

# ROAD SAFETY AUDIT

Redemption Rock Trail (Route 140) at Princeton Road  
(Route 62)

Town of Sterling

January 30, 2024

Prepared For:  
MassDOT



On Behalf Of:  
Town of Sterling, MA



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# Table of Contents

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## Contents

<b>Background .....</b>	<b>1</b>
<b>Project Data .....</b>	<b>1</b>
<b>Project Location and Description.....</b>	<b>2</b>
<b>Audit Observations and Potential Safety Enhancements.....</b>	<b>6</b>
<b>Summary of Road Safety Audit.....</b>	<b>17</b>

## List of Appendices

Appendix A.	RSA Meeting Agenda
Appendix B.	RSA Audit Team Contact List
Appendix C.	Detailed Crash Data
Appendix D.	Traffic Volume Data
Appendix E.	Road Safety Audit References

## List of Figures

Figure 1: Locus Map.....	5
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## List of Tables

Table 1: Participating Audit Team Members.....	2
Table 2: Estimated Time Frame and Costs Breakdown.....	17
Table 3: Potential Safety Enhancement Summary .....	18

## Background

The Federal Highway Administration defines a Road Safety Audit (RSA) as the formal safety examination of an existing or future road or intersection by an independent, multidisciplinary team. The purpose of an RSA is to identify potential safety issues and possible opportunities for safety improvements considering all roadway users. Green International Affiliates, Inc. (Green) has been working with the Town of Sterling to develop roadway improvements for the intersection of Redemption Rock Trail (Route 140) at Princeton Road (Route 62). The Highway Safety Improvement Program (HSIP) is a Federal-aid program with the purpose to significantly reduce the number of traffic fatalities and serious injuries on all public roadways. MassDOT guidelines require an RSA be conducted where HSIP-eligible high crash locations are present within the audit area of a transportation improvement project. An intersection is defined as HSIP-eligible if the intersection is within the top 5% of crash clusters in its respective Regional Planning Commission (RPC) boundaries based on Equivalent Property Damage Only (EPDO) scores. An RSA was scheduled for the intersection of Redemption Rock Trail (Route 140) at Princeton Road (Route 62) due to its designation as an HSIP Crash Cluster within the Montachusett Regional Planning Commission (MRPC) region. The RSA is intended to identify potential short- and long-term safety improvements that can be made at the intersection, which can then be implemented through general maintenance for short-term low-cost improvements or potentially incorporated into a reconstruction project for longer term measures.

This RSA was conducted at the unsignalized intersection of Route 140 (Redemption Rock Trail) at Route 62 (Princeton Road) in Sterling, MA on October 30, 2023. The purpose of the RSA was to identify and discuss existing safety issues and potential improvements for all road users. Both short-term, mid-term, and long-term improvements were discussed.

The RSA study intersection was identified as a high crash cluster in the period of 2013-2015. In addition, the intersection was found to have an EPDO score exceeding the Top 5% HSIP threshold for the MRPC region during the years 2015-2017 and 2016-2018. Thus, the project location is eligible for funding through the HSIP following completion of the RSA.

The RSA team was composed of representatives from the MassDOT Traffic Safety Section, MassDOT District 3, the MRPC, Sterling Police Department, Sterling Fire Department, Town of Sterling Planning Department, Sterling Public Schools, Town of Sterling Department of Public Works, and Green International Affiliates, Inc. (Green).

## Project Data

The RSA for the intersection of Redemption Rock Trail (Route 140) and Princeton Road (Route 62) was conducted on October 30, 2023, with pre- and post-audit meetings held at the Butterick Municipal Building, located at 1 Park Street in Sterling. The RSA agenda is provided in Appendix A. Table 1 lists all members of the RSA team. The RSA began with Green International Affiliates, Inc. (Green) giving a brief presentation of the existing conditions and crash data history. A site visit was then conducted to evaluate the existing conditions and identify potential issues observed by the RSA team.

Following the site visit, the RSA team regrouped to summarize the safety concerns and discuss potential improvements.

As indicated in Table 1, the RSA team consisted of representatives from State, Regional, and Local agencies and included a cross-section of engineering, planning, and emergency response expertise. Contact information for the RSA team members is provided in Appendix B.

**Table 1: Participating RSA Team Members**

<b>Audit Team Member</b>	<b>Agency/Affiliation</b>
Michelle Deng	MassDOT Traffic Safety
Alolade (Lola) Campbell	MassDOT Projects
Dakota DelSignore	MassDOT Traffic Safety
Colby Roussel	MassDOT District 3 Traffic
Shane Leary	MassDOT District 3 Traffic
Steve Wallace	Sterling Town Planner
Bill Caldwell	Sterling Town Administrator
Sean Gaudette	Sterling Chief of Police
David C. Hurlbut, Jr.	Sterling Chief of Fire
Ryan Mouradian	Sterling Department of Public Works
Dr. James Reilly	Sterling Schools Superintendent
George Snow	Montachusett Regional Planning Commission (MRPC)
Amy Allen, P.E., PTOE	Green International Affiliates Inc.
Sergio Musto, P.E., PTOE	Green International Affiliates Inc.
Alex Tsoukalas, P.E.	Green International Affiliates Inc.
Dennis Vertiyev, P.E.	Green International Affiliates Inc.
Julianne Griffiths	Green International Affiliates Inc.

## Project Location and Description

This RSA evaluates safety issues at the unsignalized intersection of Route 140 (Redemption Rock Trail) and Route 62 (Princeton Road).

Route 140 (Redemption Rock Trail) is functionally classified as a rural minor arterial roadway. The segment of Route 140 (Redemption Rock Trail) within the study area is under the jurisdiction of the Town of Sterling. Route 140 (Redemption Rock Trail) intersects I-190 in Sterling, Route 2 in Westminster, and I-290 in Shrewsbury. Approaching the study intersection, Route 140 (Redemption Rock Trail) has two-way traffic flow with approximately 12-foot-wide travel lanes and 1-foot-wide shoulders. The posted speed limit is 35 Miles Per Hour (MPH) in both directions. However, Special Speed Regulation #422-A sets the speed limit at the intersection as 40 MPH in both directions.

Route 62 (Princeton Road) is classified as a rural major collector and provides access to the downtown area of Sterling. The segment of Route 62 (Princeton Road) within the study area is under the jurisdiction of the Town of Sterling. Route 62 (Princeton Road) intersects with I-190 in Sterling, Route 2 in Westminster, and I-495 in Berlin. Route 62 (Princeton Road) in the study area has one 11-12-foot-wide travel lane in each direction and 1-foot-wide shoulders. The posted speed limit is 35 MPH in the



eastbound direction, and 30 MPH in the westbound direction. It should be noted that this road, within the limits of the Town of Sterling, is not governed by an approved special speed regulation. Thus, the posted speed limit signs are not supported by a speed regulation and the statutory speed limit of 40 MPH for rural areas is applicable.

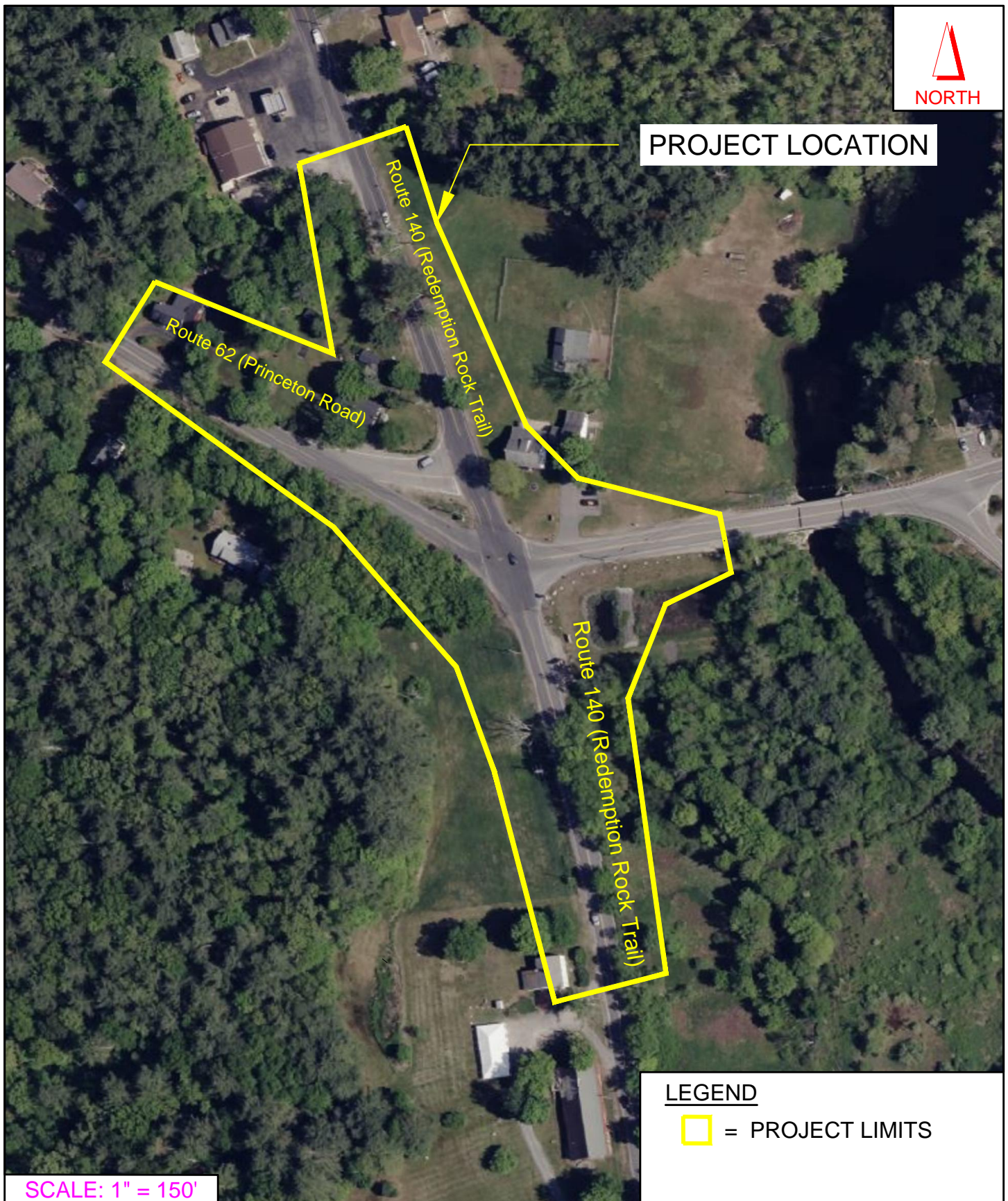
Route 140 (Redemption Rock Trail) and Route 62 (Princeton Road) form a five-legged intersection. Route 140 (Redemption Rock Trail) is uncontrolled, and Route 62 (Princeton Road) is stop controlled. There is an overhead flashing beacon with yellow and red flashing lights facing the major and minor approaches, respectively. There are no bicycle or pedestrian accommodations located at or in the vicinity of the intersection. Route 140 (Redemption Rock Trail) forms the north and south legs, and Route 62 (Princeton Road) forms the two west and east legs. Each of the five intersection legs has one approach lane and one receiving lane. Approaching the study area, Route 62 (Princeton Road) east leg has two-way traffic flow with approximately 11-foot-wide travel lanes and 1-foot-wide shoulders. On the west leg of Route 62 (Princeton Road) is a large triangle-shaped grass island separating the two eastbound approaches. The Route 62 (Princeton Road) eastbound northern leg has two-way traffic flow with approximately 13-foot-wide travel lanes with 1-foot-wide shoulders. The Route 62 (Princeton Road) eastbound southern leg approach has two-way traffic flow with approximately 12-foot-wide travel lanes and 1-foot-wide shoulders.

Land use in vicinity of the intersection is a mix of residential and undeveloped. There are residential buildings at the northwest and northeast corners of the intersection. The southwest corner of the intersection is undeveloped, and the southeast corner of the intersection has a retention pond for removing contaminate from runoff water. There is no formal parking provided at the intersection. All approaches are separated with a double yellow center line and have white shoulder markings. There is no fixed-route public transit or rail transportation in the audit area.

Local crash data, supplemented by the MassDOT IMPACT crash data portal, were collected and organized into a crash summary and collision diagram. There were 40 reported crashes at the intersection of Route 140 (Redemption Rock Trails) and Route 62 (Princeton Road) from 2015 to 2019. The crash data indicated the following:

- 8 crashes (20%) resulted in injuries;
- 27 crashes (68%) were angle collisions;
- 14 crashes (35%) involved drivers who either disregarded traffic signs or failed to yield right-of-way;
- The highest number of crashes (8) occurred between 6:00 AM and 8:00 AM, and between 4:00 PM and 6:00 PM;
- 7 crashes (18%) occurred under dark conditions;
- Crash rate relates the number of accidents at a location to the amount of traffic that passes through the location. The calculated rate is compared to the MassDOT averages. The intersection has a crash rate of 1.66, over twice as high as the MassDOT District 3 average crash rate of 0.61 for unsignalized intersections.

Existing roadway volumes were collected on Tuesday, September 20, 2022, and Wednesday, September 21, 2022. These values were used in the calculations of crash rates for the intersection. Appendix C provides the crash summary, collision diagram, and MassDOT crash rate worksheets for the intersection. Traffic volume data is provided in Appendix D. The audit location is shown in Figure 1. The study intersection is outlined in yellow.





## Audit Observations and Potential Safety Enhancements

In conducting the RSA, existing safety issues and possible corrective actions were identified based on RSA team discussions and site visit observations. Several of these concerns and their associated improvements will require further evaluation and engineering to determine the feasibility of implementing appropriate safety enhancements. The safety issues that were identified at the intersection include:

- Driver Behavior and Excessive Speed;
- Intersection Geometry and Operations;
- Inadequate Drainage;
- Inadequate or Faded Traffic Signs and Pavement Markings;
- Lack of Bicycle Accommodations;
- Lack of Pedestrian Accommodations;
- Potential Effects on Emergency Response and Apparatuses;
- Difficulty with Plowing Operations.



**Image 1: Route 140 (Redemption Rock Trail)  
at Route 62 (Princeton Road)**

The following paragraphs describe in more detail the issues and potential safety enhancements. The issues identified by the RSA team have some similarities and were grouped into major categories. The potential enhancements discussed consisted of low, medium, and high-cost improvements that range from short-term, mid-term, and long-term implementation. There have been recent improvements to the Route 140 (Redemption Rock Trail) and Route 62 (Princeton Road) intersection in an effort to address the existing safety issues. These improvements included resurfacing and restriping the roadways, and installing LED flashing Stop signs and Stop Ahead signs in the past year. The safety effects of these recent improvements have not yet been evaluated.

## **Safety Issue #1. Driver Behavior and Excessive Speed**

### Observations

The RSA team members noted that driver confusion and impatience are common and may be contributing factors to the crashes experienced at this intersection. Driver actions that were reported at the study intersection include, but are not limited to, Route 62 (Princeton Road) drivers making left turns in front of Route 140 (Redemption Rock Trail) traffic which has the right-of-way and Route 62 (Princeton Road) drivers not coming to a complete stop before entering Route 140 (Redemption Rock Trail). The crash reports indicated that during the five-year study period, “failed to yield right-of-way” or “disregarded traffic sign, signals, road markings” were recorded as the driver contributing factor for 14 of the 40 crashes (35%), which may be a leading cause of the high frequency of angle collisions. This issue is particularly prevalent on the Route 62 eastbound and westbound approaches as these legs are stop controlled, while Route 140 (Redemption Rock Trail) is uncontrolled.



**Image 2: Southwest corner facing east**

Of the 40 total crashes at the study intersection, 23 crashes (58%) were angle crashes with vehicles exiting Route 62 (Princeton Road) and vehicles traveling along Route 140 (Redemption Rock Trail). Of these angle collisions, eight of the 23 angle crashes occurred between vehicles exiting Route 62 (Princeton Road) eastbound with vehicles traveling southbound on Route 140 (Redemption Rock Trail). Eleven of the 23 angle crashes occurred between vehicles exiting Route 62 (Princeton Road) westbound with vehicles traveling southbound on Route 140 (Redemption Rock Trail). Two of the 23 angle crashes occurred between vehicles exiting Route 62 (Princeton Road) eastbound with vehicles traveling northbound on Route 140 (Redemption Rock Trail), and two of the 23 angle crashes occurred between vehicles exiting Route 62 (Princeton Road) westbound with vehicles traveling northbound on Route 140 (Redemption Rock Trail).

The crash data indicate that most crashes occurred during the 6:00AM to 8:00AM peak hours and the 4:00PM to 6:00PM peak hours. It was reported that 16 of the 40 crashes (40%) occurred during the peak commuting hours. Driver impatience could be a contributing factor to the frequency of collisions during the peak hours. Long queues of traffic and increased wait times to exit the Route 62 (Princeton Road) approaches could increase driver impatience to safely exit and willingness to accept short gaps. Although not mentioned in the crash reports, courtesy behavior was observed during the field visit, when drivers on Route 140 (Redemption Rock Trail) yielded the right-of-way, contrary to the rules of the road, to drivers exiting Route 62 (Princeton Road). Courtesy behavior can cause confusion to other drivers. A driver in one direction may yield to a turning driver; however, a third driver may not be aware or conform to the courtesy action resulting in an angle crash. As a result, courtesy behavior can cause a safety issue for all motorists.

As mentioned earlier, existing stop signs on the eastbound and westbound approaches have flashing LEDs. There is an overhead flashing signal head beacon for four of the five intersection approaches,

excluding the northern leg of the eastbound approach of Route 62. It was observed that the flashing beacon facing the eastbound approach cannot be clearly seen by approaching vehicles due to the skewed angle of the approach. The flashing beacons facing the northbound and southbound approaches are missing visors. It was observed that drivers on the Route 62 (Princeton Road) eastbound approach can see the Route 140 (Redemption Rock Trail) southbound yellow flashing beacon due to the missing visor. This may cause confusion for drivers on the Route 62 (Princeton Road) eastbound approach as they may see two conflicting traffic control signals.

Town officials explained that during winter ski season, traffic volumes can be significantly higher as Route 140 (Redemption Rock Trail) and Route 62 (Princeton Road) are used to access the Mount Wachusett Ski Area. During the ski season months, December through March, 17 of the 40 crashes (43%) occurred. This could be due to the increased traffic utilizing the intersection to access the Mount Wachusett Ski Area.

During the field visit, the RSA team observed excessive vehicle speeds along both approaches of Route 140 (Redemption Rock Trail). Of the eight injury crashes, five involved northbound or southbound vehicles traveling on Route 140 where higher speeds were noted to be observed. Local authorities of the RSA team have noted from their past experience responding to crashes at the intersection that excessive speed was a major contributing factor to the severity of reported crashes. At the time of this RSA, there was a radar speed feedback sign mounted to a utility pole just north of the intersection, facing southbound traffic, at the Mutual Gas Station and Lanphers Market. This sign is inconspicuous for motorists and, due to its location, it may also capture speeds of vehicles exiting the adjacent driveways.

For context, the posted speed limits for each leg of the intersection are: Route 140 southbound (40 MPH), Route 140 northbound (35 MPH), Route 62 (Princeton Road) westbound (30 MPH), and Route 62 (Princeton Road) eastbound (35 MPH). From the traffic count data collected in September 2022, each approach's 85th percentile speed was recorded to be at minimum 5 MPH over the posted speed limit. The 85th percentile speed is the speed at or below which 85 percent of the drivers travel on a road segment. The high travel speeds are thought to result from drivers feeling encouraged to speed, due to the rural setting with infrequent driveways or intersecting streets, and drivers do not encounter signal or roundabout yield control on Route 140 for two or more miles in either direction from the study intersection. Approximately two miles to the south of the study intersection is the limited-access arterial I-190, and drivers may be continuing to travel unimpeded at a high rate of speed on Route 140 through the study area when coming from this connecting roadway. The local members of the RSA team observed that drivers tend to pick up speed in both northbound and southbound approaches of the study intersection. It should be noted that the posted speed limits on Route 62 (Princeton Road) and Route 140 (Redemption Rock Trail) do not conform with the speed regulations or statutory speed that legally sets speeds on both study area roadway at 40 MPH.

