GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

REF.: MAX-2018162.00

November 29, 2018

Ms. Jacki Byerley
Planning Department
36 Bartlett Street
Andover, MA 01450

SUBJECT: The Dascomb Road Project - Transportation Peer Review

Dear Ms. Byerley:

Greenman-Pedersen, Inc. (GPI) has performed a review of the transportation impacts associated with the proposed Dascomb Road Project (herein referred to as the "Project") to be located at #146 Dascomb Road in Andover, Massachusetts. This review focuses specifically on the *Traffic Impact, Access, and Parking Study (TIAPS*) prepared by The Engineering Corp, Inc. (TEC) for Lupoli Companies (the "Proponent"). The following documents were received for our review:

- *Traffic Impact, Access, and Parking Study, The Dascomb Road Project, Andover, Massachusetts;* prepared by TEC; October 16, 2018.
- *Site Plans: The Dascomb Road Project, Andover, Massachusetts (Assessors Map 203, Lot 2A-1)*; prepared by TEC; October 31, 2018.
- *Planning Board Special Permit Application;* prepared by TEC; October 31, 2018.

The site is currently occupied by approximately 189,000 square feet (SF) of mixed office and industrial uses. The adjacent property at #148 Dascomb Road contains a ±90,000 SF of Restaurant Depot facility, which partially shares driveways with the site at #146 Dascomb Road. The #146 Dascomb Road site is currently accessed via five (5) driveways along the easterly side of Smith Way, which provides access to Dascomb Road at an unsignalized intersection. Based on the documents submitted, the Project proposes to raze the existing buildings on site and construct a ±524,000 SF mixed-use development containing a 100-room business hotel, 80,000 SF of retail, 20,000 SF of restaurants, a 30,000 SF fitness center, a 35,000 SF grocery store, and 293,000 SF of professional office space. Access to the site will be provided via two full-access/egress driveways, a shared full-access/egress driveway with the Restaurant Depot on Dacomb Road, and a loading dock driveway on Smith Way, as well as a signalized, full access/egress driveway on Dascomb Road opposite Frontage Road. All full-access/egress driveways for the Restaurant Depot along Smith Way will be retained as part of the project. A total of 1,760 parking spaces will be provided, mainly in structured parking, to accommodate the proposed uses on the site.

As the Project directly abuts the state highway and off-site improvements are proposed within the state highway layout (SHLO), the Project will require review by the Massachusetts Department of Transportation and issuance of a Permit to Access State Highway. In addition, at the off-site mitigation requires modifications to the Interstate Highway System ramps, the project will also require review by the Federal Highway Administration (FHWA) in the form of a Project Framework Document (PFD). Furthermore, as the project is expected to generate more than 3,000 new vehicle trips per day (VPD) and construct more than 1,000 new parking spaces and will require the above mentioned permits from MassDOT and FHWA, the project will also require review by the Massachusetts

Environmental Policy Act (MEPA) office in the form of an Environmental Notification Form (ENF) and mandatory Environmental Impact Report (EIR)

Overall GPI finds the material submitted within the traffic study to be prepared in a manner consistent with transportation local requirements and industry standards, with the exception of the following comments.

General Comments

1. None of the buildings on the site plan have been labeled to provide easy identification of the buildings. Therefore, for the purposes of this review letter, GPI has assigned labels to the buildings in a clockwise order beginning at the northeast corner of the site as described below:

   Building A = Prop Bldg; 4 stories; 67,000 SF
   Building B = Prop Bldg; 4 stories; 165,000 SF
   Building C = Prop Bldg; 2 stories; 30,000 SF
   Building D = Prop Bldg; 4 stories; 87,000 SF
   Building E = Prop Bldg; 4 stories; 35,000 SF
   Building F = Prop Bldg; 3 stories; 66,000 SF
   Building G = Prop Bldg; 1 story; 35,000 SF
   Building H = Prop Bldg; 3 stories; 39,000 SF

   From this point forward, the labels above will be utilized to describe the proposed buildings.

