Connecticut Crash Summary Tables



Queries Selected: Town(South Windsor), Date(Year:All or 1/1/2010 to 12/31/2014), Severity(All), Route Class(All), Road Number(All), Mile Markers 1.7 to 2.2

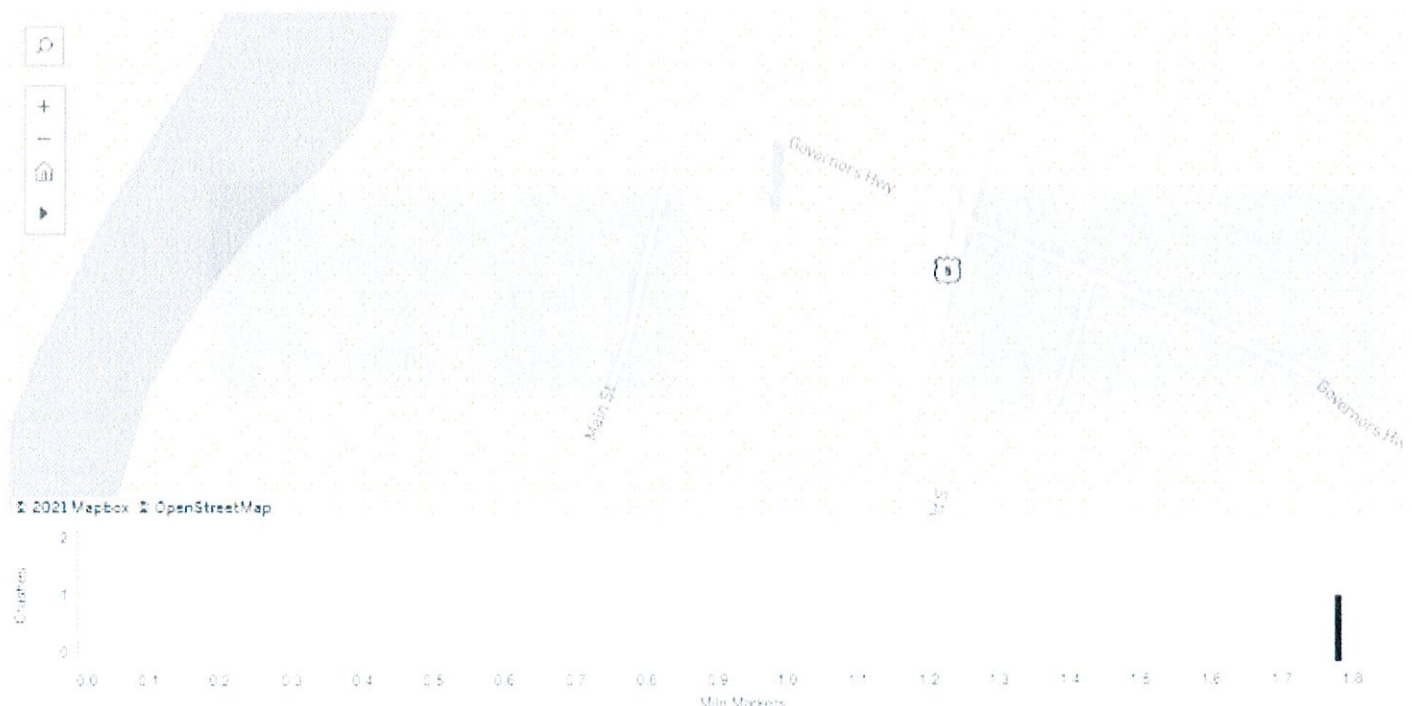
This page incorporates dynamic filtering on the tables and mile marker bar graph. By selecting a record, the other figures will be filtered by that selection. Any selections made on this page will not be reflected anywhere else in the report.

Top 10 Roads for Crashes

Please Note: The Latitude and Longitude data for crashes was automatically added to the crash records based upon the address long after the crash data was initially recorded. They do not necessarily show the actual crash location.