### Enhancements

- Consider installing advanced intersection warning signage with street name plaques underneath (e.g. MUTCD W2-1) supplemented with flashing warning beacons on Route 140 northbound and southbound approaches to warn motorists of the approaching intersection with Route 62.
- Consider realigning the angle of the flashing beacons to be directly facing each approach to increase visibility. Please note that given perpendicular flashers, maintaining visibility on all approaches is difficult due to the intersection's skew.
- Consider installing visors on the flashing signal head beacons to avoid drivers on a given approach from seeing another approach's conflicting signal head.
- Consider upgrading flashing signal head beacons to LED to enhance visibility to drivers.
- Evaluate the addition of left-turn lanes for both approaches for Route 140 (Redemption Rock Trail) to discourage or reduce the possibility that courtesy behavior may lead to courtesy crashes.
- Evaluate the feasibility of a town-wide enforcement and driver education campaign of traffic regulations to raise awareness amongst citizens to encourage safer driving behaviors.
- Evaluate alternative intersection control operations, such as signalized intersection, roundabout, or innovative intersection types to reduce number of conflict points.
- Consider reducing the lane widths by either physical narrowing or visual narrowing. Visual narrowing could include, but is not limited to, visual gateway treatments. Visual gateway treatments are used to alert drivers that they are entering an area with slower speeds. These treatments can include, but are not limited to, warning signage, median islands, curb extensions, or speed reduction pavement markings. Calming traffic to reduce vehicle speeds could thus potentially reduce crash severities.
- Consider installing transverse rumble strips. Transverse rumble strips are placed in the travel lane perpendicular to the direction of travel to alert drivers of a need to slow down or stop that may not be anticipated by an inattentive driver.
- Consider establishing a target speed for Route 140 (Redemption Rock Trail) within the study area, and incorporate speed management measures to achieve the target speed.
- Consider installing permanent speed feedback signs on the Route 140 (Redemption Rock Trail) northbound and southbound approaches.
- Consider conducting a speed study for Route 140 to identify areas of speeding concern and where speed management countermeasures should be focused.
- Coordinate with MassDOT to formally establish a special speed regulation for Route 62 (Princeton Road) within the Town of Sterling.

## **Safety Issue #2. Intersection Geometry and Operations**

### Observations

The unconventional intersection geometry and skewed angle of the southern leg of the Route 62 (Princeton Road) eastbound approach creates poor lines of sight for exiting vehicles yielding to traffic on Route 140 (Redemption Rock Trail). The poor sight distance for exiting vehicles on Route 62 (Princeton Road) may contribute to quick starting and then stopping once traffic is seen on Route 140 (Redemption Rock Trail). The quick starting and stopping may contribute to the rear-end crashes. Nine of the 40 total crashes (23%) were rear-end crashes at the Route 62 (Princeton Road) approaches. Of these nine crashes, seven occurred at the southern leg of the Route 62 (Princeton Road) eastbound approach and two occurred at the Route 62 (Princeton Road) westbound approach. This recurrence may correspond with the observation that sight distance appears to be most notably limited on the southern leg of the Route 62 eastbound approach. Local RSA team members observed drivers looking both ways more often when entering or crossing the intersection from Route 62 (Princeton Road) approaches. Local RSA members who respond to intersection crashes indicate that drivers frequently indicate either not seeing the traffic control or not seeing other drivers as a contributing factor. Three of the 40 total crashes (8%; crashes #10, #27, #40) indicated that a driver exiting from Route 62 (Princeton Road) did not see a vehicle approaching from Route 140 (Redemption Rock Trail) southbound resulting in an angle collision.



**Image 3: Line of sight from Route 62 (Princeton Road) eastbound looking north to Route 140 (Redemption Rock Trail)**

The utility pole located in the triangle-shaped island could potentially be obstructing driver line of sight. Roadway vegetation along Route 140 (Redemption Rock Trail) southbound, near the gas station, may also be obstructing line of sight. There is currently no traffic control at the west side of the triangle-shaped island forming a “Y” intersection with the converging traffic. During the five-year study period, “inattention” or “visibility obstructed” were recorded as the driver contributing factor for 12 of the 40 crashes (30%). Route 140 (Redemption Rock Trail) north of the intersection has a crest in the roadway profile which may limit the visibility of southbound vehicles.

The intersection footprint allows for multiple vehicles to enter the study intersection at the same time. The audit team observed issues regarding left turn movements from Route 140 (Redemption Rock Trail) northbound and southbound blocking exiting movements on Route 62 (Princeton Road). Vehicles on Route 140 (Redemption Rock Trail) waiting to take a left turn that block exiting traffic from Route 62 (Princeton Road) approaches may contribute to longer queues and wait times for the Route 62 (Princeton Road) approaches. Crashes involving left turns also involved actions other than those discussed above. Crash #17 involved a southbound left-turning vehicle that entered the wrong lane of a westbound approach and crashed into the vehicle stopped at the westbound approach. Crash #31 involved a westbound through-moving vehicle driving around a southbound left-turning vehicle to cross the intersection. Crash #33 involved a northbound left-turning vehicle being rear-ended by a northbound through-moving vehicle as the driver yielded the right-of-way to southbound through-moving traffic.



RSA team members observed that Route 140 (Redemption Rock Trail) experiences platooning traffic, which is a large segment of traffic flowing through the uncontrolled intersection with no gaps. As previously noted, 16 of the 40 crashes (40%) within the study period occurred during the peak commuting hours. A local RSA member noted that this could be caused by traffic control operations along Route 140 north of the study intersection at a signalized intersection in Westminster. During the site visit, the RSA team members also observed platooning traffic on Route 140 (Redemption Rock Trail) northbound, which may be caused by a signalized intersection located approximately two miles to the south. Drivers from Route 62 may initially stop but then cut out in front of vehicles traveling on Route 140, thus leading to angle collisions. This may also contribute to the aforementioned rear end collisions on Route 62 (Princeton Road) due to quickly starting and stopping to safely yield to traffic along Route 140 (Redemption Rock Trail).

Field observations indicated that lighting of the intersection is limited to one overhead LED streetlight between the Route 62 (Princeton Road) west intersection legs located on the triangle-shaped island. Three of the 40 crashes (8%) occurred under dark, underlighted roadway conditions, which may exacerbate the other conditions mentioned at this intersection.

#### Enhancements

- Consider changing the intersection geometry to make approaches more perpendicular to address the unconventional intersection geometry. This could be beneficial to addressing the skewed or sharp angle for drivers exiting from Route 62 (Princeton Road) eastbound approach.
- Consider installing either yield or stop traffic control at the westbound approach of the west leg of Route 62 (Princeton Road) with respect to the adjacent residential driveway. This could be beneficial as this would avoid right-of-way confusion with traffic entering right from Route 140 (Redemption Rock Trail) southbound, and traffic entering left from Route 140 (Redemption Rock Trail) northbound or traffic entering through from Route 62 (Princeton Road) westbound.
- Consider consolidating the eastbound approach to one leg to reduce driver confusion and to reduce the number of conflict points.
- Consider adjusting the roadway profile north of the intersection along the Route 140 (Redemption Rock Trail) southbound approach to address the roadway crest and sag.
- Consider relocating the utility pole on the triangle-shaped island for the Route 62 (Princeton Road) eastbound approach farther from the intersection.
- Evaluate and remove any vegetation along the roadway edge towards the gas station located on Route 140 (Redemption Rock Trail) southbound.
- Coordinate with residential property owner to evaluate features located at the northwest corner of the intersection that may impede visibility, such as fencing and vegetation.

- Evaluate options including traffic signal, roundabout, or alternative intersection types. These alternative traffic control methods could create longer or more frequent gaps on the major approaches that traffic from the minor approaches can enter or pass.
- Evaluate addition of left-turn lanes at the Route 140 (Redemption Rock Trail) northbound and southbound approaches. This may reduce the delay along Route 140 (Redemption Rock Trail) by splitting the traffic stream into two lanes.
- Evaluate addition of right-turn lane on the westbound approach of Route 62 (Princeton Road). This may reduce the delay along Route 62 (Princeton Road) by splitting the traffic stream into two lanes.

### **Safety Issue #3. Inadequate Drainage**

#### Observations

It was observed that rainwater was ponding in the southwest corner adjacent to the southern leg of the Route 62 (Princeton Road) eastbound approach and on the south side of the triangle-shaped island. Lack of catch basins could result in standing water and ponding on the roadway, making vehicle control more difficult for drivers during and after heavy rain events. Improper grading and drainage may also be a contributing factor in exacerbating the poor pavement conditions present at this intersection. Poor drainage at the intersection could also be a contributing factor to crashes. One of the reported crashes indicated snowy road surface conditions, which could have been exacerbated by inadequate drainage. Another reported crash involved a motorcyclist losing control due to sand or debris in the roadway. Excessive sand along a roadway could indicate improper drainage as water runoff pools in one area leaving sand and debris behind.

#### Enhancements

- Evaluate existing drainage around intersection. Evaluate locations of water ponding at the corners of the Route 62 (Princeton Road) eastbound approaches, and along the triangle-shaped island.
- Evaluate pavement conditions and maintenance to address standing water near intersection.



**Image 4: Current drainage conditions at the southwest corner of the intersection along Route 62 (Princeton Road) eastbound**

#### **Safety Issue #4. Inadequate or Faded Traffic Signs and Pavement Markings**

##### Observations

The multiple destination signage present at the intersection was observed to be outdated, and no longer compliant with the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD defines national standards for all traffic control devices, including road markings, traffic signals, and more. Some of the intersection signage appears to not meet the minimum height requirement, such as the stop sign on the triangle-shaped island facing Route 62 (Princeton Road) eastbound. Other traffic signs on the southbound approach were faded. For example, the Route 140 (Redemption Rock Trail) southbound advanced route turn assembly with a directional arrow auxiliary is faded. There are an excessive number of signs on the triangle-shaped island. The general sign clutter may be contributing to the line of sight issue with Route 140 (Redemption Rock Trail) southbound traffic and the Route 62 (Princeton Road) eastbound approach. Multiple, potentially repetitive “No Passing” signs were also observed in the study area. The Town of Sterling Department of Public Works indicated that the stop signs for the Route 62 (Princeton Road) eastbound and westbound approaches had recently been upgraded to have LED flashing borders. In addition, it was observed that there are numerous destination signs located at the triangle-shaped island that could be impeding the line of sight.



**Image 5: Speed limit sign on Route 140 (Redemption Rock Trail) southbound that does not meet minimum sign height requirement (Site Visit July 2022)**

The RSA team also noted that the stop line location for the Route 62 (Princeton Road) approaches may be too far back, which could lead drivers to encroach into the roadway to improve their line of sight. The angle of the stop line on the Route 62 (Princeton Road) eastbound approach was also questioned as stopped drivers need to turn their heads back to look left under the current stop line position. The quality of the pavement markings ranged from fair to good condition. The edge lines are more faded than the stop lines.

##### Enhancements

- Evaluate the condition, compliance, and location of all warning, regulatory, and wayfinding signage within the study area and replace as needed.
- Evaluate placement of stop bars for Route 62 (Princeton Road) approaches and restripe if deemed necessary.
- Consider installing STOP AHEAD pavement markings on Route 62 (Princeton Road) approaches to further enhance advanced warning of the intersection for motorists.
- Consider reducing intersection sign clutter and upgrading to current sign standards. This should have particular emphasis regarding the signage installed on the triangle-shaped island separating the two Route 62 (Princeton Road) eastbound approaches.

## **Safety Issue #5. Lack of Bicycle Accommodations**

### Observations

The intersection is not currently user-friendly for bicyclists due to the lack of bicycle accommodations. Existing shoulders are approximately 1-3 feet wide, which is not a sufficient width to provide safe travel for bicycles separate from vehicles.

It was noted during the RSA that bicyclists traveling through the region may pass through this intersection since Route 62 (Princeton Road) connects to the Town of Sterling downtown area. Local members of the RSA reported that they have observed bicycles traveling on Route 140 (Redemption Rock Trail). The MassDOT map for “Potential for Everyday Biking by Regional Planning Agency” records the study intersection roadways as low potential.

The turning movement counts collected on Tuesday, September 20, 2022 indicated that there was some bicycle activity. The turning movement count was conducted from 7:00AM to 7:00PM. The hour with the highest volumes of bicycles reported utilizing the intersection was between 2:00PM to 3:00PM, when a total of four bicyclists were recorded. In total during the 12-hour turning movement count, there were nine bicyclists entering the intersection legs. The Route 62 (Princeton Road) eastbound legs had the highest volume of bicycles, with four bicyclists utilizing that approach during the 12-hour turning movement count. There were no bicyclist crashes reported during the five-year study period.

### Enhancements

- Evaluate and review all nearby bicycle accommodations to provide connections.
- Consider coordinating with Wachusett Greenways to review potential connections to their bicycle network.
- Consider installing separated or buffered bicycle lanes, or a shared-use path to safely accommodate bicyclists through the study area.
- Consider creating a town-wide bicycle network plan to better prioritize locations that are of bicycle facility in the town.



**Image 6: Lacking Bicycle Accommodations Route 140 (Redemption Rock Trail) Southbound facing north toward intersection. (Site Visit July 2022)**

## **Safety Issue #6. Lack of Pedestrian Accommodations**

### Observations

The intersection is not currently user-friendly for pedestrians due to the lack of pedestrian accommodations, such as sidewalks and crosswalks. Existing shoulders are approximately 1-3 feet wide, which is not a sufficient width to provide safe travel for pedestrians separate from vehicles. Local audit team members noted that the surrounding area is not a highly active for pedestrians. Approximately 0.28 miles west of the intersection, however, there are athletic fields.

The turning movement counts collected on Tuesday, September 20, 2022 indicated that there was some pedestrian activity. In total during the 12-hour turning movement count, three pedestrians entered the intersection legs, all during the 8:45AM to 9:45AM peak hour. All three of the reported pedestrians utilized the Route 62 (Princeton Road) eastbound legs during the 12-hour turning movement count. There were no pedestrian crashes reported during the five-year study period.

### Enhancements

- Consider creating a town-wide pedestrian network plan to identify the Town's pedestrian facilities and prioritize areas that lack sidewalk and crosswalk connections.
- Review potential connections to the Wachusett Greenways network.
- Evaluate and review all nearby pedestrian accommodations to provide connections. Consider installing sidewalks and crosswalks to enhance the existing connections.



**Image 7: Lacking Pedestrian Accommodations Route 62 (Princeton Road) Eastbound facing south at intersection (Site Visit July 2022)**

## **Safety Issue #7. Potential Effects on Emergency Response and Apparatuses**

### Observations

It was reported by local RSA members that the study intersection is used frequently by emergency response teams for the Town of Sterling and surrounding municipalities as it is a connection route to nearby medical facilities. For example, Route 62 (Princeton Road) is utilized by emergency responders to access UMass Memorial Health Alliance in Clinton to the east of the study area. Also, Route 140 (Redemption Rock Trail) is utilized as a connection by emergency responders to access Saint Vincent Hospital in



**Image 8: Heavy traffic volumes at intersection may decrease emergency response time (Site Visit July 2022)**



Worcester. There is currently no emergency pre-emption detection equipment at the study intersection, as it is stop controlled.

#### Enhancements

- Consider installing emergency pre-emption detection equipment if a traffic signal is installed, as Route 62 (Princeton Road) is a major route utilized by emergency apparatuses.

### **Safety Issue #8. Difficulty with Plowing Operations**

#### Observations

During plowing operations, the Town of Sterling Department of Public Works reports that due to convenience, snow is temporarily stored in the triangle-shaped island. During off-peak hours, typically in the middle of the night, the snow is hauled to an alternative location. In one of the reported crashes, the driver specifically stated that the snowbank was obstructing their visibility and contributed to the crash.



**Image 9: Triangle-shaped island currently used for snow storage (Site Visit July 2022)**

#### Enhancements

- Evaluate alternative locations for snow storage so that snow piles do not block intersection sight lines.

## Summary of Road Safety Audit

Based on the RSA team members' review of observations and discussions, issues and possible solutions were identified that could help reduce safety risks at Route 140 (Redemption Rock Trail) and Route 62 (Princeton Road).

Table 2 defines estimated safety payout, time frame, cost, and responsibility. The issues and possible solutions from the previous sections are summarized in Table 3.

**Safety Payoff:** the safety payoff is an engineering judgement of the effectiveness of the potential safety improvements.

**Time frame:** the enhancement can be completed within a time frame of short-term (<1 year), mid-term (1-3 years), or long-term (>3 years).

**Cost:** cost is estimated to be low (<\$10,000), medium (\$10,001-\$50,000) or high (>\$50,000).

**Jurisdiction:** the entity or organization which has ownership of the roadway where potential enhancements may be completed.