<u>Existing Conditions</u>

Traffic Study Area

2. Based on the scope of the proposed development and the number of *new* primary trips generated on the adjacent roadways, GPI agrees that the study area for the TIA is adequate and appropriate to assess project-related impacts.

3. No traffic analysis has been provided for any of the intersections along Smith Way or internal to the site. At a minimum, GPI recommends analyzing the two main site driveways on Smith Way to verify whether turning lanes will be required and the first internal intersection entering the site from the Easterly Site Driveway at Dascomb Road / Frontage Road (4-Way STOP) to ensure traffic will not back onto Dascomb Road.

Existing Traffic Volumes

4. Manual Turning Movement Counts (TMCs) and Automatic Traffic Recorder (ATR) counts were conducted in the morning Thursday, September 13, 2018, on the day of the Greater Lawrence Gas Disaster, which caused fires, explosions, road closures, and mass evacuations in the communities of Lawrence, Andover, and North Andover due to over-pressurization of a low-pressure gas line. As the first fire as a result of this event was reported to have occurred after 3:00 PM, use of any traffic count data prior to 3:00 PM on September 13, 2018 is acceptable and represents normal traffic operations.

5. Weekday evening and Saturday midday TMCs were collected on Thursday, September 20 and Saturday, September 22, 2018, following the Greater Lawrence Gas Disaster. Although the majority of roads in the area had been reopened at this point in time, many homes and businesses were a complete loss or remained closed at this time, pending repairs and restoration of gas to the home. On the date of the counts, many families were still residing in shelters. In addition, there are numerous properties located just outside of the study area for the TIAPS that do not have gas restored and are not scheduled for relight until November 28, 2018. According to a restoration update provided by Columbia Gas on November 17, 2018, gas has been restored to approximately 80 percent of businesses and 67 percent of residential homes. Within the Town of Andover, approximately 375 homes and 30 businesses remain without gas service. Therefore, traffic volumes collected on September 20 and 22, 2018 may have been impacted by the number of area families and businesses that remain displaced due to the Greater Lawrence Gas Disaster.

   To assess the impact the Greater Lawrence Gas Disaster had on traffic volumes in the study area, GPI compared TMCs collected during the weekday PM peak hours on September 20, 2018 to ATR counts collected on September 12, 2018 during the same time period at the following locations:
   - Dascomb Road between Partridge Hill Road and Surrey Lane
   - Dascomb Road at I-93 Overpass
   - Dascomb Road west of Smith Way

   The results of the comparison indicate that TMCs along collected Dascomb Road during the weekday PM peak hour on September 20th were approximately 2.3 percent lower than ATR counts collected on September 12th during the same time period. However, based on MassDOT seasonal adjustment factors, traffic volumes in September are approximately 3.5 percent higher than average-month condition. Therefore, the volumes collected on September 20th would still represent an above average-month condition.

6. The Tewksbury Street Bridge over the Pan Am Railroad in Andover, MA was closed in early August 2018 and remains closed pending MassDOT determination of a plan to reopen. The TIAPS notes that traffic volumes along Dascomb Road collected in September 2018 were elevated due to traffic detours resulting from this bridge closure. Based on MassDOT historic traffic counts, Tewksbury Street carries approximately 1,990 vehicles per day over the Pan Am Railroad, with approximately 235 vehicles using Tewksbury Street during the weekday AM and PM peak hours. Therefore, traffic volumes along Dascomb Road could be inflated by as much as 11 to 15 percent as a result of the Tewksbury Street bridge closure.

Seasonal Adjustment

7. GPI agrees with the Proponent's decision not to seasonally adjust the traffic volumes, as the September traffic volumes are higher than the yearly average volumes.

8. While the Greater Lawrence Gas Disaster may have reduced traffic volumes along Dascomb Road during the weekday PM and Saturday midday peak hour conditions, this reduction was likely outweighed by the additional traffic generated by the Tewksbury Street Bridge detour and volumes being collected in September, an above-average month. Therefore, the 2018 Existing Conditions Peak Hour Traffic Volumes estimated in the TIAPS are likely to be conservative.