50

Crash Locations (Limited to the 10,000 most recent crashes)



These data are exempt from discovery or admission under 23 U.S.C. 409. Not all topics have data available for the years 2010-2014.

CAST Dashboards: 2010 - 2014

The Collision Analysis Summary Tables (CAST) is a summary dashboard where the crash data can be filtered to the road, town, crash severity, or time period of interest and explored along a variety of aspects, including but not limited to crash locations, time and date of crashes, vehicle types, demographics of persons involved, and driver distraction.

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Connecticut Crash Summary Tables

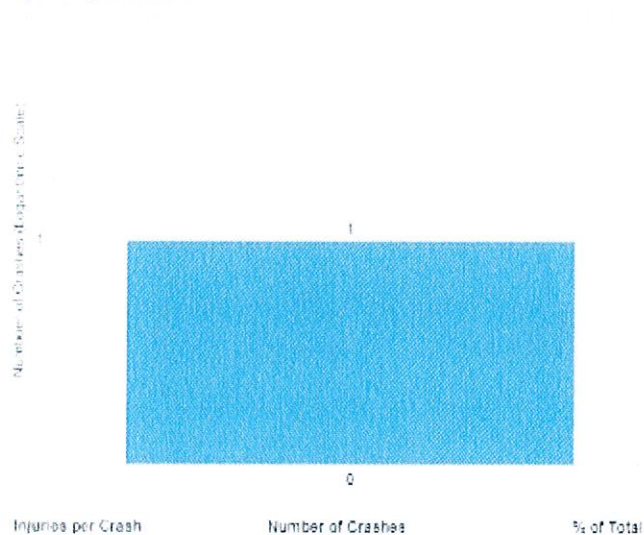


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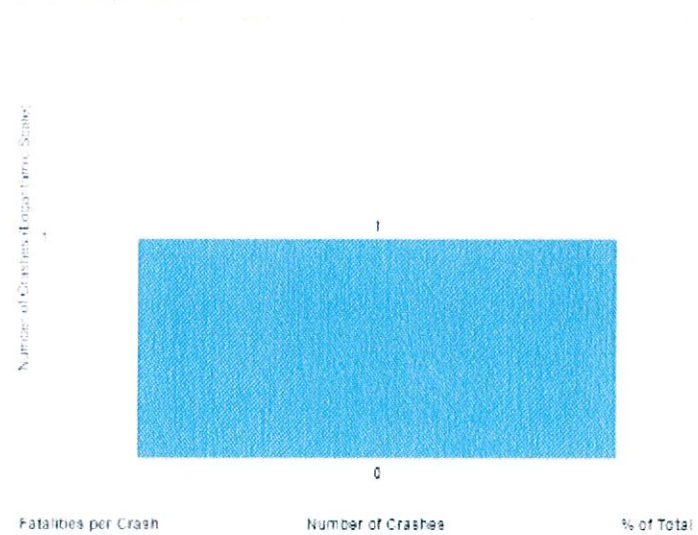
Injury Status of Crashes



Injuries per Crash



Fatalities per Crash



CAST Dashboards: Last 3 years

The Collision Analysis Summary Tables (CAST) is a summary dashboard where the crash data can be filtered to the road, town, crash severity, or time period of interest and explored along a variety of aspects, including but not limited to crash locations, time and date of crashes, vehicle types, demographics of persons involved, and driver distraction.

[Search Criteria](#) [Table of Contents](#) [Report](#)

Collision Analysis Safety Tables



Queries Selected: Town: *South Windsor*, Date (Year): *All* or 1/1/2018 to 4/30/2021, Severity: *All*, Route Class: *Unknown*, *Interstate*, *US Route* and 2 more, Road Number: *All*, Local Road Name: *All*, Mile Markers: *1.7* to *2.2*