Table 2: Estimated Time Frame and Costs Breakdown

Time Frame		Costs	
Short-Term	<1 Year	Low	<\$10,000
Mid-Term	1-3 Years	Medium	\$10,001-\$50,000
Long-Term	>3 Years	High	>\$50,000

**Table 3: Potential Safety Enhancement Summary**

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Driver Behavior and Excessive Speed	Consider installing advanced intersection warning signage with street name plaques underneath (e.g. MUTCD W2-1) supplemented with flashing warning beacons on Route 140 northbound and southbound approaches to warn motorists of the approaching intersection with Route 62.	Medium	Short-Term	Medium	Town of Sterling
	Consider realigning the angle of the flashing beacons to be directly facing each approach to increase visibility. Please note that given perpendicular flashers, maintaining visibility on all approaches is difficult due to the intersection's skew.	Low	Short-Term	Low	Town of Sterling
	Consider installing visors on the flashing signal head beacons to avoid drivers on a given approach from seeing another approach's conflicting signal head.	Low	Short-Term	Low	Town of Sterling
	Consider upgrading flashing signal head beacons to LED to enhance visibility to drivers.	Medium	Short-Term	Low	Town of Sterling



Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Driver Behavior and Excessive Speed (Continued)	Evaluate the addition of left-turn lanes for both approaches for Route 140 (Redemption Rock Trail) to discourage or reduce the possibility that courtesy behavior may lead to courtesy crashes.	Medium	Long-Term	High	Town of Sterling
	Evaluate the feasibility of a town-wide enforcement and driver education campaign of traffic regulations to raise awareness amongst citizens to encourage safer driving behaviors.	Low	Short-Term	Low	Town of Sterling
	Evaluate alternative intersection control operations, such as signalized intersection, roundabout, or innovative intersection types to reduce number of conflict points.	High	Long-Term	High	Town of Sterling

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Driver Behavior and Excessive Speed (Continued)	Consider reducing the lane widths by either physical narrowing or visual narrowing. Visual narrowing could include, but is not limited to, visual gateway treatments. Visual gateway treatments are used to alert drivers that they are entering an area with slower speeds. These treatments can include, but are not limited to, warning signage, median islands, curb extensions, or speed reduction pavement markings. Calming traffic to reduce vehicle speeds could thus potentially reduce crash severities.	Medium	Short to Mid-Term (Depending on the selected treatment)	Low to Medium (Depending on the selected treatment)	Town of Sterling
	Consider installing transverse rumble strips. Transverse rumble strips are placed in the travel lane perpendicular to the direction of travel. Transverse rumble strips are installed to alert drivers of a need to slow down or stop that may not be anticipated by an inattentive driver.	Medium	Short-Term	Low to Medium (Depending on the selected treatment)	Town of Sterling
	Consider establishing a target speed for Route 140 (Redemption Rock Trail) within the study area, and incorporate speed management measures to achieve the target speed.	Low	Long-Term	Low to Medium (Depending on the selected treatment)	Town of Sterling

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Driver Behavior and Excessive Speed (Continued)	Consider installing permanent speed feedback signs on the Route 140 (Redemption Rock Trail) northbound and southbound approaches.	Low	Short-Term	Medium	Town of Sterling
	Consider conducting a speed study for Route 140 to identify areas of speeding concern and where speed management countermeasures should be focused.	Medium	Mid-Term	Medium	Town of Sterling
	Coordinate with MassDOT to formally establish a special speed regulation for Route 62 (Princeton Road).	Medium	Mid-Term	Medium	Town of Sterling
Intersection Geometry & Operations	Consider changing the intersection geometry to make approaches more perpendicular to address the unconventional intersection geometry. This could be beneficial to addressing the skewed or sharp angle for drivers exiting from Route 62 (Princeton Road) eastbound approach.	High	Long-Term	High	Town of Sterling

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Intersection Geometry & Operations	Consider installing either yield or stop traffic control at the westbound approach of the west leg of Route 62 (Princeton Road) with respect to the adjacent residential driveway. This could be beneficial as this would avoid right-of-way confusion with traffic entering right from Route 140 (Redemption Rock Trail) southbound, and traffic entering left from Route 140 (Redemption Rock Trail) northbound or traffic entering through from Route 62 (Princeton Road) westbound.	Medium	Long-Term	Low	Town of Sterling
	Consider consolidating the eastbound approach to one leg to reduce driver confusion and to reduce the number of conflict points.	Medium	Long-Term	High	Town of Sterling
	Consider adjusting the roadway profile north of the intersection along the Route 140 (Redemption Rock Trail) southbound approach to address the roadway crest and sag.	Medium	Mid-Term	High	Town of Sterling

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Intersection Geometry & Operations (Continued)	Consider relocating the utility pole on the triangle-shaped island for the Route 62 (Princeton Road) eastbound approach farther from the intersection.	Low	Short-Term	Medium	Town of Sterling, Utility owners
	Evaluate and remove any vegetation along the roadway edge towards the gas station located on Route 140 (Redemption Rock Trail) southbound.	Low	Short-Term	Low	Town of Sterling
	Coordinate with residential property owner to evaluate features located at the northwest corner of the intersection that may impede visibility, such as fencing and vegetation.	Low	Short-Term	Low	Town of Sterling, Property Owner
	Evaluate options including traffic signal, roundabout, or alternative intersection types. These alternative traffic control methods could create longer or more frequent gaps on the major approaches that traffic from the minor approaches can enter or pass.	High	Long-Term	High	Town of Sterling

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Intersection Geometry & Operations (Continued)	Evaluate addition of left-turn lane on the westbound approach of Route 62 (Princeton Road). This may reduce the delay along Route 62 (Princeton Road) by splitting the traffic stream into two lanes.	Low	Mid-Term	High	Town of Sterling
	Evaluate addition of right-turn lane on the westbound approach of Route 62 (Princeton Road). This may reduce the delay along Route 62 (Princeton Road) by splitting the traffic stream into two lanes.	Low	Mid-Term	High	Town of Sterling
Inadequate Drainage	Evaluate existing drainage around intersection. Evaluate locations of water ponding at the corners of the Route 62 (Princeton Road) eastbound approaches, and along the triangle-shaped island.	Low	Short-Term	Low	Town of Sterling
	Evaluate pavement conditions and maintenance to address standing water near intersection.	Low	Short-Term	Medium	Town of Sterling

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Inadequate or Faded Traffic Signs and Pavement Markings	Evaluate the condition, compliance, and location of all warning, regulatory, and wayfinding signage within the study area and replace as needed.	Low	Short-Term	Medium	Town of Sterling
	Evaluate placement of stop bars for Route 62 (Princeton Road) approaches and restripe if deemed necessary.	Low	Short-Term	Low	Town of Sterling
	Consider installing STOP AHEAD pavement markings on Route 62 (Princeton Road) approaches to further enhance advanced warning of the intersection for motorists.	Medium	Short-Term	Low	Town of Sterling
	Consider reducing intersection sign clutter and upgrading to current sign standards. This should have particular emphasis regarding the signage installed on the triangle-shaped island separating the two Route 62 (Princeton Road) eastbound approaches.	Medium	Short-Term	Low	Town of Sterling
Lack of Bicycle Accommodations	Evaluate and review all nearby bicycle accommodations to provide connections.	Low	Short-Term	Low	Town of Sterling
	Consider coordinating with Wachusett Greenways to review potential connections to their bicycle network.	Low	Short-Term	Low	Town of Sterling

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Lack of Bicycle Accommodations (Continued)	Consider installing separated or buffered bicycle lanes, or a shared-use path to safely accommodate bicyclists through the study area.	Medium	Long-Term	High	Town of Sterling
	Consider creating a town-wide bicycle network plan to better prioritize locations that are of bicycle facility in the town.	Low	Mid-Term	Medium	Town of Sterling
Lack of Pedestrian Accommodations	Consider creating a town-wide pedestrian network plan to identify the Town's pedestrian facilities and prioritize areas that lack sidewalk/crosswalk connections.	Low	Mid-Term	Medium	Town of Sterling
	Review potential connections to the Wachusett Greenways network.	Low	Short-Term	Low	Town of Sterling
	Evaluate and review all nearby pedestrian accommodations to provide connections. Consider installing sidewalks and crosswalks to enhance the existing connections.	Medium	Mid to Long-Term (Depending on the selected treatment)	High	Town of Sterling
Potential Effects on Emergency Response and Apparatuses	Consider installing emergency pre-emption detection equipment as Route 62 (Princeton Road) is a major route utilized by emergency apparatuses.	Medium	Long-Term (If traffic signal is constructed)	Medium	Town of Sterling
Difficulty with Plowing Operations	Evaluate alternative locations for snow storage so that snow piles do not block intersection sight lines.	Low	Short-Term	Low	Town of Sterling



## Appendix A. RSA Meeting Agenda

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# Agenda

## Road Safety Audit

Meeting Location:  
Butterick Municipal Building, Room 205  
1 Park Street, Sterling MA  
October 30, 2023  
1:00 PM – 4:00 PM

Type of meeting:	Route 140 (Redemption Rock Trail) at Route 62 (Princeton Road) – Road Safety Audit
Attendees:	Invited Participants to Comprise a Multidisciplinary Team
Please bring:	Thoughts and Enthusiasm!!
1:00 PM	Welcome and Introductions
1:15 PM	Review of Site-Specific Material <ul style="list-style-type: none"><li>• Crash Summaries – provided in advance</li><li>• Existing Geometries and Conditions</li></ul>
2:00 PM	Visit the Site <ul style="list-style-type: none"><li>• Drive to intersection of Route 140 and Route 62</li><li>• As a group, review site &amp; identify areas for improvement</li></ul>
3:30 PM	Post Visit Discussion / Completion of RSA <ul style="list-style-type: none"><li>• Discuss observations and finalize findings</li><li>• Discuss potential improvements and finalize recommendations</li></ul>
4:00 PM	Adjourn for the Day – but the RSA has not ended

### Instructions for Participants:

- Before attending the RSA on DATE, participants are encouraged to drive through the project area and complete/consider elements on the RSA Prompt List (enclosed) with a focus on safety.
- All participants will be actively involved in the process throughout. Participants are encouraged to come with thoughts and ideas but are reminded that the synergy that develops and respect for others' opinions are key elements to the success of the overall RSA process.
- After the RSA meeting, participants will be asked to comment and respond to the document materials to assure it is reflective of the RSA completed by the multidisciplinary team.

## Appendix B. RSA Audit Team Contact List

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Date: October 30, 2023 Location: 1 Park Street, Sterling, MA

### Participating RSA Team Members

<b>Audit Team Member</b>	<b>Agency/Affiliation</b>
Michelle Deng	MassDOT Traffic Safety
Alolade (Lola) Campbell	MassDOT Projects
Dakota DelSignore	MassDOT Traffic Safety
Colby Roussel	MassDOT District 3 Traffic
Shane Leary	MassDOT District 3 Traffic
Steve Wallace	Sterling Town Planner
Bill Caldwell	Sterling Town Administrator
Sean Gaudette	Sterling Chief of Police
David C. Hurlbut, Jr.	Sterling Chief of Fire
Ryan Mouradian	Sterling Department of Public Works
Dr. James Reilly	Sterling Schools Superintendent
George Snow	Montachusett Regional Planning Commission (MRPC)
Amy Allen, P.E., PTOE	Green International Affiliates Inc.
Sergio Musto, P.E., PTOE	Green International Affiliates Inc.
Alex Tsoukalas, P.E.	Green International Affiliates Inc.
Dennis Vertiyev, P.E.	Green International Affiliates Inc.
Julianne Griffiths	Green International Affiliates Inc.

## Appendix C. Detailed Crash Data

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## INTERSECTION CRASH RATE WORKSHEET

TOWN : Sterling COUNT DATE : 9/20/2022

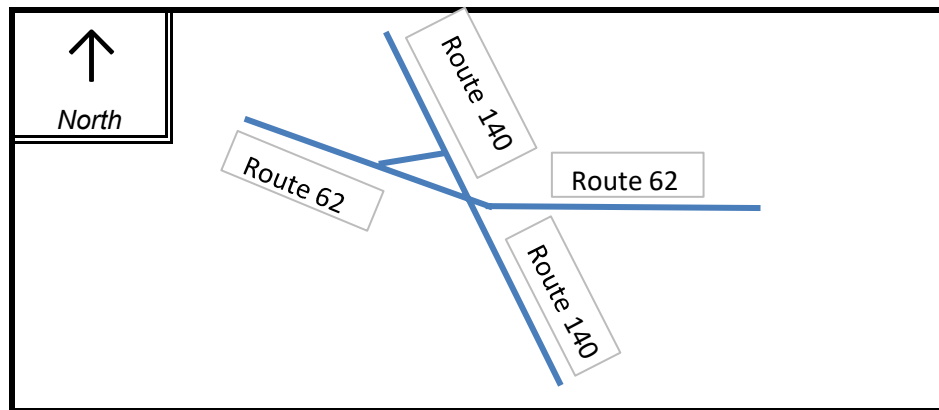
DISTRICT : 5 UNSIGNALIZED : ☒ SIGNALIZED :

### ~ INTERSECTION DATA ~

MAJOR STREET : Route 62

MINOR STREET(S) : Route 140

INTERSECTION  
DIAGRAM



### PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (PM) :	617	258	91	174		1,140

" K " FACTOR :

0.09

INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

13,225

TOTAL # OF CRASHES :

40

# OF YEARS :

5

AVERAGE # OF CRASHES PER YEAR ( A ) :

8.00

CRASH RATE CALCULATION :

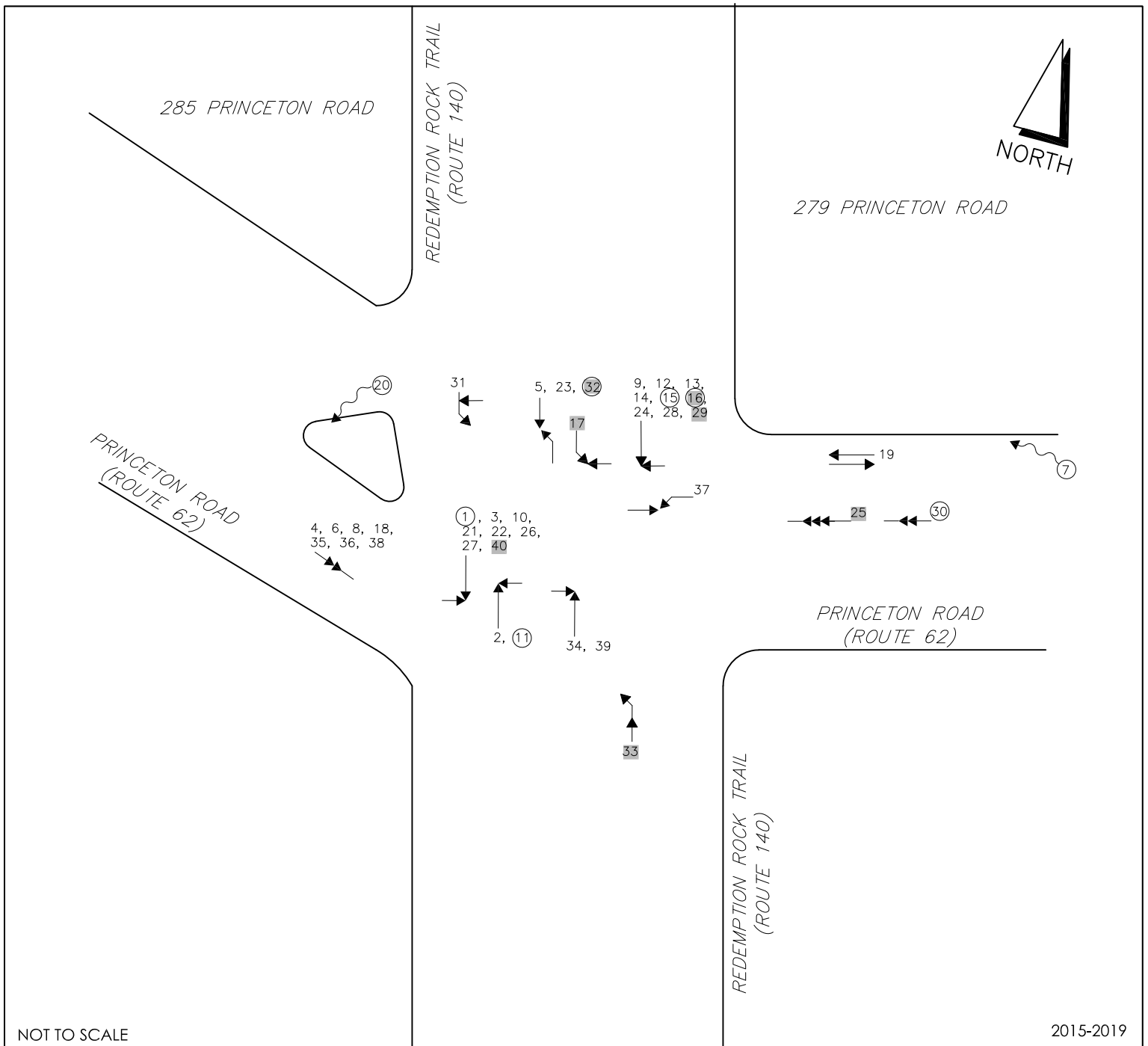
1.66

RATE =

$$\frac{(A * 1,000,000)}{(V * 365)}$$

Comments : The average crash rate for an unsignalized intersection in District 3 is 0.61

Project Title & Date : 22071 Sterling, MA – June 2023



NOT TO SCALE

2015-2019

NO.	DATE	TIME	W	PD	I	F	L	R	V	NO.	DATE	TIME	W	PD	I	F	L	R	V	NO.	DATE	TIME	W	PD	I	F	L	R	V	
1	3/01/2015	10:47 AM	SU	YES	1		1	1		15	10/30/2016	4:23 PM	SU	YES	1		1	2	2	29	7/16/2018	9:01 PM	M	YES				4	1	2
2	3/28/2015	2:10 PM	SA	YES			1	1		16	11/18/2016	5:07 PM	F	YES	1		4	1	2	30	10/05/2018	2:23 PM	F	YES	1			1	1	2
3	4/06/2015	9:57 AM	M	YES			1	1		17	12/02/2016	6:26 PM	F	YES		5	1	8	31	10/24/2018	5:04 PM	W	YES				1	1		
4	6/13/2015	9:48 AM	SA	YES			1	1		18	3/02/2017	7:21 AM	TH	YES		1	1		32	12/13/2018	6:29 PM	TH	YES	1		4	1	2		
5	9/02/2015	7:44 AM	W	YES			1	1	2	19	3/19/2017	3:44 PM	SU	YES		1	1		33	2/09/2019	7:11 PM	SA	YES			5	1			
6	12/11/2015	7:53 AM	F	YES			1	2		20	7/02/2017	3:50 PM	SU	YES	1		1	1	8	34	2/14/2019	8:14 AM	TH	YES			1	4	2	
7	1/18/2016	7:30 AM	M	YES	2		1	3		21	7/04/2017	10:57 AM	TU	YES		1	1	8	35	3/18/2019	7:41 AM	M	YES			1	1	2		
8	3/23/2016	7:25 AM	W	YES			1	1		22	7/07/2017	4:18 PM	F	YES		1	1	2	36	4/29/2019	7:19 AM	M	YES			1	1			
9	4/05/2016	6:07 PM	TU	YES			1	1	2	23	10/13/2017	5:54 PM	F	YES		1	1	2	37	5/25/2019	2:39 PM	SA	YES			1	1	2		
10	4/09/2016	9:47 AM	SA	YES			1	1		24	12/13/2017	10:27 AM	W	YES		1	1		38	9/03/2019	7:31 AM	TU	YES			1	1	2		
11	5/29/2016	11:03 AM	SU	YES	1		1	1	2	25	1/03/2018	5:24 PM	W	YES		5	1		39	12/03/2019	10:14 AM	TU	YES			1	4	2		
12	9/28/2016	1:22 PM	W	YES			1	1		26	3/01/2018	12:19 PM	TH	YES		1	1	2	40	12/11/2019	9:20 PM	W	YES			4	2			
13	10/28/2016	4:54 PM	F	YES			1	2		27	5/19/2018	12:36 PM	SA	YES		1	2													
14	10/29/2016	2:50 PM	SA	YES			1	1	2	28	7/09/2018	5:28 PM	M	YES		1	1													

#### SYMBOLS

ANGLE	→	BICYCLE	🚲
BACKING	←←←	FIXED OBJECT	→
REAR END	→→→	PARKED VEHICLE	☒
SIDE SWIPE	→→	FATALITY	●
HEAD ON	→→	INJURY	○
TURNING MOVE	→→	VEHICLE	→
OUT OF CONTROL	~~~~~	PEDESTRIAN	-▷
DAWN/NIGHTTIME	##		

#### LIGHT CONDITIONS (L)

1. DAYLIGHT
2. DAWN OR DUSK
3. DARKNESS, LIT ROADWAY
4. DARKNESS, UNLIT ROADWAY
5. UNKNOWN

#### ROAD CONDITIONS (R)

1. DRY
2. WET
3. SNOW OR ICY
4. OTHER/ UNKNOWN

#### WEEDKAY (W)

- M = MONDAY F = FRIDAY  
 TU = TUESDAY SA = SATURDAY  
 W = WEDNESDAY SU = SUNDAY  
 TH = THURSDAY

#### VIOLATIONS CITED (V)

1. SPEED TOO FAST
  2. FAILURE TO YIELD
  3. RAN STOP SIGN
  4. RAN TRAFFIC SIGNAL
  5. FOLLOWING TOO CLOSE
  6. IMPROPER PASSING
  7. WRONG SIDE OF ROAD
  8. IMPROPER TURNING
  9. IMPROPER BACKING
  10. HAD BEEN DRINKING
  11. PEDESTRIAN VIOLATION
  12. RECKLESS DRIVING
  13. IMPROPER LIGHT OR BRAKES
  14. CARE IN STARTING/STOPPING
  15. MARKED LANE
  16. VIOLATION OF LICENSE RESTRICTION
  17. OPERATING WITHOUT LICENSE
  18. TEXTING WHILE DRIVING
- I = INJURY  
 F = FATALITY

#### COLLISION DIAGRAM

#### ROAD SAFETY AUDIT

INTERSECTION OF PRINCETON ROAD (ROUTE 62)  
 AND REDEMPTION ROCK TRAIL (ROUTE 140)

STERLING, MA



GREEN INTERNATIONAL AFFILIATES, INC.  
 CIVIL & STRUCTURAL ENGINEERS TEWKSBURY, MASSACHUSETTS

# Crash Data Summary Table

Route 140 (Redemption Rock Trail) at Route 62 (Princeton Road), Sterling, MA  
2015-2019