Collision History

9. The collision data analysis indicates that only one collision occurred at the Dascomb Road / Clark Road / Bannister Road intersection between 2011 to 2017. However, based on a review of collision records provided on MassDOT's crash portal, a total of 12 collisions were reported at this location between 2011 and 2016, resulting in a crash rate of 0.39 c/mev. One of these collisions was a rear-end collision that occurred on Clark Road approaching the intersection with Dascomb Road due to queuing on this approach. The remaining eleven collisions were all angle collisions involving vehicles entering or exiting Clark Road.

10. The intersection of Dascomb Road / Frontage Road is an HSIP-eligible crash cluster, experiencing an average of over 14 crashes per year and a crash rate significantly higher than the state and district-wide averages. The TIAPS notes that over 50 percent (51 of 101) of the crashes were angle crashes, which are described as being typical of signalized intersections. It should be noted that angle collisions are NOT typical of signalized intersections, and in fact, signalizing an intersection is often considered as a means for reducing angle collisions. As part of the Project, the intersection will reconstructed with all new traffic signal equipment and phasing to accommodate the proposed site driveway as a fourth leg to the intersection. In addition, Frontage Road and Dascomb Road will be widened to provide additional lanes. Emergency-vehicle detection and bicycle detection will be provided at the signal, in addition to new vehicle-demand based signal equipment. ADA-compliant ramps, crosswalks, and signals with audio/vibratory equipment will be provided. These measures are anticipated to significantly improve the safety of the intersection.

11. The Dascomb Road / Andover Street intersection experienced more than 6 collisions per year and a crash rate significantly higher than the state and district-wide averages. Approximately 55 percent (11 of 20) of these collisions were angle or head-on collisions, which were likely due to the awkward geometry of the intersection. Sixty percent (12 of 20) of the collisions occurred during the peak commuter hours, indicating traffic congestion is likely a contributing factor to collisions at this location. Traffic exiting Dascomb Road onto Andover Street currently experiences long delays during the weekday PM peak hour, which will be exacerbated by the additional traffic generated by the Project. GPI recommends the Applicant evaluate options for safety and operational improvements at this location as mitigation for the proposed development.

Sight Distances

12. The TIAPS notes that sight lines looking west exiting the Hewlett-Packard (HP) driveway and Smith Way are restricted by vegetation along the edge of the roadway. GPI recommends clearing and trimming of the vegetation within the public right-of-way or property controlled by the Proponent to maximize sight lines to the west of these driveways.

Future Conditions

General Background Growth

13. GPI agrees with applying a 1.0 percent growth rate to base year volumes in order to grow to future year volumes based on traffic growth patterns on surrounding area roadways. This is also consistent with other projects in the area.

No-Build Traffic Volumes

14. GPI concurs with the No-Build traffic volume methodology and the volumes shown on Figure 3, and notes that the traffic volumes are conservative as they were projected to an 8-year horizon and no credit was applied for trips generated by the reoccupancy of existing office and industrial space on the site.

Site-Generated Traffic

15. GPI agrees with the methodology presented within the TIAPS to estimate and distribute site-generated vehicle trips to the adjacent roadway network.

Build Traffic Volumes

16. GPI concurs with the Build traffic volume methodology and the volumes shown on Figure 7.

Traffic Operations Analysis

17. The capacity and queue analysis contained within the TIAPS for the Dascomb Road / Frontage Road intersection are shown as Free operations for the westbound and southbound channelized right-turn lanes for the Existing and No-Build conditions. These movements actually operate under YIELD control as described in the TIAPS. Based on feedback received from Trafficware, the most appropriate method for modeling channelized right-turns under YIELD control at a signalized intersection is to assume that the movement is signalized with permitted and overlap phasing.

18. The Dascomb Road eastbound left-turn movement at the Dascomb Road / Acorn Drive / Lovejoy Road intersection currently operates under permitted/protected phasing, although only a single general-purpose lane is provided on this approach. As a result, through vehicles become trapped behind left-turning vehicles. GPI recommends the Applicant evaluate the warranting condition and feasibility for installing a dedicated left-turn lane on this approach.