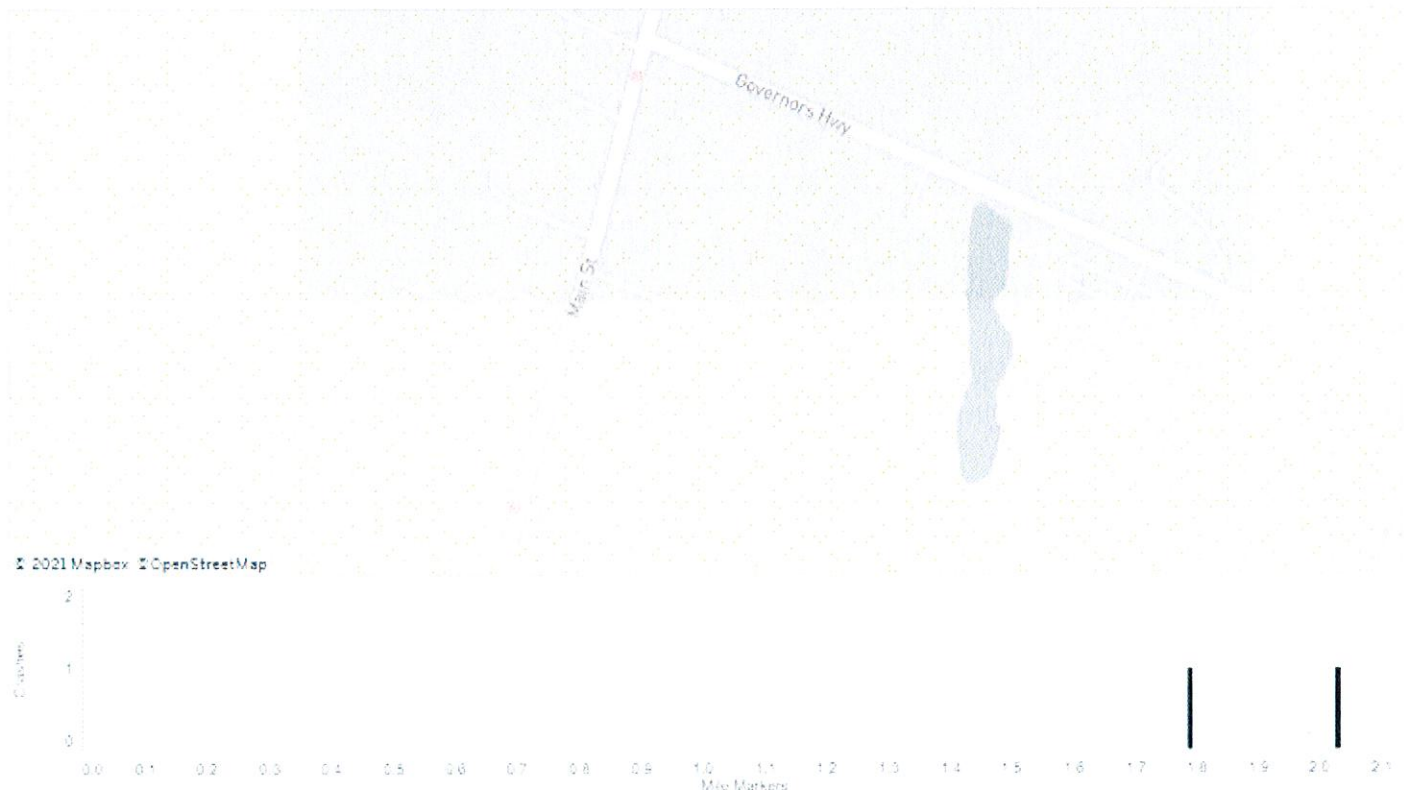
This page incorporates dynamic filtering on the tables and mile marker bar graph. **Top 10 Routes for Crashes**
By selecting a record, the other figures will be filtered by that selection. Any selections made on this page will not be reflected anywhere else in the report.

Please Note: The location and route number are both drawn directly from the crash reports and have not been checked for entirely errors. These may not directly correspond and are not guaranteed to be accurate.