Crash Diagram Ref #	Crash Date	Crash Day	Time of Day	Max Injury Status	Manner of Collision	Light Condition	Weather Condition	Road Surface	Driver Contributing Code	Driver Ages			Comments
	m/d/y				Type	Type	Type	Type	Type	D1	D2	D3	
1	3/1/15	Sunday	10:47 AM	Non-Fatal Injury - Non-Incapacitating	Angle	Daylight	Clear	Dry	Disregarded traffic signs, signals, road markings	55	41		Vehicle 1 failed to stop on the Route 62 EB approach and struck Vehicle 2 which was traveling SB. Vehicle 1 then crashed into a utility pole.
2	3/28/15	Saturday	2:10 PM	No Injury	Angle	Daylight	Cloudy	Dry	Disregarded traffic signs, signals, road markings	70	48		Vehicle 1 was traveling WB and failed to stop. Vehicle 2, traveling NB on Route 140, hit Vehicle 2 after trying to swerve out of way. Vehicle 1 operator stated they did not see stop sign or overhead flashing red light prior to crash.
3	4/6/15	Monday	9:57 AM	No Injury	Angle	Daylight	Clear	Dry	Inattention	54	81		Vehicle 2 was traveling EB and did not yield to Vehicle 1 which was traveling SB on Route 140 and struck the rear of Vehicle 1's passenger side.
4	6/13/15	Saturday	9:48 AM	No Injury	Rear-end	Daylight	Cloudy	Dry	Distracted	17	18		Vehicles 1 and 2 were on EB approach. Vehicle 1 was stopped, but driver of Vehicle 2 went to grab something off of the floor while moving.
5	9/2/15	Wednesday	7:44 AM	No Injury	Angle	Daylight	Clear	Dry	Failed to yield right of way	23	40		Vehicle 2 was traveling SB on Route 140 when Vehicle 1, traveling NB, made a left turn in front of Vehicle 2 causing vehicles to collide.
6	12/11/15	Friday	7:53 AM	No Injury	Rear-end	Daylight	Cloudy	Wet	Inattention	55	64		Vehicle 2 truck driver thought Vehicle 1 had entered intersection while looking for cross traffic and tapped their car. Both on EB approach.
7	1/18/16	Monday	7:30 AM	Non-Fatal Injury - Non-Incapacitating	Single Vehicle Crash	Daylight	Snow	Snow	No Improper Driving	39			Driver was traveling WB and lost control in the snow, flipping the vehicle sideways behind the guardrail.
8	3/23/16	Wednesday	7:25 AM	No Injury	Rear-end	Daylight	Clear	Dry	Inattention	55	57		Vehicle 1 going EB on Rte 62 waiting to turn right. Veh. 2, behind Veh. 1, thought they were entering intersection & pulled forward into Veh. 1.
9	4/5/16	Tuesday	6:07 PM	No Injury	Angle	Daylight	Clear	Dry	Failed to yield right of way	42	17		Vehicle 1 was traveling SB and Vehicle 2 was traveling WB on Route 62. Vehicle 2 stopped at stop sign but then proceeded into intersection hitting Vehicle 1.
10	4/9/16	Saturday	9:47 AM	No Injury	Angle	Daylight	Clear	Dry	Inattention	48	42		Vehicle 1 was traveling SB and Vehicle 2 was turning right from EB on Route 62. Vehicle 2 did not see Vehicle 1 leading to collision.
11	5/29/16	Sunday	11:03 AM	Non-Fatal Injury - Non-Incapacitating	Angle	Daylight	Cloudy	Dry	Failed to yield right of way	27	67	59	Vehicle 1 was traveling WB on Route 62 and did not stop & hit Vehicle 2 which was traveling NB, knocking it into SB lane and SB Vehicle 3.
12	9/28/16	Wednesday	1:22 PM	No Injury	Angle	Daylight	Cloudy	Dry	Unknown	64	17		Vehicle 1 traveling SB turning left and struck by Vehicle 2 which made a rolling stop in the WB direction.
13	10/28/16	Friday	4:54 PM	No Injury	Angle	Daylight	Rain	Wet	Failed to yield right of way	41	83		Vehicle 2 was traveling WB on Route 62 and had crossed into the intersection of Route 140, blocking the SB lane of travel for Vehicle 1, and causing a collision.
14	10/29/16	Saturday	2:50 PM	No Injury	Angle	Daylight	Cloudy	Dry	Failed to yield right of way	78	41		Vehicle 1 was traveling WB on Route 62 and did not stop thereby hitting Vehicle 2, which was traveling SB.
15	10/30/16	Sunday	4:23 PM	Non-Fatal Injury - Possible	Angle	Daylight	Rain	Wet	Failed to yield right of way	22	42		Vehicle 1 was traveling WB on Route 62 and did not stop, getting hit by Vehicle 2 which was traveling SB.
16	11/18/16	Friday	5:07 PM	Non-Fatal Injury - Non-Incapacitating	Angle	Dark - lighted roadway	Clear	Dry	Failed to yield right of way	29	23		Vehicle 1 was traveling WB on Route 62. They stopped, but did not see Vehicle 2 which was traveling SB.
17	12/2/16	Friday	6:26 PM	No Injury	Angle	Dark - roadway not lighted	Clear	Dry	Made an improper turn	52	43		Vehicle 1 on WB approach had stopped. Vehicle 2 was turning SBL from Route 140 and entered the wrong lane, striking Vehicle 1.
18	3/2/17	Thursday	7:21 AM	No Injury	Rear-end	Daylight	Clear	Dry	Unknown	61	31		Vehicle 1 stopped on EB approach and was struck from behind by Vehicle 2.
19	3/19/17	Sunday	3:44 PM	No Injury	Sideswipe, opposite direction	Daylight	Clear	Dry	Made an improper turn	19	47		Veh. 1 was making NBR turn when it made a wide turn and swiped Veh. 2 which was heading WB. Veh. 1 then went off-road and hit boulder.
20	7/2/17	Sunday	3:50 PM	Non-Fatal Injury - Non-Incapacitating	Single Vehicle Crash	Daylight	Clear	Dry	Over-correcting/over-steering	65			The motorcycle driver was making SMR turn from Route 140 when he struck a sand patch where he had to dump his motorcycle.
21	7/4/17	Tuesday	10:57 AM	No Injury	Angle	Daylight	Clear	Dry	Inattention	57	71		Vehicle 2 was driving EB across Route 140, did not stop all of the way, and was struck by Vehicle 1 heading SB who tried to avoid getting hit.
22	7/7/17	Friday	4:18 PM	No Injury	Angle	Daylight	Cloudy	Dry	Failed to yield right of way	55	16		Vehicle 2 was heading EB. Although driver stopped on approach, they entered the intersection and struck SB Vehicle 1 which then hit pole.
23	10/13/17	Friday	5:54 PM	No Injury	Angle	Daylight	Clear	Dry	Unknown	19	18		Vehicle 2 was making NBL turn in front of, and got struck by, Vehicle 1 as it was heading SB.
24	12/13/17	Wednesday	10:27 AM	No Injury	Angle	Daylight	Clear	Dry	Inattention	32	48		Vehicle 1, traveling WB, failed to stop at intersection and then hit Vehicle 2 which was traveling SB.
25	1/3/18	Wednesday	5:24 PM	No Injury	Rear-end	Dark - roadway not lighted	Clear	Dry	Unknown	53	33	59	All three vehicles were on the WB approach when Vehicle 3 struck Vehicle 2, bumping it into Vehicle 1.
26	3/1/18	Thursday	12:19 PM	No Injury	Angle	Daylight	Clear	Dry	Failed to yield right of way	60	77		Vehicle 2 was heading EB. Although its driver stopped on approach, they entered the intersection and got struck by SB Vehicle 1.
27	5/19/18	Saturday	12:36 PM	No Injury	Angle	Daylight	Rain	Wet	Inattention	79	34		Vehicle 1 was heading EB. Although its driver stopped on approach, they entered the intersection not noticing / got struck by SB Vehicle 2.
28	7/9/18	Monday	5:28 PM	No Injury	Angle	Daylight	Other	Dry	Unknown	25	18		Vehicle 2 was heading WB. Although its driver stopped on approach, they entered the intersection not noticing / got struck by SB Vehicle 1.
29	7/16/18	Monday	9:01 PM	No Injury	Angle	Dark - lighted roadway	Cloudy	Dry	Failed to yield right of way	20	21	68	Vehicle 1, heading WB, failed to stop at intersection and got hit by SB Vehicle 2 and was pushed into Vehicle 3 which was making EBR turn.
30	10/5/18	Friday	2:23 PM	Non-Fatal Injury - Possible	Rear-end	Daylight	Clear	Dry	Unknown	55	21		Both Vehicles 1 and 2 were traveling WB. Uncertain if Vehicle 2 backed into Vehicle 1 or if Vehicle 1 rear-ended Vehicle 2.
31	10/24/18	Wednesday	5:04 PM	No Injury	Angle	Daylight	Other	Dry	Swerving or avoiding due to wind, slippery surface, vehicle, object, non-motorist in roadway, etc.	60	48		Vehicle 2 was heading EB and stopped at approach, but when entered intersection attempted to swerve around Vehicle 1 making SBL turn.
32	12/13/18	Thursday	6:29 PM	Non-Fatal Injury - Non-Incapacitating	Angle	Dark - lighted roadway	Clear	Dry	Inattention	41	63	41	Vehicle 1 was making NBL turn and got struck by Vehicle 2 as it was heading SB. Vehicle 1 then struck Vehicle 3 waiting at EB approach.



## Crash Data Summary Table

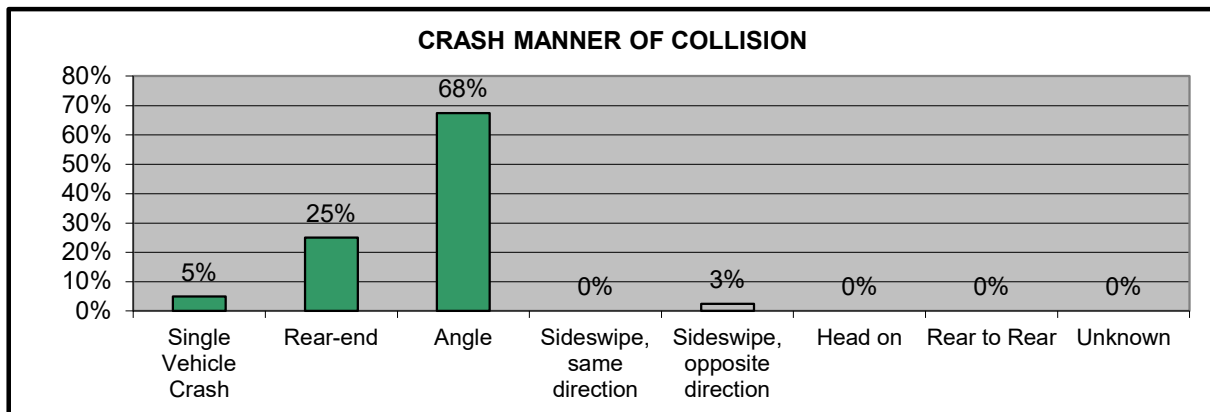
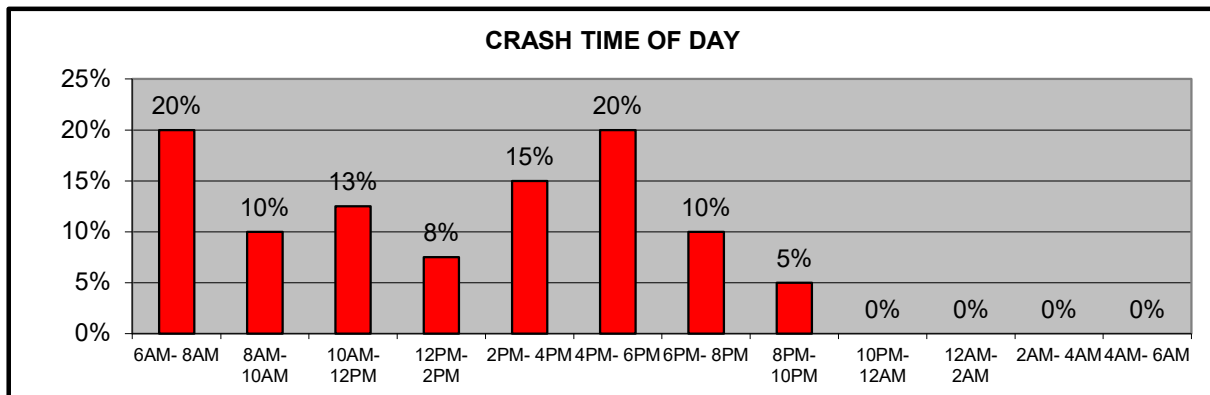
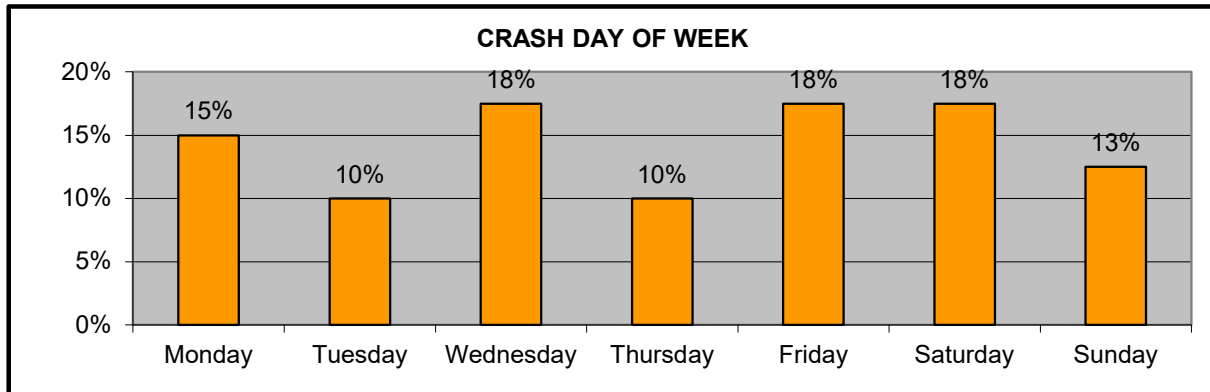
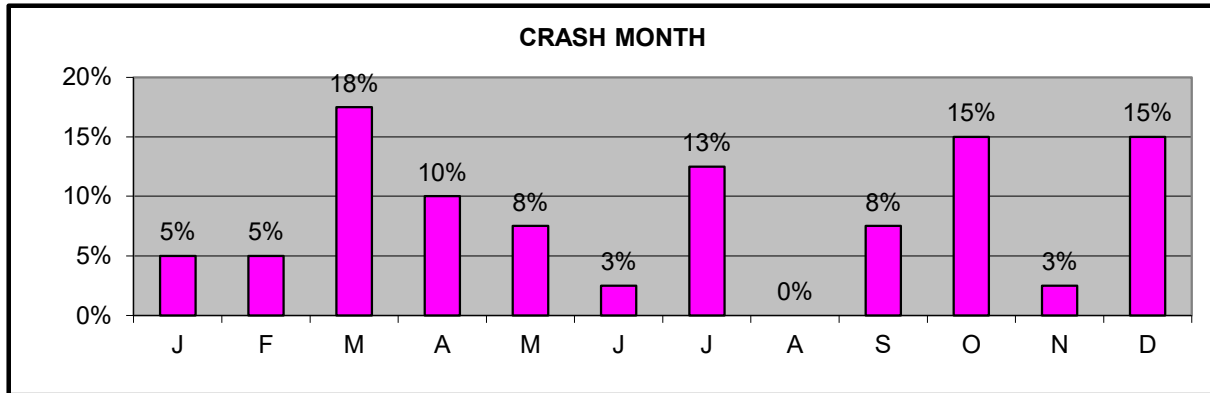
Route 140 (Redemption Rock Trail) at Route 62 (Princeton Road), Sterling, MA  
2015-2019

Crash Diagram Ref #	Crash Date	Crash Day	Time of Day	Max Injury Status	Manner of Collision	Light Condition	Weather Condition	Road Surface	Driver Contributing Code	Driver Ages			Comments
	m/d/y				Type	Type	Type	Type	Type	D1	D2	D3	
33	2/9/19	Saturday	7:11 PM	No Injury	Rear-end	Dark - roadway not lighted	Clear	Dry	Inattention	50	65		Vehicle 1 rear-ended Vehicle 2. Vehicle 2 was turning left onto Route 62 from Route 140 NB.
34	2/14/19	Thursday	8:14 AM	No Injury	Angle	Daylight	Other	Sand, mud, dirt, oil, gravel	Failed to yield right of way	31	71	44	Vehicle 1, heading EB, stopped and then entered onto Rte 140 striking NB Vehicle 2. Veh. 1 spun around and hit Veh. 3 on EB approach.
35	3/18/19	Monday	7:41 AM	No Injury	Rear-end	Daylight	Clear	Dry	Inattention	55	69		Vehicles 1 and 2 were on WB approach. Vehicle 1 had stopped at the intersection and Vehicle 2 rear-ended Vehicle 1.
36	4/29/19	Monday	7:19 AM	Unknown	Rear-end	Daylight	Clear	Dry	Inattention	61	31		On the EB Route 62 approach, Vehicle 2 rear-ended Vehicle 1 while its driver was waiting to enter the intersection.
37	5/25/19	Saturday	2:39 PM	No Injury	Angle	Daylight	Other	Dry	Unknown	73	17		Vehicle 1 was turning left from WB Route 62 approach, but did not see Vehicle 2 which was driving straight in the EB direction thus Vehicle 1 struck Vehicle 2 with impact causing Vehicle 2 to be spun around.
38	9/3/19	Tuesday	7:31 AM	No Injury	Rear-end	Daylight	Other	Dry	Distracted	33	41		Vehicles 1 and 2 were on WB approach. Vehicle 1 rear-ended Vehicle 2.
39	12/3/19	Tuesday	10:14 AM	No Injury	Angle	Daylight	Blowing Sand, Snow	Slush	Failed to yield right of way	34	32		Vehicle 1 was driving straight NB when Vehicle 2, heading EB, entered the intersection without yielding and collided with Vehicle 1.
40	12/11/19	Wednesday	9:20 PM	No Injury	Angle	Dark - lighted roadway	Clear	Wet	Visibility Obstructed	21	26		Vehicle 2 stopped on the EB approach before proceeding into intersection, but snow banks prevented sight of oncoming Vehicle 1 heading SB. Vehicle 1 collided with Vehicle 2.