19. Although installation of a traffic signal is warranted at the Dascomb Road / Clark Road / Bannister Road intersection under existing conditions, TEC does not recommend installation of a signal at this location at this time. Clark Road provides a major cut-through route between Dascomb Road and Andover Street. Although the crash rate is lower than the statewide and District-wide averages, over 90 percent (11 of 12) of the collisions at this location were angle collisions involving a vehicle entering or exiting Clark Road, and could have been corrected by a traffic signal. Traffic exiting Clark Road onto Dascomb Road experiences long delays and queues under existing conditions, particularly during the weekday AM and PM peak hours, which will be exacerbated by the additional traffic generated by the proposed development. The Project will result in an increase of 80 to 155 additional vehicle trips through this congested intersection. Therefore, the Applicant should consider improvements at this intersection to enhance operations and safety as mitigation for the proposed Project, including, but not limited to, installation of a traffic signal.

20. The Dascomb Road / I-93 NB Ramps intersection is proposed to be signalized under Build w/ Mitigation conditions. However, the channelized right-turn movements for the eastbound and northbound approaches

are modeled under FREE control. MassDOT has a policy that channelized right-turns at signalized intersections are to be signalized to avoid conflicts with left-turning vehicles. GPI recommends that the analysis be modified to include signalization of the channelized movements.

Overall Site Plan

Parking

21. The proposed parking supply of 1,760 parking spaces exceeds zoning requirements the zoning requirement of 1,747 spaces by 13 parking spaces. The zoning bylaws do not account for sharing of parking spaces between multiple uses. It is anticipated that significant sharing of parking spaces will occur on the site as employees of the offices or hotel patrons may choose to dine at the restaurants or shop at the retail on site. In addition, the offices will generate their peak parking demand during the day, while the restaurants may experience heavier parking demands in the evenings. As a result, the actual parking demand is anticipated to be significantly lower than estimated by zoning ordinances. Based on Institute of Transportation Engineers (ITE) data, the peak parking demand during the peak December month is anticipated to be 1,728 parking spaces. The Applicant has proposed a Transportation Demand Management (TDM) program for the site. As part of this TDM program, the Applicant should consider reducing the parking supply to encourage trips by alternative modes (walking, biking, carpooling, transit) to the site.

22. Vehicles entering and exiting the southerly parking aisle near Building H will be in significant conflict with traffic traveling along the main drive aisle through the site. Consideration should be given to eliminating this row of parking to minimize conflicts along the main drive aisle.

23. Based on the TIAPS, the Applicant proposed to provide preferential parking spaces for rideshare, carpool, and hybrid vehicles; as well as provide electric vehicle charging stations. The locations of these spaces should be identified on the site plan and located closest to the major entryways to the buildings.

24. The Applicant proposes to implement an intelligent parking system to direct drivers to open parking spaces in the parking garage. The location of any signage or equipment required for this system should be depicted on the site plan to ensure it does not conflict with sight lines, vehicle turning paths, utilities, etc. It should be noted that provision of such a system reduces the need to provide additional parking spaces on site to minimize recirculation of vehicles searching for a space.

Pedestrian Access

25. Although pedestrian access is provided along the westerly side of the Easterly Site Driveway (opposite Frontage Road) via a multi-use path, there are no sidewalks proposed along the easterly side of this driveway. Therefore, pedestrians traveling to/from Buildings A, B, C, and D will need to cross the roadway at least twice to remain on a sidewalk to travel between Dascomb Road East and the proposed buildings.

26. GPI recommends providing a crosswalk across the main drive aisle to connect the pocket-park just east of Building H to the large park area in the center of the property. In order to provide a continuous pedestrian

connection from Dascomb Road into the center park area, GPI recommends installing a crosswalk on the westerly leg of the 4-way STOP intersection at the Easterly Site Driveway / main drive aisle.