MAIN ST in South Windsor

2

Crash Locations (limited to the 10,000 most recent crashes)



These data are exempt from discovery or admission under 23 U.S.C. 404. Data Extracted: 05/03/2021

CAST Dashboards: Last 3 years

The Collision Analysis Summary Tables (CAST) is a summary dashboard where the crash data can be filtered to the road, town, crash severity, or time period of interest and explored along a variety of aspects, including but not limited to crash locations, time and date of crashes, vehicle types, demographics of persons involved, and driver distraction.

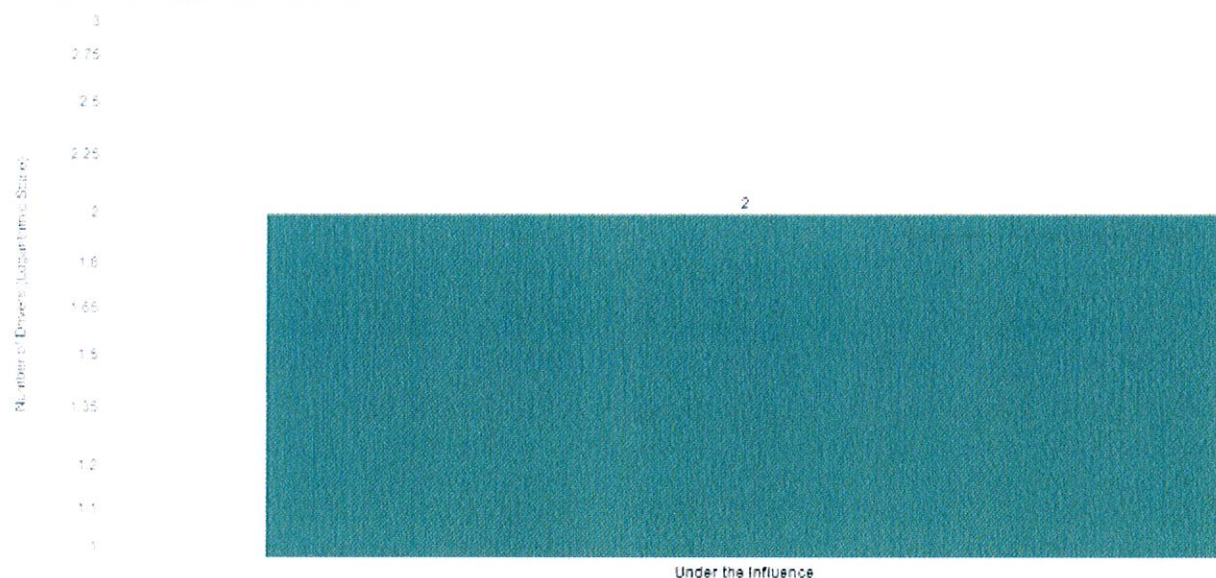
[Search Criteria](#) [Table of Contents](#) [Report](#)

Collision Analysis Safety Tables



Queries Selected: Town: *South Windsor*, Date (Year: *All* or 1/1/2018 to 4/30/2021), Severity: *All*, Route Class: *Unknown*, *Interstate*, *US Route* and 2 more, Road Number: *All*, Local Road Name: *All*, Mile Markers: 1.7 to 2.2

Condition at the Time of the Crash



Condition at time of Crash (group)	Drivers		Grand Total	
	Count of People	% of Total People	Count of People	% of Total People
Under the Influence	2,000	100.00%	2,000	100.00%
Grand Total	2,000	100.00%	2,000	100.00%

These data are exempt from discovery or admission under 20 U.S.C. 408. Data Extracted 05/03/2021

CAST Dashboards: Last 3 years

The Collision Analysis Summary Tables (CAST) is a summary dashboard where the crash data can be filtered to the road, town, crash severity, or time period of interest and explored along a variety of aspects, including but not limited to crash locations, time and date of crashes, vehicle types, demographics of persons involved, and driver distraction.