Summary based on Crash Reports obtained from the Town of Sterling Police Department and MassDOT

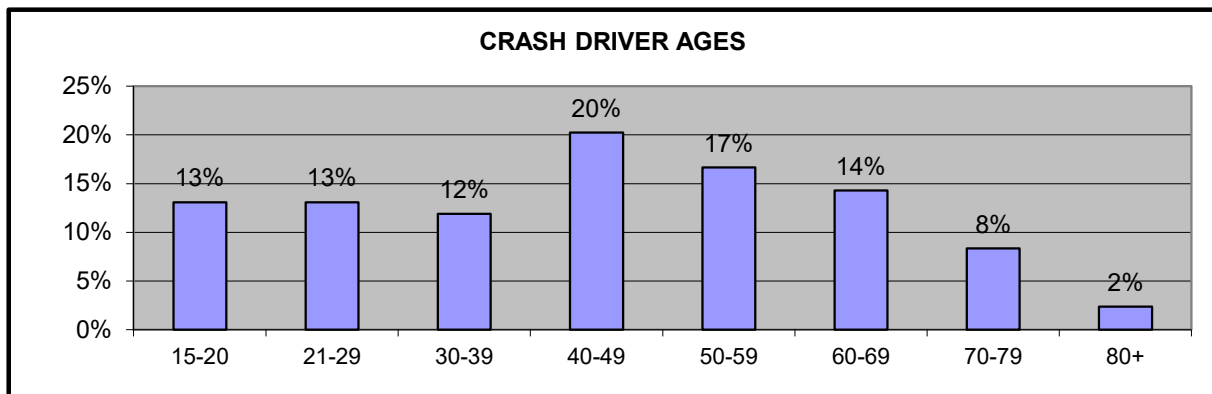
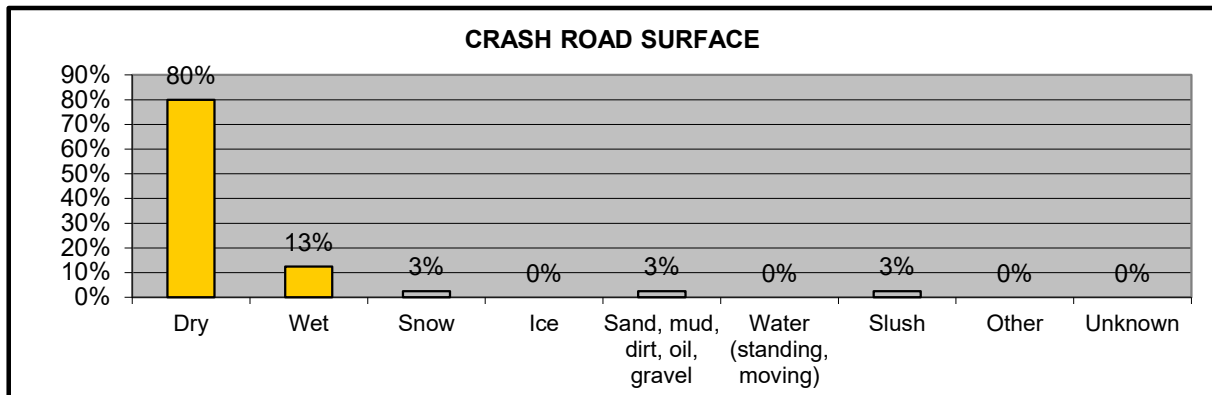
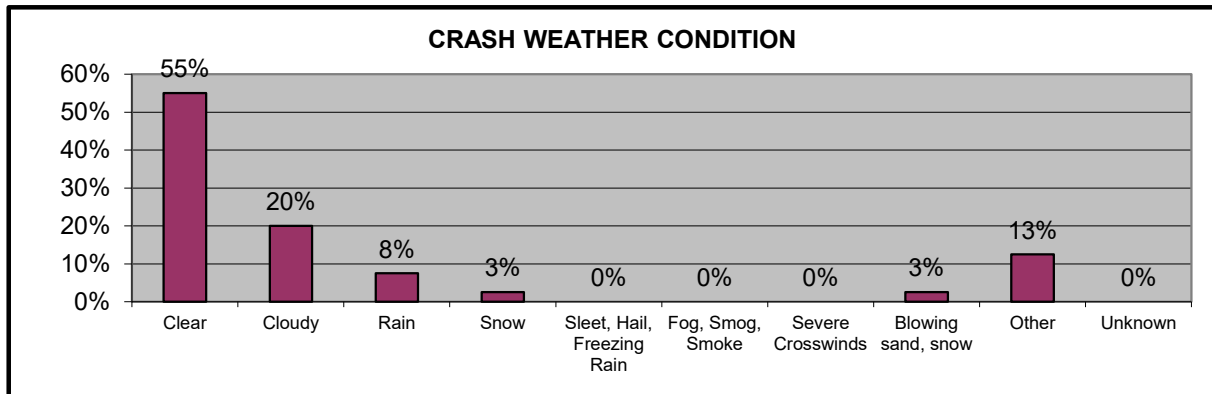
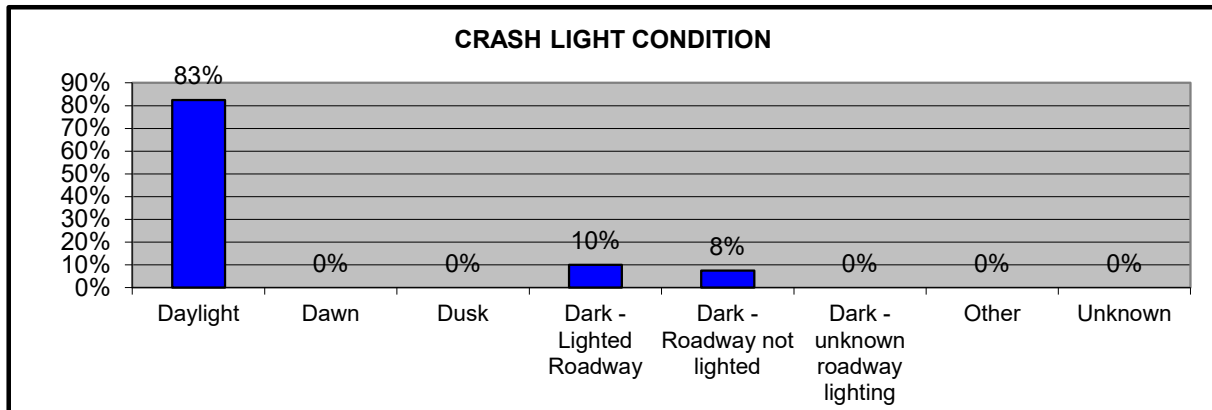
### Crash Data Summary Tables and Charts

Route 140 (Redemption Rock Trail) at Route 62 (Princeton Road), Sterling, MA



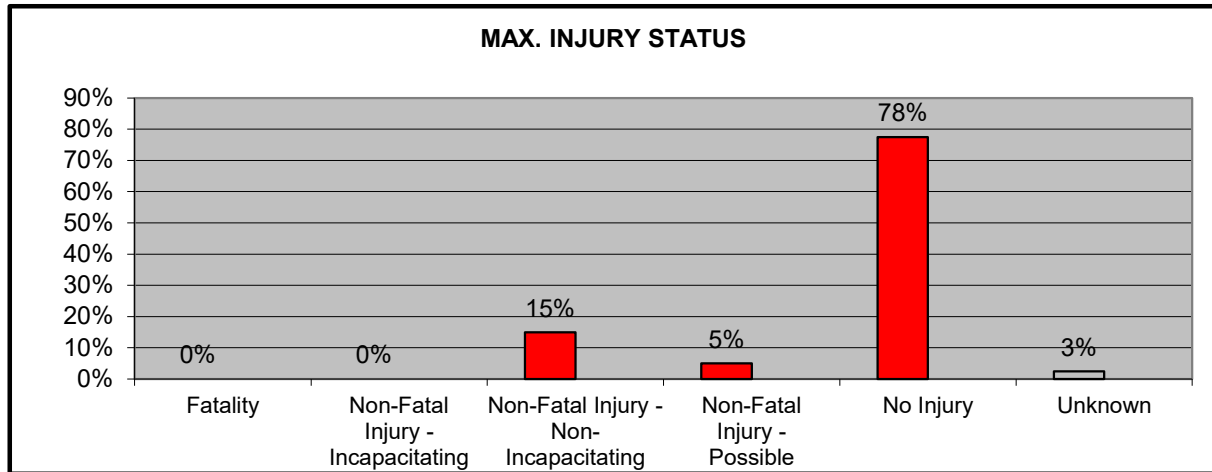
### Crash Data Summary Tables and Charts

Route 140 (Redemption Rock Trail) at Route 62 (Princeton Road), Sterling, MA



### Crash Data Summary Tables and Charts

Route 140 (Redemption Rock Trail) at Route 62 (Princeton Road), Sterling, MA



## Appendix D. Traffic Volume Data

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PDI File #: **228829 A**  
Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
City, State: **Sterling, MA**  
Client: **Green International/ D. Perloff**  
Site Code: **Task Order #32**  
Count Date: **Tuesday, September 20, 2022**  
Start Time: **7:00 AM**  
End Time: **7:00 PM**  
Class:



**Cars and Heavy Vehicles (Combined)**

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
7:00 AM	0	0	120	6	0	126	3	0	4	8	0	15	3	18	0	1	0	22	36	21	0	0	0	57	0	0	0	0	0	0	220
7:15 AM	1	0	125	6	0	132	3	0	6	6	0	15	3	39	0	8	0	50	43	29	0	0	0	72	0	0	0	0	0	0	269
7:30 AM	3	0	172	11	0	186	8	0	7	4	0	19	2	26	0	10	0	38	35	32	0	0	0	67	0	0	0	4	0	4	314
7:45 AM	2	0	121	14	0	137	7	1	10	9	0	27	3	43	0	13	0	59	37	34	0	0	0	71	0	0	0	3	0	3	297
Total	6	0	538	37	0	581	21	1	27	27	0	76	11	126	0	32	0	169	151	116	0	0	0	267	0	0	0	7	0	7	1100
8:00 AM	2	0	95	4	0	101	8	0	22	4	0	34	3	33	0	13	0	49	34	35	1	0	0	70	0	0	1	2	0	3	257
8:15 AM	3	0	113	3	0	119	10	0	10	8	0	28	8	36	0	8	0	52	37	27	0	0	0	64	0	0	0	3	0	3	266
8:30 AM	3	0	77	8	0	88	3	0	8	8	0	19	2	36	0	14	0	52	24	19	0	0	0	43	0	0	0	0	0	0	202
8:45 AM	2	0	64	8	0	74	3	0	14	6	0	23	5	29	1	3	0	38	22	19	0	0	0	41	0	0	0	1	0	1	177
Total	10	0	349	23	0	382	24	0	54	26	0	104	18	134	1	38	0	191	117	100	1	0	0	218	0	0	1	6	0	7	902
9:00 AM	2	0	41	8	0	51	7	0	13	6	0	26	8	31	0	13	0	52	24	12	0	0	0	36	0	0	0	1	0	1	166
9:15 AM	2	0	47	6	0	55	7	0	15	5	0	27	3	41	0	8	0	52	21	17	0	0	0	38	0	0	0	0	1	1	173
9:30 AM	3	0	37	3	0	43	2	0	9	4	0	15	7	32	0	9	0	48	16	17	0	0	0	33	0	0	0	3	0	3	142
9:45 AM	1	0	35	5	0	41	6	0	8	2	0	16	1	35	0	9	0	45	19	17	0	0	0	36	0	0	0	2	0	2	140
Total	8	0	160	22	0	190	22	0	45	17	0	84	19	139	0	39	0	197	80	63	0	0	0	143	0	0	0	6	1	7	621
10:00 AM	3	0	39	8	1	51	2	0	8	5	0	15	2	41	0	12	0	55	12	19	0	0	0	31	0	1	0	1	0	2	154
10:15 AM	1	0	44	1	0	46	7	0	11	5	0	23	2	31	0	11	0	44	26	14	0	0	0	40	0	1	0	2	0	3	156
10:30 AM	2	0	43	3	0	48	3	0	13	4	0	20	4	27	0	13	0	44	19	12	0	0	0	31	0	0	0	1	0	1	144
10:45 AM	2	0	47	7	0	56	2	0	15	3	0	20	2	32	0	12	0	46	13	10	0	0	0	23	0	0	0	5	0	5	150
Total	8	0	173	19	1	201	14	0	47	17	0	78	10	131	0	48	0	189	70	55	0	0	0	125	0	2	0	9	0	11	604
11:00 AM	0	0	37	1	0	38	6	0	9	2	0	17	2	17	0	16	0	35	17	11	0	0	0	28	0	0	0	3	0	3	121
11:15 AM	3	0	46	6	0	55	7	0	9	4	0	20	7	29	0	8	0	44	9	10	0	0	0	19	0	0	0	1	0	1	139
11:30 AM	0	0	41	4	0	45	1	1	11	3	0	16	4	24	0	5	0	33	15	7	0	0	0	22	0	0	0	0	0	0	116
11:45 AM	4	0	38	3	0	45	7	0	8	6	0	21	9	37	1	11	0	58	9	12	0	0	0	21	0	0	0	1	0	1	146
Total	7	0	162	14	0	183	21	1	37	15	0	74	22	107	1	40	0	170	50	40	0	0	0	90	0	0	0	5	0	5	522
12:00 PM	3	0	36	5	0	44	1	0	10	4	0	15	6	28	0	13	0	47	13	10	0	0	0	23	0	0	0	3	0	3	132
12:15 PM	4	0	21	8	0	33	3	0	9	2	0	14	1	45	0	10	0	56	11	15	0	0	0	26	0	0	0	1	0	1	130
12:30 PM	1	0	39	1	0	41	4	0	17	4	0	25	3	24	0	12	0	39	8	12	0	0	0	20	0	0	0	0	0	0	125
12:45 PM	4	0	39	3	0	46	3	0	9	6	0	18	4	21	0	8	0	33	14	14	0	0	0	28	0	0	0	4	0	4	129
Total	12	0	135	17	0	164	11	0	45	16	0	72	14	118	0	43	0	175	46	51	0	0	0	97	0	0	0	8	0	8	516
1:00 PM	1	0	34	4	0	39	2	0	12	3	0	17	8	44	0	14	0	66	5	11	0	0	0	16	0	0	0	4	0	4	142
1:15 PM	3	0	39	4	0	46	2	0	8	0	0	10	6	37	0	16	0	59	17	16	0	0	0	33	0	0	0	2	0	2	150
1:30 PM	2	0	44	3	0	49	6	0	10	0	0	16	3	39	0	16	0	58	17	10	0	0	0	27	0	0	0	3	0	3	153
1:45 PM	4	0	39	7	0	50	5	0	13	3	0	21	5	53	0	22	0	80	12	12	0	0	0	24	0	0	1	3	0	4	179
Total	10	0	156	18	0	184	15	0	43	6	0	64	22	173	0	68	0	263	51	49	0	0	0	100	0	0	1	12	0	13	624
2:00 PM	2	0	56	8	0	66	7	0	11	1	0	19	6	56	1	15	0	78	13	9	1	0	0	23	0	0	0	0	0	0	186
2:15 PM	7	0	45	3	0	55	7	0	16	1	0	24	7	60	0	19	0	86	12	15	0	0	0	27	0	0	0	1	0	1	193
2:30 PM	2	0	50	8	0	60	6	0	21	7	0	34	7	62	0	30	0	99	6	12	0	0	0	18	0	0	0	2	0	2	213
2:45 PM	2	0	51	3	0	56	5	0	22	2	0	29	5	89	0	28	0	122	15	16	1	0	0	32	0	0	0	4	0	4	243
Total	13	0	202	22	0	237	25	0	70	11	0	106	25	267	1	92	0	385	46	52	2	0	0	100	0	0	0	7	0	7	835
3:00 PM	4	0	49	5	0	58	14	0	23	7	0	44	7	78	0	28	0	113	22	19	0	0	0	41	0	0	0	2	0	2	258
3:15 PM	4	0	60	9	0	73	5	1	25	3	0	34	4	89	1	34	0	128	13	21	0	0	0	34	0	0	0	0	0	0	269
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3:45 PM	3	0	39	3	0	45	8	0	21	2	0	31	8	93	0	34	0	135	12	16	0	0	0	28	0	1	0	3	0	4	243
Total	19	0	211	25	0	255	38	2	92	22	0	154	23	342	1	132	0	498	67	76	0	0	0	143	0	1	0	6	0	7	1057
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4:15 PM	6	0	53	9	0	68	14	0	24	1	0	39	5	126	0	34	0	165	12	15	0	0	0	27	0	0	0	3	0	3	302
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4:45 PM	3	0	47	3	0	53	14	0	35	1	0	50	10	117	0	27	0	154	11	15	0	0	0	26	0	0	0	2	0	2	285
Total	22	0	212	24	0	258	52	0	112	10	0	174	34	456	0	127	0	617	38	53	0	0	0	91	0	0	0	12	0	12	1152
5:00 PM	4	0	44	8	0	56	13	0	29	5	0	47	6	110	0	38	0	1													

PDI File #: **228829 A**  
Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
City, State: **Sterling, MA**  
Client: **Green International/ D. Perloff**  
Site Code: **Task Order #32**  
Count Date: **Tuesday, September 20, 2022**  
Start Time: **7:00 AM**  
End Time: **7:00 PM**  
Class:



### Cars and Heavy Vehicles (Combined)

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
5:15 PM	3	0	61	9	0	73	8	0	23	6	0	37	8	103	0	32	0	143	11	12	0	0	0	23	0	0	0	0	0	0	276
5:30 PM	3	0	35	4	0	42	6	0	29	4	0	39	7	86	0	27	0	120	19	7	0	0	0	26	0	0	0	0	0	0	227
5:45 PM	5	0	32	6	0	43	5	0	19	7	0	31	7	88	0	22	0	117	7	14	0	0	0	21	0	0	0	0	0	0	212
Total	15	0	172	27	0	214	32	0	100	22	0	154	28	387	0	119	0	534	44	42	0	0	0	86	0	0	0	0	0	0	988
6:00 PM	2	0	27	1	0	30	5	0	20	4	0	29	4	65	0	31	0	100	14	11	0	0	0	25	0	0	0	1	0	1	185
6:15 PM	2	0	30	1	0	33	2	0	13	4	0	19	9	53	0	16	0	78	16	10	0	0	0	26	0	0	0	1	0	1	157
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6:45 PM	1	0	25	4	0	30	5	0	7	2	0	14	7	32	0	23	0	62	6	7	0	0	0	13	0	0	0	0	0	0	119
Total	7	0	110	12	0	129	14	0	53	12	0	79	25	197	0	86	0	308	45	35	0	0	0	80	0	0	0	3	0	3	599
Grand Total	137	0	2580	260	1	2978	289	4	725	201	0	1219	251	2577	4	864	0	3696	805	732	3	0	0	1540	0	3	2	81	1	87	9520
Approach %	4.6	0.0	86.6	8.7	0.0		23.7	0.3	59.5	16.5	0.0		6.8	69.7	0.1	23.4	0.0		52.3	47.5	0.2	0.0	0.0		0.0	3.4	2.3	93.1	1.1		
Total %	1.4	0.0	27.1	2.7	0.0	31.3	3.0	0.0	7.6	2.1	0.0	12.8	2.6	27.1	0.0	9.1	0.0	38.8	8.5	7.7	0.0	0.0	0.0	16.2	0.0	0.0	0.0	0.9	0.0	0.9	
Exiting Leg Total	2951						1245						3589						1589						146						9520
Cars	133	0	2464	229	1	2827	268	3	691	199	0	1161	240	2472	3	842	0	3557	785	690	2	0	0	1477	0	3	2	75	1	81	9103
% Cars	97.1	0.0	95.5	88.1	100.0	94.9	92.7	75.0	95.3	99.0	0.0	95.2	95.6	95.9	75.0	97.5	0.0	96.2	97.5	94.3	66.7	0.0	0.0	95.9	0.0	100.0	100.0	92.6	100.0	93.1	95.6
Exiting Leg Total	2818						1161						3451						1533						140						9103
Heavy Vehicles	4	0	116	31	0	151	21	1	34	2	0	58	11	105	1	22	0	139	20	42	1	0	0	63	0	0	0	6	0	6	417
% Heavy Vehicles	2.9	0.0	4.5	11.9	0.0	5.1	7.3	25.0	4.7	1.0	0.0	4.8	4.4	4.1	25.0	2.5	0.0	3.8	2.5	5.7	33.3	0.0	0.0	4.1	0.0	0.0	0.0	7.4	0.0	6.9	4.4
Exiting Leg Total	133						84						138						56						6						417

AM Peak Hour Analysis from 07:00 AM to 10:00 AM begins at:

7:15 AM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)							
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total	
7:15 AM	1	0	125	6	0	132	3	0	6	6	0	15	3	39	0	8	0	50	43	29	0	0	0	72	0	0	0	0	0	0	269	
7:30 AM	3	0	172	11	0	186	8	0	7	4	0	19	2	26	0	10	0	38	35	32	0	0	0	67	0	0	0	4	0	4	314	
7:45 AM	2	0	121	14	0	137	7	1	10	9	0	27	3	43	0	13	0	59	37	34	0	0	0	71	0	0	0	3	0	3	297	
8:00 AM	2	0	95	4	0	101	8	0	22	4	0	34	3	33	0	13	0	49	34	35	1	0	0	70	0	0	1	2	0	3	257	
Total Volume	8	0	513	35	0	556	26	1	45	23	0	95	11	141	0	44	0	196	149	130	1	0	0	280	0	0	1	9	0	10	1137	
% Approach Total	1.4	0.0	92.3	6.3	0.0		27.4	1.1	47.4	24.2	0.0		5.6	71.9	0.0	22.4	0.0		53.2	46.4	0.4	0.0	0.0		0.0	0.0	10.0	90.0	0.0			
PHF	0.667	0.000	0.746	0.625	0.000	0.747	0.813	0.250	0.511	0.639	0.000	0.699	0.917	0.820	0.000	0.846	0.000	0.831	0.866	0.929	0.250	0.000	0.000	0.972	0.000	0.000	0.250	0.563	0.000	0.625	0.905	
Cars	8	0	502	34	0	544	20	1	42	23	0	86	11	129	0	40	0	180	146	125	1	0	0	272	0	0	1	8	0	9	1091	
Cars %	100.0	0.0	97.9	97.1	0.0	97.8	76.9	100.0	93.3	100.0	0.0	90.5	100.0	91.5	0.0	90.9	0.0	91.8	98.0	96.2	100.0	0.0	0.0	97.1	0.0	0.0	100.0	88.9	0.0	90.0	96.0	
Heavy Vehicles	0	0	11	1	0	12	6	0	3	0	0	9	0	12	0	4	0	16	3	5	0	0	0	8	0	0	0	1	0	1	46	
Heavy Vehicles %	0.0	0.0	2.1	2.9	0.0	2.2	23.1	0.0	6.7	0.0	0.0	9.5	0.0	8.5	0.0	9.1	0.0	8.2	2.0	3.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0	11.1	0.0	10.0	4.0	
Cars Enter Leg	8	0	502	34	0	544	20	1	42	23	0	86	11	129	0	40	0	180	146	125	1	0	0	272	0	0	1	8	0	9	1091	
Heavy Enter Leg	0	0	11	1	0	12	6	0	3	0	0	9	0	12	0	4	0	16	3	5	0	0	0	8	0	0	0	1	0	1	46	
Total Entering Leg	8	0	513	35	0	556	26	1	45	23	0	95	11	141	0	44	0	196	149	130	1	0	0	280	0	0	1	9	0	10	1137	
Cars Exiting Leg						158						171						671						82							9	1091
Heavy Exiting Leg						19						6						14						7							0	46
Total Exiting Leg						177						177						685						89							9	1137

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
1:45 PM	4	0	39	7	0	50	5	0	13	3	0	21	5	53	0	22	0	80	12	12	0	0	0	24	0	0	1	3	0	4	179
2:00 PM	2	0	56	8	0	66	7	0	11	1	0	19	6	56	1	15	0	78	13	9	1	0	0	23	0	0	0	0	0	0	186
2:15 PM	7	0	45	3	0	55	7	0	16	1	0	24	7	60	0	19	0	86	12	15	0	0	0	27	0	0	0	1	0	1	193
2:30 PM	2	0	50	8	0	60	6	0	21	7	0	34	7	62	0	30	0	99	6	12	0	0	0	18	0	0	0	2	0	2	213
Total Volume	15	0	190	26	0	231	25	0	61	12	0	98	25	231	1	86	0	343	43	48	1	0	0	92	0	0	1	6	0	7	771
% Approach Total	6.5	0.0	82.3	11.3	0.0		25.5	0.0	62.2	12.2	0.0		7.3	67.3	0.3	25.1	0.0		46.7	52.2	1.1	0.0	0.0		0.0	0.0	14.3	85.7	0.0		
PHF	0.536	0.000	0.848	0.813	0.000	0.875	0.893	0.000	0.726	0.429	0.000	0.721	0.893	0.931	0.250	0.717	0.000	0.866	0.827	0.800	0.250	0.000	0.000	0.852	0.000	0.000	0.250	0.500	0.000	0.438	0.905

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



### Cars and Heavy Vehicles (Combined)

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total
Cars	14	0	178	22	0	214	24	0	57	12	0	93	20	216	0	84	0	320	41	43	1	0	0	85	0	0	1	5	0	6	718
Cars %	93.3	0.0	93.7	84.6	0.0	92.6	96.0	0.0	93.4	100.0	0.0	94.9	80.0	93.5	0.0	97.7	0.0	93.3	95.3	89.6	100.0	0.0	0.0	92.4	0.0	0.0	100.0	83.3	0.0	85.7	93.1
Heavy Vehicles	1	0	12	4	0	17	1	0	4	0	0	5	5	15	1	2	0	23	2	5	0	0	0	7	0	0	0	1	0	1	53
Heavy Vehicles %	6.7	0.0	6.3	15.4	0.0	7.4	4.0	0.0	6.6	0.0	0.0	5.1	20.0	6.5	100.0	2.3	0.0	6.7	4.7	10.4	0.0	0.0	0.0	7.6	0.0	0.0	0.0	16.7	0.0	14.3	6.9
Cars Enter Leg	14	0	178	22	0	214	24	0	57	12	0	93	20	216	0	84	0	320	41	43	1	0	0	85	0	0	1	5	0	6	718
Heavy Enter Leg	1	0	12	4	0	17	1	0	4	0	0	5	5	15	1	2	0	23	2	5	0	0	0	7	0	0	0	1	0	1	53
Total Entering Leg	15	0	190	26	0	231	25	0	61	12	0	98	25	231	1	86	0	343	43	48	1	0	0	92	0	0	1	6	0	7	771
Cars Exiting Leg						246						86					231						141							14	718
Heavy Exiting Leg						17						14					14						6							2	53
Total Exiting Leg						263						100					245						147							16	771

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

4:00 PM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
4:00 PM	10	0	55	4	0	69	12	0	26	2	0	40	3	104	0	37	0	144	6	9	0	0	0	15	0	0	0	6	0	6	274
4:15 PM	6	0	53	9	0	68	14	0	24	1	0	39	5	126	0	34	0	165	12	15	0	0	0	27	0	0	0	3	0	3	302
4:30 PM	3	0	57	8	0	68	12	0	27	6	0	45	16	109	0	29	0	154	9	14	0	0	0	23	0	0	0	1	0	1	291
4:45 PM	3	0	47	3	0	53	14	0	35	1	0	50	10	117	0	27	0	154	11	15	0	0	0	26	0	0	0	2	0	2	285
Total Volume	22	0	212	24	0	258	52	0	112	10	0	174	34	456	0	127	0	617	38	53	0	0	0	91	0	0	0	12	0	12	1152
% Approach Total	8.5	0.0	82.2	9.3	0.0		29.9	0.0	64.4	5.7	0.0		5.5	73.9	0.0	20.6	0.0		41.8	58.2	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.550	0.000	0.930	0.667	0.000	0.935	0.929	0.000	0.800	0.417	0.000	0.870	0.531	0.905	0.000	0.858	0.000	0.935	0.792	0.883	0.000	0.000	0.000	0.843	0.000	0.000	0.000	0.500	0.000	0.954	
Cars	22	0	201	20	0	243	51	0	111	10	0	172	34	450	0	125	0	609	37	51	0	0	0	88	0	0	0	11	0	11	1123
Cars %	100.0	0.0	94.8	83.3	0.0	94.2	98.1	0.0	99.1	100.0	0.0	98.9	100.0	98.7	0.0	98.4	0.0	98.7	97.4	96.2	0.0	0.0	0.0	96.7	0.0	0.0	0.0	91.7	0.0	91.7	97.5
Heavy Vehicles	0	0	11	4	0	15	1	0	1	0	0	2	0	6	0	2	0	8	1	2	0	0	0	3	0	0	0	1	0	1	29
Heavy Vehicles %	0.0	0.0	5.2	16.7	0.0	5.8	1.9	0.0	0.9	0.0	0.0	1.1	0.0	1.3	0.0	1.6	0.0	1.3	2.6	3.8	0.0	0.0	0.0	3.3	0.0	0.0	0.0	8.3	0.0	8.3	2.5
Cars Enter Leg	22	0	201	20	0	243	51	0	111	10	0	172	34	450	0	125	0	609	37	51	0	0	0	88	0	0	0	11	0	11	1123
Heavy Enter Leg	0	0	11	4	0	15	1	0	1	0	0	2	0	6	0	2	0	8	1	2	0	0	0	3	0	0	0	1	0	1	29
Total Entering Leg	22	0	212	24	0	258	52	0	112	10	0	174	34	456	0	127	0	617	38	53	0	0	0	91	0	0	0	12	0	12	1152
Cars Exiting Leg						512						105					248						236							22	1123
Heavy Exiting Leg						8						6					12						3							0	29
Total Exiting Leg						520						111					260						239							22	1152



PDI File #: **228829 A**  
Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
City, State: **Sterling, MA**  
Client: **Green International/ D. Perloff**  
Site Code: **Task Order #32**  
Count Date: **Tuesday, September 20, 2022**  
Start Time: **7:00 AM**  
End Time: **7:00 PM**  
Class:



**Cars**

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
7:00 AM	0	0	120	6	0	126	2	0	4	8	0	14	2	16	0	1	0	19	36	20	0	0	0	56	0	0	0	0	0	0	215
7:15 AM	1	0	122	6	0	129	2	0	5	6	0	13	3	33	0	8	0	44	42	27	0	0	0	69	0	0	0	0	0	0	255
7:30 AM	3	0	170	11	0	184	7	0	7	4	0	18	2	26	0	9	0	37	34	31	0	0	0	65	0	0	0	4	0	4	308
7:45 AM	2	0	120	13	0	135	6	1	9	9	0	25	3	38	0	13	0	54	36	33	0	0	0	69	0	0	0	3	0	3	286
Total	6	0	532	36	0	574	17	1	25	27	0	70	10	113	0	31	0	154	148	111	0	0	0	259	0	0	0	7	0	7	1064
8:00 AM	2	0	90	4	0	96	5	0	21	4	0	30	3	32	0	10	0	45	34	34	1	0	0	69	0	0	1	1	0	2	242
8:15 AM	3	0	109	2	0	114	9	0	10	8	0	27	8	35	0	7	0	50	36	27	0	0	0	63	0	0	0	3	0	3	257
8:30 AM	3	0	77	8	0	88	3	0	8	8	0	19	2	33	0	13	0	48	23	17	0	0	0	40	0	0	0	0	0	0	195
8:45 AM	2	0	58	6	0	66	3	0	12	6	0	21	5	25	1	2	0	33	21	19	0	0	0	40	0	0	0	1	0	1	161
Total	10	0	334	20	0	364	20	0	51	26	0	97	18	125	1	32	0	176	114	97	1	0	0	212	0	0	1	5	0	6	855
9:00 AM	2	0	40	5	0	47	7	0	9	5	0	21	8	27	0	11	0	46	24	11	0	0	0	35	0	0	0	1	0	1	150
9:15 AM	2	0	44	5	0	51	6	0	15	5	0	26	3	41	0	8	0	52	18	17	0	0	0	35	0	0	0	0	1	1	165
9:30 AM	3	0	37	3	0	43	2	0	8	4	0	14	7	26	0	9	0	42	16	17	0	0	0	33	0	0	0	3	0	3	135
9:45 AM	1	0	34	5	0	40	6	0	8	2	0	16	1	34	0	8	0	43	19	15	0	0	0	34	0	0	0	2	0	2	135
Total	8	0	155	18	0	181	21	0	40	16	0	77	19	128	0	36	0	183	77	60	0	0	0	137	0	0	0	6	1	7	585
10:00 AM	3	0	36	8	1	48	2	0	7	5	0	14	2	39	0	12	0	53	12	17	0	0	0	29	0	1	0	1	0	2	146
10:15 AM	1	0	41	1	0	43	7	0	9	5	0	21	2	28	0	9	0	39	24	13	0	0	0	37	0	1	0	1	0	2	142
10:30 AM	2	0	40	3	0	45	3	0	12	4	0	19	4	23	0	13	0	40	18	12	0	0	0	30	0	0	0	1	0	1	135
10:45 AM	2	0	46	5	0	53	2	0	15	3	0	20	2	30	0	12	0	44	13	10	0	0	0	23	0	0	0	5	0	5	145
Total	8	0	163	17	1	189	14	0	43	17	0	74	10	120	0	46	0	176	67	52	0	0	0	119	0	2	0	8	0	10	568
11:00 AM	0	0	37	1	0	38	5	0	8	2	0	15	2	17	0	16	0	35	17	9	0	0	0	26	0	0	0	3	0	3	117
11:15 AM	3	0	41	4	0	48	5	0	9	4	0	18	6	29	0	8	0	43	9	10	0	0	0	19	0	0	0	1	0	1	129
11:30 AM	0	0	39	4	0	43	1	0	9	3	0	13	4	22	0	5	0	31	14	6	0	0	0	20	0	0	0	0	0	0	107
11:45 AM	4	0	36	2	0	42	5	0	7	6	0	18	7	35	1	10	0	53	8	12	0	0	0	20	0	0	0	1	0	1	134
Total	7	0	153	11	0	171	16	0	33	15	0	64	19	103	1	39	0	162	48	37	0	0	0	85	0	0	0	5	0	5	487
12:00 PM	3	0	35	3	0	41	1	0	9	4	0	14	6	27	0	13	0	46	13	10	0	0	0	23	0	0	0	3	0	3	127
12:15 PM	3	0	21	7	0	31	3	0	9	2	0	14	1	44	0	10	0	55	11	13	0	0	0	24	0	0	0	1	0	1	125
12:30 PM	1	0	38	1	0	40	4	0	15	4	0	23	3	24	0	12	0	39	8	12	0	0	0	20	0	0	0	0	0	0	122
12:45 PM	4	0	35	3	0	42	2	0	6	6	0	14	4	20	0	8	0	32	14	13	0	0	0	27	0	0	0	3	0	3	118
Total	11	0	129	14	0	154	10	0	39	16	0	65	14	115	0	43	0	172	46	48	0	0	0	94	0	0	0	7	0	7	492
1:00 PM	1	0	29	4	0	34	2	0	12	2	0	16	8	41	0	14	0	63	5	7	0	0	0	12	0	0	0	4	0	4	129
1:15 PM	2	0	34	2	0	38	2	0	8	0	0	10	5	34	0	16	0	55	17	13	0	0	0	30	0	0	0	2	0	2	135
1:30 PM	2	0	40	3	0	45	5	0	10	0	0	15	3	34	0	16	0	53	16	10	0	0	0	26	0	0	0	3	0	3	142
1:45 PM	4	0	39	6	0	49	5	0	12	3	0	20	4	50	0	21	0	75	12	11	0	0	0	23	0	0	1	3	0	4	171
Total	9	0	142	15	0	166	14	0	42	5	0	61	20	159	0	67	0	246	50	41	0	0	0	91	0	0	1	12	0	13	577
2:00 PM	2	0	50	8	0	60	7	0	10	1	0	18	6	51	0	15	0	72	13	8	1	0	0	22	0	0	0	0	0	0	172
2:15 PM	7	0	43	2	0	52	6	0	16	1	0	23	7	58	0	19	0	84	10	14	0	0	0	24	0	0	0	1	0	1	184
2:30 PM	1	0	46	6	0	53	6	0	19	7	0	32	3	57	0	29	0	89	6	10	0	0	0	16	0	0	0	1	0	1	191
2:45 PM	2	0	45	3	0	50	5	0	22	2	0	29	5	83	0	28	0	116	13	15	0	0	0	28	0	0	0	4	0	4	227
Total	12	0	184	19	0	215	24	0	67	11	0	102	21	249	0	91	0	361	42	47	1	0	0	90	0	0	0	6	0	6	774
3:00 PM	3	0	45	4	0	52	13	0	21	7	0	41	7	73	0	27	0	107	22	18	0	0	0	40	0	0	0	1	0	1	241
3:15 PM	4	0	56	9	0	69	4	1	25	3	0	33	4	88	1	33	0	126	13	17	0	0	0	30	0	0	0	0	0	0	258
3:30 PM	8	0	61	6	0	75	11	1	23	10	0	45	4	81	0	36	0	121	20	20	0	0	0	40	0	0	0	1	0	1	282
3:45 PM	3	0	37	3	0	43	7	0	20	2	0	29	8	90	0	32	0	130	12	16	0	0	0	28	0	1	0	3	0	4	234
Total	18	0	199	22	0	239	35	2	89	22	0	148	23	332	1	128	0	484	67	71	0	0	0	138	0	1	0	5	0	6	1015
4:00 PM	10	0	53	4	0	67	11	0	26	2	0	39	3	103	0	36	0	142	6	9	0	0	0	15	0	0	0	5	0	5	268
4:15 PM	6	0	50	6	0	62	14	0	24	1	0	39	5	124	0	33	0	162	11	14	0	0	0	25	0	0	0	3	0	3	291
4:30 PM	3	0	54	7	0	64	12	0	27	6	0	45	16	108	0	29	0	153	9	13	0	0	0	22	0	0	0	1	0	1	285
4:45 PM	3	0	44	3	0	50	14	0	34	1	0	49	10	115	0	27	0	152	11	15	0	0	0	26	0	0	0	2	0	2	279
Total	22	0	201	20	0	243	51	0	111	10	0	172	34	450	0	125	0	609	37	51	0	0	0	88	0	0	0	11	0	11	1123
5:00 PM	4	0	44	8	0	56	13	0	29	5	0	47	5	107	0	37	0	149	7	8	0	0	0								

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



#### Cars

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
5:15 PM	3	0	60	9	0	72	8	0	23	6	0	37	8	102	0	32	0	142	11	11	0	0	0	22	0	0	0	0	0	0	273
5:30 PM	3	0	33	3	0	39	6	0	28	4	0	38	7	86	0	27	0	120	19	7	0	0	0	26	0	0	0	0	0	0	223
5:45 PM	5	0	29	6	0	40	5	0	19	7	0	31	7	88	0	22	0	117	7	14	0	0	0	21	0	0	0	0	0	0	209
Total	15	0	166	26	0	207	32	0	99	22	0	153	27	383	0	118	0	528	44	40	0	0	0	84	0	0	0	0	0	0	972
6:00 PM	2	0	26	1	0	29	5	0	20	4	0	29	4	64	0	31	0	99	14	11	0	0	0	25	0	0	0	1	0	1	183
6:15 PM	2	0	30	1	0	33	2	0	13	4	0	19	9	53	0	16	0	78	16	10	0	0	0	26	0	0	0	1	0	1	157
6:30 PM	2	0	26	6	0	34	2	0	13	2	0	17	5	46	0	16	0	67	9	7	0	0	0	16	0	0	0	1	0	1	135
6:45 PM	1	0	24	3	0	28	5	0	6	2	0	13	7	32	0	23	0	62	6	7	0	0	0	13	0	0	0	0	0	0	116
Total	7	0	106	11	0	124	14	0	52	12	0	78	25	195	0	86	0	306	45	35	0	0	0	80	0	0	0	3	0	3	591
Grand Total	133	0	2464	229	1	2827	268	3	691	199	0	1161	240	2472	3	842	0	3557	785	690	2	0	0	1477	0	3	2	75	1	81	9103
Approach %	4.7	0.0	87.2	8.1	0.0		23.1	0.3	59.5	17.1	0.0		6.7	69.5	0.1	23.7	0.0		53.1	46.7	0.1	0.0	0.0		0.0	3.7	2.5	92.6	1.2		
Total %	1.5	0.0	27.1	2.5	0.0	31.1	2.9	0.0	7.6	2.2	0.0	12.8	2.6	27.2	0.0	9.2	0.0	39.1	8.6	7.6	0.0	0.0	0.0	16.2	0.0	0.0	0.0	0.8	0.0	0.9	
Exiting Leg Total						2818						1161					3451						1533							140	9103