27. GPI recommends a pedestrian connection from Smith Way along the main drive aisle to Buildings F and H.

28. Pedestrians are likely to travel between Buildings E, F, G, and H and Buildings C and D along the sidewalk, crossing the access/egress for the spiral ramp to the parking garage. Sight lines exiting the ramp may be limited by the ramp walls. Therefore, GPI recommends installing a crosswalk across this ramp access point. In addition, consideration should be given to providing an auditory warning to pedestrians that a vehicle is exiting the ramp.

29. Similarly, pedestrians are likely to cross the parking garage ramp on the easterly side of Building B. Consideration should also be given to striping a crosswalk across this ramp and providing an auditory warning to pedestrians that a vehicle is exiting the ramp.

Bus Access

30. The site is located directly across Dascomb Road from the Andover Dascomb Road Park and Ride, to which both MVRTA and LRTA bus service is provided. The Applicant has agreed, as part of its TDM program, to coordinate with MVRTA and LRTA to extend bus service into the site. Should bus service to the site be provided, GPI recommends locating a bus stop with shelter along the northerly side of the main drive aisle in either of two locations:
    a. Adjacent to the pocket park just east of Building H, or
    b. Opposite Building F/G where GPI previously recommended removing the perpendicular parking spaces along the main drive aisle. Removing these parking spaces would allow for a bus turnout in this area to optimize traffic flow through the site.

    Buses could then enter the site via the signalized Easterly Site Driveway opposite Frontage Road, circulate through the site and make a right turn back onto Dascomb Road via Smith Way.

Vehicle Turning Movement Diagrams

31. In order to access the loading dock for Building A, a truck will need to back up along Smith Way into the loading dock. As two of the access points into the parking garage are located further south on Smith Way, trucks backing on Smith Way will create significant conflict with vehicles traveling south on Smith Way to access the Restaurant Depot and the proposed parking garage.

32. Sheet C-24 indicates that trucks accessing the loading dock for Building D, as well as accessing Buildings A, B, C, F, and H will need to cross onto property controlled by the adjacent Restaurant Depot. Cross-access easements will be required to ensure that these movements can be made legally.

33. It appears that the truck turning path for a WB-50 vehicle encroaches on the curb at the northwest corner of Building B while exiting the parking field for Building A.

34. Loading docks are proposed for Buildings A, B, and H. Although the site plans depict a WB-50 truck circulating through the parking lots, passing by these buildings, truck turning diagrams have not been provided to depict

truck paths entering and exiting these loading areas. Entering and exiting the loading docks at Buildings A and H appears difficult due to perpendicular parking provided in close proximity to the loading areas.

35. It appears that no loading areas are provided for Buildings C, E, and F. The Applicant should indicate where loading/unloading is proposed to occur for these buildings.

36. The site plans do not provide a truck turning diagram for an emergency vehicle accessing the lower floors of the parking garage. At a minimum, an ambulance should be able to access the lower levels of the parking garage. The Andover Fire Chief should confirm that fire apparatus access to the interior of the parking garage is not required for this development. Should fire apparatus access be required to the lower levels of the parking garage, the Applicant should provide a vehicle turning diagram depicting a fire apparatus navigating through the parking garage to enter and exit.

37. A spiral ramp is proposed to provide access into the parking garage. The Applicant should provide a vehicle turning diagram to depict the turning path for the largest vehicle that maneuver around this spiral ramp and into the parking garage.

Mitigation Measures

38. Improvements are proposed at the Dascomb Road / I-93 NB Ramps intersection and the Frontage Road / I-93 SB Ramps intersection, which include installation of a traffic signal at both locations to be coordinated with other signals along the corridor and widening of the ramps to provide additional lanes. These improvements will require review and approval by MassDOT as these locations are under MassDOT's jurisdiction.

39. The TIAPS notes that improvements are not proposed at the Dascomb Road / Lovejoy Road / Acorn Drive intersection as mitigation for the Project. However, the 2026 Build with Mitigation conditions includes in Table 9 reflects signal timing modifications at this intersection to be completed as part of post-occupancy fine-tuning. As traffic exiting Lovejoy Road is expected to operate at LOS under 2026 Build conditions, the Applicant should commit to implementing signal timing improvements, including post-occupancy fine-tuning, at this intersection as mitigation for the development.