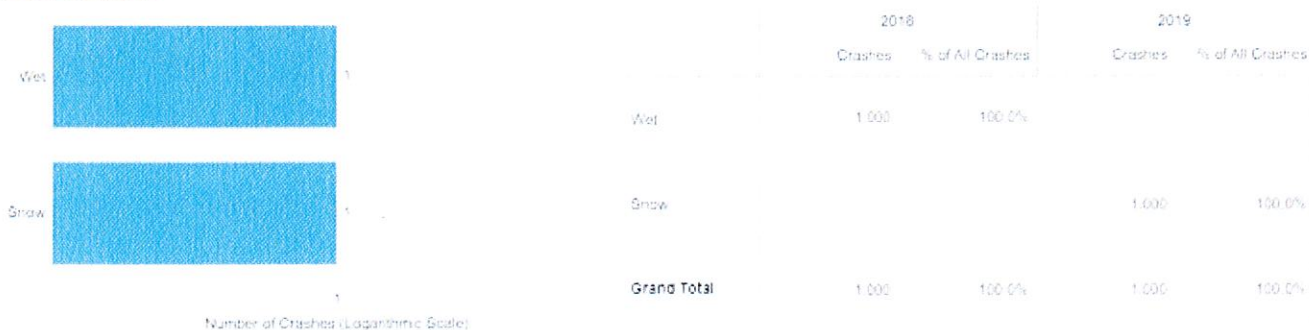
[Search Criteria](#) [Table of Contents](#) [Report](#)

Collision Analysis Safety Tables

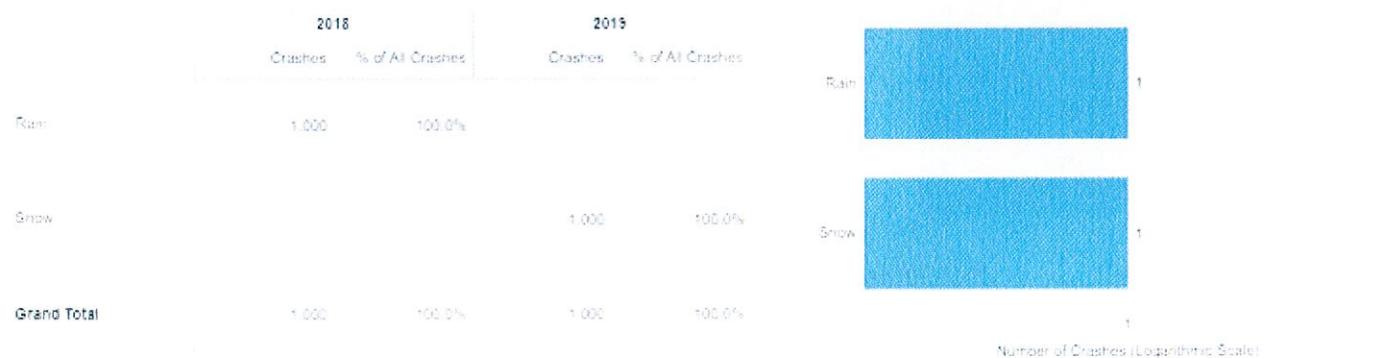


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Traffic Surface Conditions



Weather Conditions



Light Conditions



CAST Dashboards: Last 3 years

The Collision Analysis Summary Tables (CAST) is a summary dashboard where the crash data can be filtered to the road, town, crash severity, or time period of interest and explored along a variety of aspects, including but not limited to crash locations, time and date of crashes, vehicle types, demographics of persons involved, and driver distraction.