AM Peak Hour Analysis from 07:00 AM to 10:00 AM begins at:

7:30 AM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
7:30 AM	3	0	170	11	0	184	7	0	7	4	0	18	2	26	0	9	0	37	34	31	0	0	0	65	0	0	0	4	0	4	308
7:45 AM	2	0	120	13	0	135	6	1	9	9	0	25	3	38	0	13	0	54	36	33	0	0	0	69	0	0	0	3	0	3	286
8:00 AM	2	0	90	4	0	96	5	0	21	4	0	30	3	32	0	10	0	45	34	34	1	0	0	69	0	0	1	1	0	2	242
8:15 AM	3	0	109	2	0	114	9	0	10	8	0	27	8	35	0	7	0	50	36	27	0	0	0	63	0	0	0	3	0	3	257
Total Volume	10	0	489	30	0	529	27	1	47	25	0	100	16	131	0	39	0	186	140	125	1	0	0	266	0	0	1	11	0	12	1093
% Approach Total	1.9	0.0	92.4	5.7	0.0		27.0	1.0	47.0	25.0	0.0		8.6	70.4	0.0	21.0	0.0		52.6	47.0	0.4	0.0	0.0		0.0	0.0	8.3	91.7	0.0		
PHF	0.833	0.000	0.719	0.577	0.000	0.719	0.750	0.250	0.560	0.694	0.000	0.833	0.500	0.862	0.000	0.750	0.000	0.861	0.972	0.919	0.250	0.000	0.000	0.964	0.000	0.000	0.250	0.688	0.000	0.750	0.887
Entering Leg	10	0	489	30	0	529	27	1	47	25	0	100	16	131	0	39	0	186	140	125	1	0	0	266	0	0	1	11	0	12	1093
Exiting Leg						170						172						654						86						11	1093
Total						699						272						840					352							23	2186

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
1:45 PM	4	0	39	6	0	49	5	0	12	3	0	20	4	50	0	21	0	75	12	11	0	0	0	23	0	0	1	3	0	4	171
2:00 PM	2	0	50	8	0	60	7	0	10	1	0	18	6	51	0	15	0	72	13	8	1	0	0	22	0	0	0	0	0	0	172
2:15 PM	7	0	43	2	0	52	6	0	16	1	0	23	7	58	0	19	0	84	10	14	0	0	0	24	0	0	0	1	0	1	184
2:30 PM	1	0	46	6	0	53	6	0	19	7	0	32	3	57	0	29	0	89	6	10	0	0	0	16	0	0	0	1	0	1	191
Total Volume	14	0	178	22	0	214	24	0	57	12	0	93	20	216	0	84	0	320	41	43	1	0	0	85	0	0	1	5	0	6	718
% Approach Total	6.5	0.0	83.2	10.3	0.0		25.8	0.0	61.3	12.9	0.0		6.3	67.5	0.0	26.3	0.0		48.2	50.6	1.2	0.0	0.0		0.0	0.0	16.7	83.3	0.0		
PHF	0.500	0.000	0.890	0.688	0.000	0.892	0.857	0.000	0.750	0.429	0.000	0.727	0.714	0.931	0.000	0.724	0.000	0.899	0.788	0.768	0.250	0.000	0.000	0.885	0.000	0.000	0.250	0.417	0.000	0.375	0.940
Entering Leg	14	0	178	22	0	214	24	0	57	12	0	93	20	216	0	84	0	320	41	43	1	0	0	85	0	0	1	5	0	6	718
Exiting Leg						246						86						231						141						14	718
Total						460						179						551						226						20	1436

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

4:00 PM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
4:00 PM	10	0	53	4	0	67	11	0	26	2	0	39	3	103	0	36	0	142	6	9	0	0	0	15	0	0	0	5	0	5	268
4:15 PM	6	0	50	6	0	62	14	0	24	1	0	39	5	124	0	33	0	162	11	14	0	0	0	25	0	0	0	3	0	3	291

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



**Cars**

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
4:30 PM	3	0	54	7	0	64	12	0	27	6	0	45	16	108	0	29	0	153	9	13	0	0	0	22	0	0	0	1	0	1	285
4:45 PM	3	0	44	3	0	50	14	0	34	1	0	49	10	115	0	27	0	152	11	15	0	0	0	26	0	0	0	2	0	2	279
Total Volume	22	0	201	20	0	243	51	0	111	10	0	172	34	450	0	125	0	609	37	51	0	0	0	88	0	0	0	11	0	11	1123
% Approach Total	9.1	0.0	82.7	8.2	0.0		29.7	0.0	64.5	5.8	0.0		5.6	73.9	0.0	20.5	0.0		42.0	58.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.550	0.000	0.931	0.714	0.000	0.907	0.911	0.000	0.816	0.417	0.000	0.878	0.531	0.907	0.000	0.868	0.000	0.940	0.841	0.850	0.000	0.000	0.000	0.846	0.000	0.000	0.000	0.550	0.000	0.550	0.965
Entering Leg	22	0	201	20	0	243	51	0	111	10	0	172	34	450	0	125	0	609	37	51	0	0	0	88	0	0	0	11	0	11	1123
Exiting Leg						512						105						248						236						22	1123
Total						755						277						857						324						33	2246

PDI File #: 228829 A  
Location: N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)  
Location: E: Princeton Road (Route 62) W: Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order #32  
Count Date: Tuesday, September 20, 2022  
Start Time: 7:00 AM  
End Time: 7:00 PM  
Class:



Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Princeton Road (Route 62)							Total	
	from North							from East							from South							from West							from Northwest								
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total							
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	5						
7:15 AM	0	0	3	0	0	3	1	0	1	0	0	2	0	6	0	0	0	6	1	2	0	0	0	3	0	0	0	0	0	0	14						
7:30 AM	0	0	2	0	0	2	1	0	0	0	0	1	0	0	0	1	0	1	1	1	0	0	0	2	0	0	0	0	0	0	6						
7:45 AM	0	0	1	1	0	2	1	0	1	0	0	2	0	5	0	0	0	5	1	1	0	0	0	2	0	0	0	0	0	0	11						
Total	0	0	6	1	0	7	4	0	2	0	0	6	1	13	0	1	0	15	3	5	0	0	0	8	0	0	0	0	0	0	36						
8:00 AM	0	0	5	0	0	5	3	0	1	0	0	4	0	1	0	3	0	4	0	1	0	0	0	1	0	0	0	1	0	1	15						
8:15 AM	0	0	4	1	0	5	1	0	0	0	0	1	0	1	0	1	0	2	1	0	0	0	0	1	0	0	0	0	0	0	9						
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	4	1	2	0	0	0	3	0	0	0	0	0	0	7						
8:45 AM	0	0	6	2	0	8	0	0	2	0	0	2	0	4	0	1	0	5	1	0	0	0	0	1	0	0	0	0	0	0	16						
Total	0	0	15	3	0	18	4	0	3	0	0	7	0	9	0	6	0	15	3	3	0	0	0	6	0	0	0	1	0	1	47						
9:00 AM	0	0	1	3	0	4	0	0	4	1	0	5	0	4	0	2	0	6	0	1	0	0	0	1	0	0	0	0	0	0	16						
9:15 AM	0	0	3	1	0	4	1	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	8						
9:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	7						
9:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	2	0	0	0	0	0	0	5						
Total	0	0	5	4	0	9	1	0	5	1	0	7	0	11	0	3	0	14	3	3	0	0	0	6	0	0	0	0	0	0	0	36					
10:00 AM	0	0	3	0	0	3	0	0	1	0	0	1	0	2	0	0	0	2	0	2	0	0	0	2	0	0	0	0	0	0	8						
10:15 AM	0	0	3	0	0	3	0	0	2	0	0	2	0	3	0	2	0	5	2	1	0	0	0	3	0	0	0	1	0	1	14						
10:30 AM	0	0	3	0	0	3	0	0	1	0	0	1	0	4	0	0	0	4	1	0	0	0	0	1	0	0	0	0	0	0	9						
10:45 AM	0	0	1	2	0	3	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5						
Total	0	0	10	2	0	12	0	0	4	0	0	4	0	11	0	2	0	13	3	3	0	0	0	6	0	0	0	1	0	1	36						
11:00 AM	0	0	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	4						
11:15 AM	0	0	5	2	0	7	2	0	0	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	10						
11:30 AM	0	0	2	0	0	2	0	1	2	0	0	3	0	2	0	0	0	2	1	1	0	0	0	2	0	0	0	0	0	0	9						
11:45 AM	0	0	2	1	0	3	2	0	1	0	0	3	2	2	0	1	0	5	1	0	0	0	0	1	0	0	0	0	0	0	12						
Total	0	0	9	3	0	12	5	1	4	0	0	10	3	4	0	1	0	8	2	3	0	0	0	5	0	0	0	0	0	0	35						
12:00 PM	0	0	1	2	0	3	0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5						
12:15 PM	1	0	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	0	2	0	0	0	0	0	0	5						
12:30 PM	0	0	1	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3						
12:45 PM	0	0	4	0	0	4	1	0	3	0	0	4	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	1	0	1	11						
Total	1	0	6	3	0	10	1	0	6	0	0	7	0	3	0	0	0	3	0	3	0	0	0	3	0	0	0	1	0	1	24						
1:00 PM	0	0	5	0	0	5	0	0	0	1	0	1	0	3	0	0	0	3	0	4	0	0	0	4	0	0	0	0	0	0	13						
1:15 PM	1	0	5	2	0	8	0	0	0	0	0	0	1	3	0	0	0	4	0	3	0	0	0	3	0	0	0	0	0	0	15						
1:30 PM	0	0	4	0	0	4	1	0	0	0	0	1	0	5	0	0	0	5	1	0	0	0	0	1	0	0	0	0	0	0	11						
1:45 PM	0	0	0	1	0	1	0	0	1	0	0	1	1	3	0	1	0	5	0	1	0	0	0	1	0	0	0	0	0	0	8						
Total	1	0	14	3	0	18	1	0	1	1	0	3	2	14	0	1	0	17	1	8	0	0	0	9	0	0	0	0	0	0	47						
2:00 PM	0	0	6	0	0	6	0	0	1	0	0	1	0	5	1	0	0	6	0	1	0	0	0	1	0	0	0	0	0	0	14						
2:15 PM	0	0	2	1	0	3	1	0	0	0	0	1	0	2	0	0	0	2	2	1	0	0	0	3	0	0	0	0	0	0	9						
2:30 PM	1	0	4	2	0	7	0	0	2	0	0	2	4	5	0	1	0	10	0	2	0	0	0	2	0	0	0	1	0	1	22						
2:45 PM	0	0	6	0	0	6	0	0	0	0	0	0	0	6	0	0	0	6	2	1	1	0	0	4	0	0	0	0	0	0	16						
Total	1	0	18	3	0	22	1	0	3	0	0	4	4	18	1	1	0	24	4	5	1	0	0	10	0	0	0	1	0	1	61						
3:00 PM	1	0	4	1	0	6	1	0	2	0	0	3	0	5	0	1	0	6	0	1	0	0	0	1	0	0	0	1	0	1	17						
3:15 PM	0	0	4	0	0	4	1	0	0	0	0	1	0	1	0	1	0	2	0	4	0	0	0	4	0	0	0	0	0	0	11						
3:30 PM	0	0	2	2	0	4	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5						
3:45 PM	0	0	2	0	0	2	1	0	1	0	0	2	0	3	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9						
Total	1	0	12	3	0	16	3	0	3	0	0	6	0	10	0	4	0	14	0	5	0	0	0	5	0	0	0	1	0	1	42						
4:00 PM	0	0	2	0	0	2	1	0	0	0	0	1	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	1	0	1	6						
4:15 PM	0	0	3	3	0	6	0	0	0	0	0	0	0	2	0	1	0	3	1	1	0	0	0	2	0	0	0	0	0	0	11						
4:30 PM	0	0	3	1	0	4	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	6						
4:45 PM	0	0	3	0	0	3	0	0	1	0	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6						
Total	0	0	11	4	0	15	1	0	1	0	0	2	0	6	0	2	0	8	1	2	0	0	0	3	0	0	0	1	0	1	29						
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	1	0	5	0	1	0	0	0	1	0	0	0	0	0	0	6						

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



### Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total	
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		
5:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3
5:30 PM	0	0	2	1	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	6	1	0	7	0	0	1	0	0	1	1	4	0	1	0	6	0	2	0	0	0	2	0	0	0	0	0	0	0	16
6:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:45 PM	0	0	1	1	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	4	1	0	5	0	0	1	0	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Grand Total	4	0	116	31	0	151	21	1	34	2	0	58	11	105	1	22	0	139	20	42	1	0	0	63	0	0	0	6	0	6	417	
Approach %	2.6	0.0	76.8	20.5	0.0		36.2	1.7	58.6	3.4	0.0		7.9	75.5	0.7	15.8	0.0		31.7	66.7	1.6	0.0	0.0		0.0	0.0	0.0	100.0	0.0			
Total %	1.0	0.0	27.8	7.4	0.0	36.2	5.0	0.2	8.2	0.5	0.0	13.9	2.6	25.2	0.2	5.3	0.0	33.3	4.8	10.1	0.2	0.0	0.0	15.1	0.0	0.0	0.0	1.4	0.0	1.4		
Exiting Leg Total	133						84						138						56						6						417	
Buses	1	0	12	6	0	19	4	0	6	0	0	10	5	11	0	4	0	20	3	6	0	0	0	9	0	0	0	4	0	4	62	
% Buses	25.0	0.0	10.3	19.4	0.0	12.6	19.0	0.0	17.6	0.0	0.0	17.2	45.5	10.5	0.0	18.2	0.0	14.4	15.0	14.3	0.0	0.0	0.0	14.3	0.0	0.0	0.0	66.7	0.0	66.7	14.9	
Exiting Leg Total	19						17						15						10						1						62	
Single-Unit Trucks	3	0	75	15	0	93	12	0	25	1	0	38	6	62	1	15	0	84	14	33	1	0	0	48	0	0	0	2	0	2	265	
% Single-Unit	75.0	0.0	64.7	48.4	0.0	61.6	57.1	0.0	73.5	50.0	0.0	65.5	54.5	59.0	100.0	68.2	0.0	60.4	70.0	78.6	100.0	0.0	0.0	76.2	0.0	0.0	0.0	33.3	0.0	33.3	63.5	
Exiting Leg Total	77						54						90						40						4						265	
Articulated Trucks	0	0	29	10	0	39	5	1	3	1	0	10	0	32	0	3	0	35	3	3	0	0	0	6	0	0	0	0	0	0	0	90
% Articulated	0.0	0.0	25.0	32.3	0.0	25.8	23.8	100.0	8.8	50.0	0.0	17.2	0.0	30.5	0.0	13.6	0.0	25.2	15.0	7.1	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0	21.6	
Exiting Leg Total	37						13						33						6						1						90	

### AM Peak Hour Analysis from 07:00 AM to 10:00 AM begins at:

8:15 AM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
8:15 AM	0	0	4	1	0	5	1	0	0	0	0	1	0	1	0	1	0	2	1	0	0	0	0	1	0	0	0	0	0	0	9
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	4	1	2	0	0	0	3	0	0	0	0	0	0	7
8:45 AM	0	0	6	2	0	8	0	0	2	0	0	2	0	4	0	1	0	5	1	0	0	0	0	1	0	0	0	0	0	0	16
9:00 AM	0	0	1	3	0	4	0	0	4	1	0	5	0	4	0	2	0	6	0	1	0	0	0	1	0	0	0	0	0	0	16
Total Volume	0	0	11	6	0	17	1	0	6	1	0	8	0	12	0	5	0	17	3	3	0	0	0	6	0	0	0	0	0	0	48
% Approach Total	0.0	0.0	64.7	35.3	0.0		12.5	0.0	75.0	12.5	0.0		0.0	70.6	0.0	29.4	0.0		50.0	50.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.458	0.500	0.000	0.531	0.250	0.000	0.375	0.250	0.000	0.400	0.000	0.750	0.000	0.625	0.000	0.708	0.750	0.375	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.750
Buses	0	0	1	2	0	3	1	0	2	0	0	3	0	1	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	9
Buses %	0.0	0.0	9.1	33.3	0.0	17.6	100.0	0.0	33.3	0.0	0.0	37.5	0.0	8.3	0.0	0.0	5.9	66.7	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8
Single-Unit Trucks	0	0	7	2	0	9	0	0	3	0	0	3	0	7	0	4	0	11	1	3	0	0	0	4	0	0	0	0	0	0	27
Single-Unit %	0.0	0.0	63.6	33.3	0.0	52.9	0.0	0.0	50.0	0.0	0.0	37.5	0.0	58.3	0.0	80.0	0.0	64.7	33.3	100.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	56.3
Articulated Trucks	0	0	3	2	0	5	0	0	1	1	0	2	0	4	0	1	0	5	5	0	0	0	0	0	0	0	0	0	0	0	12
Articulated %	0.0	0.0	27.3	33.3	0.0	29.4	0.0	0.0	16.7	100.0	0.0	25.0	0.0	33.3	0.0	20.0	0.0	29.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Buses	0	0	1	2	0	3	1	0	2	0	0	3	0	1	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	9
Single-Unit Trucks	0	0	7	2	0	9	0	0	3	0	0	3	0	7	0	4	0	11	1	3	0	0	0	4	0	0	0	0	0	0	27
Articulated Trucks	0	0	3	2	0	5	0	0	1	1	0	2	0	4	0	1	0	5	5	0	0	0	0	0	0	0	0	0	0	0	12
Total Entering Leg	0	0	11	6	0	17	1	0	6	1	0	8	0	12	0	5	0	17	3	3	0	0	0	6	0	0	0	0	0	0	48
Buses						2						2						3						2							9
Single-Unit Trucks						7						5						8						7							27
Articulated Trucks						4						2						4						2							12
Total Exiting Leg						13						9						15						11							48

### MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						
	from North						from East						from South						from West						from Northwest						

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



### Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
1:45 PM	0	0	0	1	0	1	0	0	1	0	0	1	1	3	0	1	0	5	0	1	0	0	0	1	0	0	0	0	0	0	8
2:00 PM	0	0	6	0	0	6	0	0	1	0	0	1	0	5	1	0	0	6	0	1	0	0	0	1	0	0	0	0	0	0	14
2:15 PM	0	0	2	1	0	3	1	0	0	0	0	1	0	2	0	0	0	2	2	1	0	0	0	3	0	0	0	0	0	0	9
2:30 PM	1	0	4	2	0	7	0	0	2	0	0	2	4	5	0	1	0	10	0	2	0	0	0	2	0	0	0	1	0	1	22
Total Volume	1	0	12	4	0	17	1	0	4	0	0	5	5	15	1	2	0	23	2	5	0	0	0	7	0	0	0	1	0	1	53
% Approach Total	5.9	0.0	70.6	23.5	0.0		20.0	0.0	80.0	0.0	0.0		21.7	65.2	4.3	8.7	0.0		28.6	71.4	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.250	0.000	0.500	0.500	0.000	0.607	0.250	0.000	0.500	0.000	0.000	0.625	0.313	0.750	0.250	0.500	0.000	0.575	0.250	0.625	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.250	0.000	0.250	0.602
Buses	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6	0	0	0	0	0	0	0	0	0	1	0	1	7
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	13.3	0.0	0.0	0.0	26.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	13.2
Single-Unit Trucks	1	0	9	2	0	12	1	0	4	0	0	5	1	10	1	2	0	14	2	4	0	0	0	6	0	0	0	0	0	0	37
Single-Unit %	100.0	0.0	75.0	50.0	0.0	70.6	100.0	0.0	100.0	0.0	0.0	100.0	20.0	66.7	100.0	100.0	0.0	60.9	100.0	80.0	0.0	0.0	0.0	85.7	0.0	0.0	0.0	0.0	0.0	0.0	69.8
Articulated Trucks	0	0	3	2	0	5	0	0	0	0	0	0	0	3	0	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	9
Articulated %	0.0	0.0	25.0	50.0	0.0	29.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	13.0	0.0	20.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	17.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6	0	0	0	0	0	0	0	0	0	1	0	1	7
Single-Unit Trucks	1	0	9	2	0	12	1	0	4	0	0	5	1	10	1	2	0	14	2	4	0	0	0	6	0	0	0	0	0	0	37
Articulated Trucks	0	0	3	2	0	5	0	0	0	0	0	0	0	3	0	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	9
Total Entering Leg	1	0	12	4	0	17	1	0	4	0	0	5	5	15	1	2	0	23	2	5	0	0	0	7	0	0	0	1	0	1	53
Buses						3						4					0							0						0	7
Single-Unit Trucks						11						7					11							6						2	37
Articulated Trucks						3						3					3							0						0	9
Total Exiting Leg						17						14					14						6						2		53