40. As previously noted, the Applicant has not proposed any project-specific mitigation at the Dascomb Road / Clark Road / Bannister Road intersection. However, this intersection currently experiences a higher number of angle collisions due to traffic entering and exiting Clark Road. In addition, traffic exiting Clark Road experiences long delays and queues, which will be exacerbated by the project, and the intersection currently exceeds warranting conditions for installation of a traffic signal. Regardless of the route vehicles travel (Clark Road or Andover Street), the Project is expected to result in an increase of 80 to 155 additional vehicle trips per hour through the intersection during the peak hours (a 12% increase in volume). Therefore, the Applicant should consider implementing off-site mitigation measures at this intersection, including installation of a traffic signal. At a minimum, the Applicant should provide a fair share contribution, proportional to the percentage increase in trips through the intersection, for the future installation of a traffic signal and any geometric improvements required to accommodate a signal at this location.

41. No improvements have been proposed at the Dascomb Road / Andover Street intersection. This intersection experiences a high occurrence of collisions and crash rate significantly higher than the state and District averages due to the awkward geometry of the intersection. In addition, traffic exiting Dascomb Road is expected to experience long delays and queues during the weekday PM peak period under all analysis conditions. The Project will result in an additional 55 to 106 vehicle trips per hour through this intersection, a 4% to 14% increase. The Applicant should consider measures to improve the operations and safety of this intersection, and at a minimum, provide a fair share contribution toward future improvements at this intersection, proportional to the percentage increase in vehicle trips generated by the Project.

42. GPI concurs with the following additional off-site improvements proposed by the Applicant as mitigation for the Project:

    a. Signal timing modifications at the Dascomb Road / East Street / Shawsheen Street intersection to optimize operations and provide coordination with other signals along the corridor.

    b. Installation of a traffic signal at the Dascomb Road / Smith Way intersection, which will be coordinated with other signals along the corridor, and widening on Dascomb Road and Smith Way to provide additional lanes.

    c. Reconstruction of the signal at the Dascomb Road / Frontage Road intersection to accommodate the new site driveway as a fourth leg and provide coordination with other signals along the corridor, and widen Frontage Road and Dascomb Road to accommodate additional lanes.

43. The Applicant has committed to installation of significant sidewalk improvements, including construction of new sidewalk between Shawsheen Street and Frontage Road, to provide a continuous sidewalk connection between the site and the Ballardvale MBTA Commuter Rail Station. In addition, RRFBs will be installed at multiple crossings along the Dascomb Road corridor to enhance the safety of the crossings. GPI notes that these improvements will provide a significant benefit to the surrounding community.

44. Similarly, the Applicant is committed to installing bicycle lanes and shared-use bicycle markings along Dascomb Road between Shawsheen Street and Osgood Street to improve bicycle accessibility along the corridor. These improvements will require review and approval by MassDOT for the section of Dascomb Road between the I-93 NB Ramps and Frontage Road, as this section of roadway is under the jurisdiction of MassDOT.

45. The Applicant proposes to provide secure, weather-protected, long-term bicycle parking for employees, as well as bicycle racks for short-term parking by patrons. However, the location(s) of these bicycle facilities are not identified on the site plans.

Summary

After a comprehensive review of the TIAPS for the Dascomb Road Project, GPI identifies the following areas where additional information or updated analysis could benefit the understanding and impacts of the Project:

1. ***Study Area:*** The site driveways along Smith Way and the internal 4-Way STOP intersection should be included in the analysis to ensure efficient traffic flow entering the site that will not back onto Dascomb Road.
2. ***Traffic Analysis:*** Channelized right-turn movements should be included as part of the signalized intersections.
3. ***Collision Data:*** The collision data provided at the Dascomb Road / Clark Road / Bannister Road intersection does not accurately reflect the number of collisions reported on MassDOT's crash portal. The additional crashes should be considered in evaluating safety enhancements for this location.
4. ***Parking:*** The location of all preferential parking spaces, electric vehicle charging stations, bicycle parking facilities, and ITS equipment should be shown on the site plans. The Applicant should consider reducing parking supply as a TDM measure, including eliminating a row of parking along the main drive aisle near Building H.
5. ***Pedestrian Access:*** Additional sidewalks and crosswalks should be considered at key locations on the site to enhance circulation and safety.
6. ***Overall Site Plan:*** Additional vehicle turning movement diagrams are required to ensure adequate traffic circulation on-site.
7. ***Mitigation Measures:*** The Applicant should consider additional measures to improve operations and safety at the intersections of Dascomb Road with Clark Road and Andover Street. At a minimum, the Applicant should provide a fair share contribution toward future improvements to offset project-specific impacts.

Should you have any questions, or require additional information, please contact me directly at (978) 570-2946.

Sincerely,

GREENMAN – PEDERSEN, INC.

Rebecca L. Brown, P.E., PTOE
Senior Project Manager

Traffic Volume Comparison

Location	Weekday AM Counts			Weekday PM Counts			Comparison		Difference
	Time	ATR	TMC	Time	ATR	TMC	AM	PM	
Dascomb Road between Partridge Hill and Surrey Lane	7:45 AM	1684	1655	5:00 PM	1470	1693	-1.7%	15.2%	16.9%
Dascomb Road at I-93 Overpass	7:30 AM	2036	2129	5:15 PM	1927	1712	4.6%	-11.2%	-15.7%
Dascomb Road west of Smith Way	7:45 AM	1879	2046	5:00 PM	1981	2069	8.9%	4.4%	-4.4%
WEIGHTED AVERAGE	--	5599	5830	--	5378	5474	4.1%	1.8%	-2.3%