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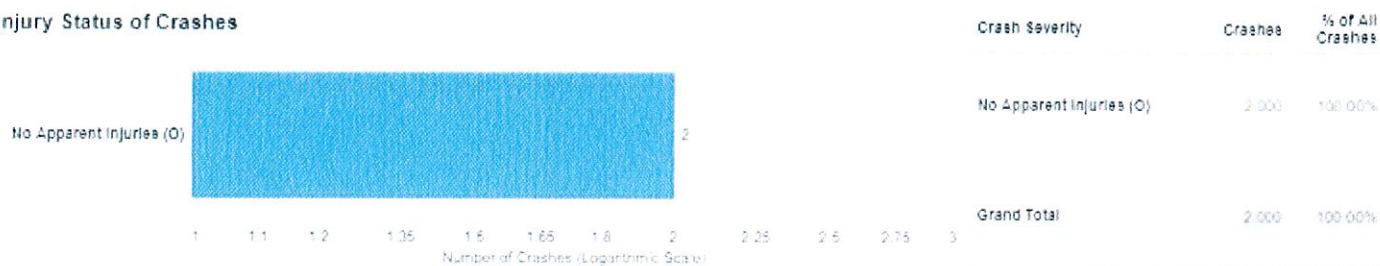
Collision Analysis Safety Tables



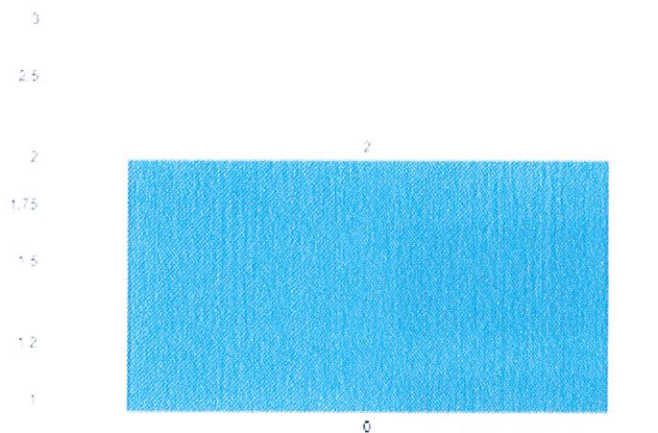
Queries Selected: Town: *South Windsor*, Date (Year: *All* or 1/1/2018 to 4/30/2021), Severity: *All*, Route Class: *Unknown, Interstate, US Route* and 2 more, Road Number: *All, Local Road* Name: *All*, Mile Markers: 1.7 to 2.2

These figures display crash-level data only, and provide the totals for crashes involving an injury of that type.

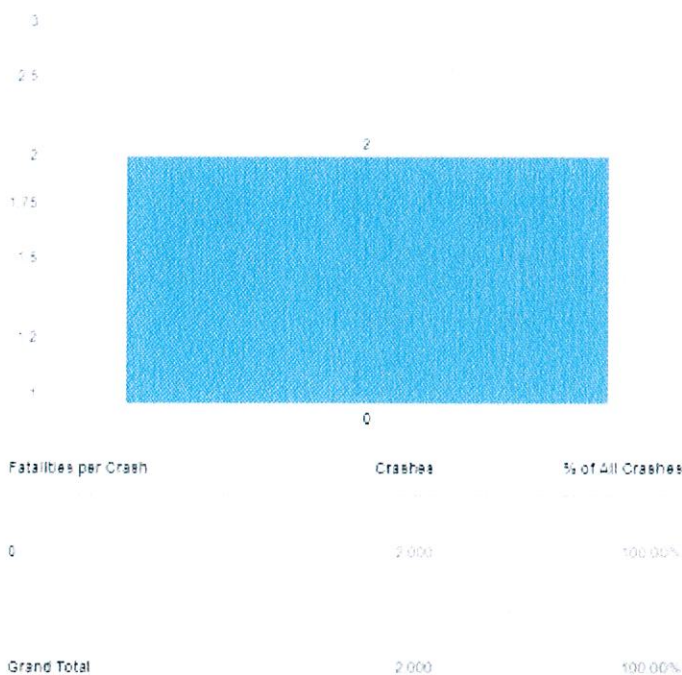
Injury Status of Crashes



Injuries per Crash



Fatalities per Crash



These data are exempt from discovery or admission under 23 U.S.C. 409. Data Extracted: 05/03/2021