Crash Number	Crash Date	Crash Time	Crash Severity	Maximum Injury Severity	Number of NonFatal	Number of Fatal Injuries	Number of Vehicles	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	First Harmful Event	Most Harmful Events	Vehicle Sequence of Events	Vehicle Configuration	Driver Contributing Codes	Non Motorist	Road Surface	Ambient Light	Weather Condition	Street Number	Roadway	Distance And Direction From Intersection	Roadway Intersection Type	Traffic Control Device Type	X	Y
2714167	3/31/2011	8:39 AM	Not Reported	Not reported	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:W / V2:N	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic),(Collision with other movable object) V2:(Collision with motor vehicle in traffic),(Collision with other movable object)	V1:() V2:()	D1:() D2:()		Dry	Daylight	Clear/Clear		DASCOMB ROAD / CLARK ROAD		T-intersection	Stop signs	227220.0156	931420.6876
2748101	7/29/2011	11:18 AM	Property damage only (none injured)	No injury	0	0	2	Angle	V1: Turning right / V2:Entering traffic lane	V1:E / V2:N	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Passenger	D1:(No improper driving) D2:(Inattention)		Dry	Daylight	Cloudy		DASCOMB ROAD / CLARK ROAD / BANNISTER ROAD		Four-way intersection	Stop signs	227220.0156	931420.6876
2986002	2/8/2012	3:49 PM	Non-fatal injury	Non-fatal injury - Non-incapacitating	1	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:E / V2:N	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)	D1:(No improper driving) D2:(Failed to yield right of way)		Dry	Daylight	Cloudy		DASCOMB RD / CLARK ROAD		T-intersection	Stop signs	227220.0156	931420.6876
3004399	4/1/2012	12:46 PM	Non-fatal injury	Non-fatal injury - Non-incapacitating	1	0	2	Angle	V1: Travelling straight ahead / V2:Entering traffic lane	V1:E / V2:N	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic),(Collision with unknown fixed object)	V1:(Passenger car) V2:(Passenger car)	D1:(No improper driving) D2:(Inattention),(Failed to yield right of way)		Dry	Daylight	Clear	72	DASCOMB RD		T-intersection	Stop signs	227212.4896	931413.1146
3060593	5/1/2012	6:11 PM	Property damage only (none injured)	No injury	0	0	2	Angle	V1: Travelling straight ahead / V2:Entering traffic lane	V1:N / V2:W	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only	D1:(Unknown) D2:(Failed to yield right of way)		Wet	Daylight	Cloudy/Rain	72	DASCOMB RD		T-intersection	Stop signs	227212.4896	931413.1146
3248724	8/28/2012	8:11 AM	Property damage only (none injured)	No injury	0	0	2	Angle	V1: Slowing or stopped in traffic / V2:Turning right	V1:N / V2:E	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Ran off road left),(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)	D1:(No improper driving) D2:(Swerving or avoiding due to wind, slippery surface, vehicle, object,		Wet	Daylight	Rain/Rain		DASCOMB RD / CLARK ROAD		T-intersection	Stop signs	227220.0156	931420.6876
3284438	10/18/2012	5:05 PM	Non-fatal injury	Non-fatal injury - Possible	1	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:E / V2:N	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only	D1:(No improper driving) D2:(Inattention)		Dry	Daylight	Cloudy/Cloudy		DASCOMB RD / CLARK ROAD		T-intersection	Stop signs	227220.0156	931420.6876
3689754	12/10/2013	2:30 PM	Property damage only (none injured)	No injury	0	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:W / V2:N	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only	D1:(Inattention) D2:(No improper driving)		Wet	Daylight	Snow	75	DASCOMB ROAD		T-intersection	Stop signs	227212.4896	931413.1146
4009765	2/17/2015	11:23 AM	Property damage only (none injured)	No injury	0	0	2	Angle	V1: Parked / V2:Travelling straight ahead	V1:W / V2:W	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with parked motor vehicle)	V1:(Light truck(van, mini-van, panel, pickup, sport utility) with only four tires) V2:(Light truck(van, mini-van, panel, pickup, sport utility) with only	D1:(No improper driving),(No improper driving) D2:(Inattention)		Slush	Daylight	Clear/Clear	75	DASCOMB ROAD	100 feet W of	Not at junction	No controls	227212.4896	931413.1146
4033782	3/30/2015	11:32 AM	Property damage only (none injured)	No injury	0	0	2	Angle	V1: Travelling straight ahead / V2:Turning left	V1:E / V2:S	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)	D1:(No improper driving),(No improper driving) D2:(Failed to yield		Wet	Daylight	Cloudy	73	DASCOMB RD		T-intersection	No controls	227223.6072	931424.5693
4045924	5/22/2015	8:40 AM	Non-fatal injury	Non-fatal injury - Non-incapacitating	1	0	2	Angle	V1: Turning left / V2:Travelling straight ahead	V1:N / V2:E	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)	D1:(Failed to yield right of way) D2:(No improper driving)		Dry	Daylight	Clear	73	DASCOMB RD		Four-way intersection	Stop signs	227223.6072	931424.5693
4193288	5/17/2016	8:37 AM	Property damage only (none injured)	No injury	0	0	2	Rear-end	V1: Slowing or stopped in traffic / V2:Slowing or stopped in traffic	V1:N / V2:N	Collision with motor vehicle in traffic	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Collision with motor vehicle in traffic) V2:(Collision with motor vehicle in traffic)	V1:(Passenger car) V2:(Passenger car)	D1:(Inattention),(Followed too closely) D2:(No improper driving)		Dry	Daylight	Cloudy	77	DASCOMB RD	250 feet S of	Not at junction	No controls	227161.2	931371

SELECT [Crash Number], [Crash Date], [Crash Time], [Crash Hour], [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], [Vehicle Travel Directions], [First Harmful Event], [Most Harmful Events], [First Harmful Event Location], [Vehicle Sequence of Events], [Vehicle Configuration], [Driver Contributing Codes], [Non Motorist Type], [Non Motorist Action], [Hit & Run], [Road Surface], [Ambient Light], [Weather Condition], [Street Number], [Roadway], [Distance

This query was also restricted by a map filter.