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:30 PM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
2:30 PM	1	0	4	2	0	7	0	0	2	0	0	2	4	5	0	1	0	10	0	2	0	0	0	2	0	0	0	1	0	1	22
2:45 PM	0	0	6	0	0	6	0	0	0	0	0	0	0	6	0	0	0	6	2	1	1	0	0	4	0	0	0	0	0	0	16
3:00 PM	1	0	4	1	0	6	1	0	2	0	0	3	0	5	0	1	0	6	0	1	0	0	0	1	0	0	0	1	0	1	17
3:15 PM	0	0	4	0	0	4	1	0	0	0	0	1	0	1	0	1	0	2	0	4	0	0	0	4	0	0	0	0	0	0	11
Total Volume	2	0	18	3	0	23	2	0	4	0	0	6	4	17	0	3	0	24	2	8	1	0	0	11	0	0	0	2	0	2	66
% Approach Total	8.7	0.0	78.3	13.0	0.0		33.3	0.0	66.7	0.0	0.0		16.7	70.8	0.0	12.5	0.0		18.2	72.7	9.1	0.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.500	0.000	0.750	0.375	0.000	0.821	0.500	0.000	0.500	0.000	0.000	0.500	0.250	0.708	0.000	0.750	0.000	0.600	0.250	0.500	0.250	0.000	0.000	0.688	0.000	0.000	0.000	0.500	0.000	0.500	0.750
Buses	1	0	3	0	0	4	1	0	0	0	0	1	4	3	0	1	0	8	0	1	0	0	0	1	0	0	0	2	0	2	16
Buses %	50.0	0.0	16.7	0.0	0.0	17.4	50.0	0.0	0.0	0.0	0.0	16.7	100.0	17.6	0.0	33.3	0.0	33.3	0.0	12.5	0.0	0.0	0.0	9.1	0.0	0.0	0.0	100.0	0.0	100.0	24.2
Single-Unit Trucks	1	0	10	2	0	13	1	0	4	0	0	5	0	8	0	1	0	9	1	7	1	0	0	9	0	0	0	0	0	0	36
Single-Unit %	50.0	0.0	55.6	66.7	0.0	56.5	50.0	0.0	100.0	0.0	0.0	83.3	0.0	47.1	0.0	33.3	0.0	37.5	50.0	87.5	100.0	0.0	0.0	81.8	0.0	0.0	0.0	0.0	0.0	0.0	54.5
Articulated Trucks	0	0	5	1	0	6	0	0	0	0	0	0	0	6	0	1	0	7	1	0	0	0	0	1	0	0	0	0	0	0	14
Articulated %	0.0	0.0	27.8	33.3	0.0	26.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.3	0.0	33.3	0.0	29.2	50.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	21.2
Buses	1	0	3	0	0	4	1	0	0	0	0	1	4	3	0	1	0	8	0	1	0	0	0	1	0	0	0	2	0	2	16
Single-Unit Trucks	1	0	10	2	0	13	1	0	4	0	0	5	0	8	0	1	0	9	1	7	1	0	0	9	0	0	0	0	0	0	36
Articulated Trucks	0	0	5	1	0	6	0	0	0	0	0	0	0	6	0	1	0	7	1	0	0	0	0	1	0	0	0	0	0	0	14
Total Entering Leg	2	0	18	3	0	23	2	0	4	0	0	6	4	17	0	3	0	24	2	8	1	0	0	11	0	0	0	2	0	2	66
Buses						6						5					3							1						1	16
Single-Unit Trucks						10						9					11						5						1	36	
Articulated Trucks						6						1					6						1						0	14	
Total Exiting Leg						22						15					20						7				2				66



PRECISION  
DATA  
INDUSTRIES, LLC

157 Washington Street, Suite 2  
Hudson, MA 01749  
Office: 508-875-0100 Fax: 508-875-0118

Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Princeton Road (Route 62)						
from North							from East							from South							from West							from Northwest						
Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total				
0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1				
0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3			
0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3			
0	0	0	0	0	0	0	2	0	0	0	0	2	1	3	0	1	0	5	0	2	0	0	0	2	0	0	0	0	0	0	9			
0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	4			
0	0	1	1	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1			
0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	4			
0	0	3	1	0	4	1	0	2	0	0	3	0	1	0	1	0	2	2	0	0	0	0	0	2	0	0	0	1	0	1	12			
0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1			
0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	3			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0	0	0	0																															

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



#### Buses

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total	
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	4
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	1	0	12	6	0	19	4	0	6	0	0	10	5	11	0	4	0	20	3	6	0	0	0	9	0	0	0	4	0	4		62
Approach %	5.3	0.0	63.2	31.6	0.0		40.0	0.0	60.0	0.0	0.0		25.0	55.0	0.0	20.0	0.0		33.3	66.7	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0			
Total %	1.6	0.0	19.4	9.7	0.0	30.6	6.5	0.0	9.7	0.0	0.0	16.1	8.1	17.7	0.0	6.5	0.0	32.3	4.8	9.7	0.0	0.0	0.0	14.5	0.0	0.0	0.0	6.5	0.0	6.5		
Exiting Leg Total	19						17						15						10						1						62	

AM Peak Hour Analysis from 07:00 AM to 10:00 AM begins at:

7:30 AM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3
8:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	4
8:15 AM	0	0	1	1	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	3	1	0	4	3	0	0	0	0	3	0	1	0	2	0	3	0	2	0	0	0	2	0	0	0	1	0	1	13
% Approach Total	0.0	0.0	75.0	25.0	0.0		100.0	0.0	0.0	0.0	0.0		0.0	33.3	0.0	66.7	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.375	0.250	0.000	0.500	0.750	0.000	0.000	0.000	0.000	0.750	0.000	0.250	0.000	0.500	0.000	0.750	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.250	0.813
Entering Leg	0	0	3	1	0	4	3	0	0	0	0	3	0	1	0	2	0	3	0	2	0	0	0	2	0	0	0	1	0	1	13
Exiting Leg						5						3						3						2						0	13
Total	9						6						6						4						1						26

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)							
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		Total
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	1	6
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	1	0	1	7
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		66.7	33.3	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.292		
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	6	0	0	0	0	0	0	0	0	1	0	1	7	
Exiting Leg						3						4							0					0						0	7	
Total	3						4						6						0						1						14	

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:15 PM	Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Princeton Road (Route 62)								
	from North							from East							from South							from West							from Northwest								
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	Total						
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1					
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	1					



PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



**Buses**

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total	
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		
2:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
3:00 PM	1	0	2	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	6
Total Volume	1	0	3	0	0	4	1	0	0	0	0	1	4	4	0	0	0	8	0	1	0	0	0	1	0	0	0	2	0	2	16	
% Approach Total	25.0	0.0	75.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		50.0	50.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0			
PHF	0.250	0.000	0.375	0.000	0.000	0.333	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.000	0.000	0.400	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.500	0.667	
Entering Leg	1	0	3	0	0	4	1	0	0	0	0	1	4	4	0	0	0	8	0	1	0	0	0	1	0	0	0	2	0	2	16	
Exiting Leg						7						5						3						0						1	16	
Total						11						6						11					1						3		32	

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



### Single-Unit Trucks

	Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Princeton Road (Route 62)							Total	
	from North							from East							from South							from West							from Northwest								
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total							
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	2					
7:15 AM	0	0	2	0	0	2	1	0	1	0	0	2	0	2	0	0	0	2	1	2	0	0	0	3	0	0	0	0	0	0	0	9					
7:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	3						
7:45 AM	0	0	1	1	0	2	0	0	1	0	0	1	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	5					
Total	0	0	5	1	0	6	1	0	2	0	0	3	0	4	0	0	0	4	3	3	0	0	0	6	0	0	0	0	0	0	0	19					
8:00 AM	0	0	3	0	0	3	3	0	1	0	0	4	0	1	0	2	0	3	0	1	0	0	0	1	0	0	0	0	0	0	0	11					
8:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	4					
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3	0	2	0	0	0	2	0	0	0	0	0	0	0	5					
8:45 AM	0	0	5	1	0	6	0	0	0	0	0	0	0	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	10					
Total	0	0	9	1	0	10	3	0	1	0	0	4	0	7	0	5	0	12	1	3	0	0	0	4	0	0	0	0	0	0	0	30					
9:00 AM	0	0	1	1	0	2	0	0	3	0	0	3	0	1	0	1	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	8					
9:15 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	5					
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4					
9:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	2	0	0	0	0	0	0	0	5					
Total	0	0	5	1	0	6	0	0	3	0	0	3	0	6	0	2	0	8	2	3	0	0	0	5	0	0	0	0	0	0	0	22					
10:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	2	0	0	0	2	0	0	0	0	0	0	0	6					
10:15 AM	0	0	2	0	0	2	0	0	2	0	0	2	0	1	0	2	0	3	2	0	0	0	0	2	0	0	0	1	0	1	10						
10:30 AM	0	0	3	0	0	3	0	0	1	0	0	1	0	2	0	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	7					
10:45 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4					
Total	0	0	8	1	0	9	0	0	3	0	0	3	0	7	0	2	0	9	3	2	0	0	0	5	0	0	0	1	0	1	27						
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2					
11:15 AM	0	0	1	0	0	1	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3					
11:30 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	5					
11:45 AM	0	0	0	1	0	1	1	0	1	0	0	2	2	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7					
Total	0	0	1	1	0	2	2	0	3	0	0	5	3	4	0	0	0	7	0	3	0	0	0	3	0	0	0	0	0	0	0	17					
12:00 PM	0	0	0	2	0	2	0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4					
12:15 PM	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	4					
12:30 PM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2					
12:45 PM	0	0	2	0	0	2	1	0	3	0	0	4	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	8						
Total	1	0	3	3	0	7	1	0	5	0	0	6	0	2	0	0	0	2	0	2	0	0	0	2	0	0	0	1	0	1	18						
1:00 PM	0	0	3	0	0	3	0	0	0	1	0	1	0	2	0	0	0	2	0	4	0	0	0	4	0	0	0	0	0	0	0	10					
1:15 PM	1	0	5	1	0	7	0	0	0	0	0	0	1	3	0	0	0	4	0	3	0	0	0	3	0	0	0	0	0	0	0	14					
1:30 PM	0	0	2	0	0	2	1	0	0	0	0	1	0	3	0	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	7					
1:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	1	0	3	0	1	0	0	0	1	0	0	0	0	0	0	0	5					
Total	1	0	10	1	0	12	1	0	1	1	0	3	2	9	0	1	0	12	1	8	0	0	0	9	0	0	0	0	0	0	0	36					
2:00 PM	0	0	6	0	0	6	0	0	1	0	0	1	0	5	1	0	0	6	0	1	0	0	0	1	0	0	0	0	0	0	0	14					
2:15 PM	0	0	1	1	0	2	1	0	0	0	0	1	0	1	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	6					
2:30 PM	1	0	2	1	0	4	0	0	2	0	0	2	0	3	0	1	0	4	0	2	0	0	0	2	0	0	0	0	0	0	0	12					
2:45 PM	0	0	5	0	0	5	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	0	3	0	0	0	0	0	0	0	9					
Total	1	0	14	2	0	17	1	0	3	0	0	4	0	10	1	1	0	12	3	4	1	0	0	8	0	0	0	0	0	0	0	41					
3:00 PM	0	0	1	1	0	2	0	0	2	0	0	2	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	8					
3:15 PM	0	0	2	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	7					
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
3:45 PM	0	0	2	0	0	2	1	0	0	0	0	1	0	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6					
Total	0	0	5	1	0	6	2	0	2	0	0	4	0	5	0	2	0	7	0	4	0	0	0	4	0	0	0	0	0	0	0	21					
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2					
4:15 PM	0	0	3	2	0	5	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	0	8					
4:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3					
4:45 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5					
Total	0	0	8	2	0	10	1	0	0	0	0	1	0	5	0	1	0	6	1	0	0	0	0	1	0	0	0	0	0	0	0	18					
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4					

PDI File #: **228829 A**  
Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
City, State: **Sterling, MA**  
Client: **Green International/ D. Perloff**  
Site Code: **Task Order #32**  
Count Date: **Tuesday, September 20, 2022**  
Start Time: **7:00 AM**  
End Time: **7:00 PM**  
Class:



**Single-Unit Trucks**

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total		
	from North						from East						from South						from West						from Northwest								
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total			
5:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:45 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Total	0	0	4	0	0	4	0	0	1	0	0	1	1	3	0	1	0	5	0	1	0	0	0	1	0	0	0	0	0	0	0	11	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
6:45 PM	0	0	1	1	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Total	0	0	3	1	0	4	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Grand Total	3	0	75	15	0	93	12	0	25	1	0	38	6	62	1	15	0	84	14	33	1	0	0	48	0	0	0	2	0	2	265		
Approach %	3.2	0.0	80.6	16.1	0.0		31.6	0.0	65.8	2.6	0.0		7.1	73.8	1.2	17.9	0.0		29.2	68.8	2.1	0.0	0.0		0.0	0.0	0.0	100.0	0.0				
Total %	1.1	0.0	28.3	5.7	0.0	35.1	4.5	0.0	9.4	0.4	0.0	14.3	2.3	23.4	0.4	5.7	0.0	31.7	5.3	12.5	0.4	0.0	0.0	18.1	0.0	0.0	0.0	0.8	0.0	0.8			
Exiting Leg Total						77						54					90						40							4	265		

AM Peak Hour Analysis from 07:00 AM to 10:00 AM begins at:

8:00 AM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
8:00 AM	0	0	3	0	0	3	3	0	1	0	0	4	0	1	0	2	0	3	0	1	0	0	0	1	0	0	0	0	0	0	11
8:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	0	1	0	0	0	0	0	4	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3	0	2	0	0	0	2	0	0	0	0	0	5	
8:45 AM	0	0	5	1	0	6	0	0	0	0	0	0	0	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	10	
Total Volume	0	0	9	1	0	10	3	0	1	0	0	4	0	7	0	5	0	12	1	3	0	0	0	4	0	0	0	0	0	0	30
% Approach Total	0.0	0.0	90.0	10.0	0.0		75.0	0.0	25.0	0.0	0.0		0.0	58.3	0.0	41.7	0.0		25.0	75.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.450	0.250	0.000	0.417	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.583	0.000	0.625	0.000	0.750	0.250	0.375	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.682	
Entering Leg	0	0	9	1	0	10	3	0	1	0	0	4	0	7	0	5	0	12	1	3	0	0	0	4	0	0	0	0	0	0	30
Exiting Leg						10						4					10						6							0	30
Total						20						8					22						10							0	60

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:15 PM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
1:15 PM	1	0	5	1	0	7	0	0	0	0	0	0	1	3	0	0	0	4	0	3	0	0	0	3	0	0	0	0	0	0	14
1:30 PM	0	0	2	0	0	2	1	0	0	0	0	1	0	3	0	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	7
1:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	1	0	3	0	1	0	0	0	1	0	0	0	0	0	0	5
2:00 PM	0	0	6	0	0	6	0	0	1	0	0	1	0	5	1	0	0	6	0	1	0	0	0	1	0	0	0	0	0	0	14
Total Volume	1	0	13	1	0	15	1	0	2	0	0	3	2	12	1	1	0	16	1	5	0	0	0	6	0	0	0	0	0	0	40
% Approach Total	6.7	0.0	86.7	6.7	0.0		33.3	0.0	66.7	0.0	0.0		12.5	75.0	6.3	6.3	0.0		16.7	83.3	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.542	0.250	0.000	0.536	0.250	0.000	0.500	0.000	0.000	0.750	0.500	0.600	0.250	0.250	0.000	0.667	0.250	0.417	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.714
Entering Leg	1	0	13	1	0	15	1	0	2	0	0	3	2	12	1	1	0	16	1	5	0	0	0	6	0	0	0	0	0	0	40
Exiting Leg						13						8						14					3							2	40
Total						28						11						30					9							2	80

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Princeton Road (Route 62)							Total	
	from North							from East							from South							from West							from Northwest								
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total							
2:00 PM	0	0	6	0	0	6	0	0	1	0	0	1	0	5	1	0	0	6	0	1	0	0	0	1	0	0	0	0	0	0	0	14					
2:15 PM	0	0	1	1	0	2	1	0	0	0	0	1	0	1	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	6					

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



### Single-Unit Trucks

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
2:30 PM	1	0	2	1	0	4	0	0	2	0	0	2	0	3	0	1	0	4	0	2	0	0	0	2	0	0	0	0	0	0	12
2:45 PM	0	0	5	0	0	5	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	0	3	0	0	0	0	0	9	
Total Volume	1	0	14	2	0	17	1	0	3	0	0	4	0	10	1	1	0	12	3	4	1	0	0	8	0	0	0	0	0	0	41
% Approach Total	5.9	0.0	82.4	11.8	0.0		25.0	0.0	75.0	0.0	0.0		0.0	83.3	8.3	8.3	0.0		37.5	50.0	12.5	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.583	0.500	0.000	0.708	0.250	0.000	0.375	0.000	0.000	0.500	0.000	0.500	0.250	0.250	0.000	0.500	0.375	0.500	0.250	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.732
Entering Leg	1	0	14	2	0	17	1	0	3	0	0	4	0	10	1	1	0	12	3	4	1	0	0	8	0	0	0	0	0	0	41
Exiting Leg						12						6						17						4						2	41
Total						29						10						29						12						2	82

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



### Articulated Trucks

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total	
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Total	0	0	1	0	0	1	1	0	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:45 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total	0	0	3	1	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
9:00 AM	0	0	0	1	0	1	0	0	1	1	0	2	0	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7
9:15 AM	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	2	0	2	1	0	1	1	0	3	0	5	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	11
10:00 AM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	1	0	0	0	0	1	0	0	0	0	0	3	
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
10:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	0	1	1	0	2	0	0	1	0	0	1	0	4	0	0	0	4	0	1	0	0	0	0	1	0	0	0	0	0	0	8
11:00 AM	0	0	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
11:15 AM	0	0	4	2	0	6	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
11:30 AM	0	0	2	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	4	
11:45 AM	0	0	2	0	0	2	1	0	0	0	0	1	0	0	0	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	5	
Total	0	0	8	2	0	10	3	1	1	0	0	5	0	0	0	1	0	1	2	0	0	0	0	0	2	0	0	0	0	0	0	18
12:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total	0	0	3	0	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1:00 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	
1:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
1:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	
1:45 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	
Total	0	0	4	2	0	6	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	11
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	
2:30 PM	0	0	2	1	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1	0	0	0	0	0	1	0	0	0	0	0	4	
Total	0	0	3	1	0	4	0	0	0	0	0	0	0	4	0	0	0	4	1	1	0	0	0	0	2	0	0	0	0	0	0	10
3:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	
3:15 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total	0	0	3	0	0	3	0	0	0	0	0	0	0	5	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	9
4:00 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

PDI File #: 228829 A  
Location: N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)  
Location: E: Princeton Road (Route 62) W: Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order #32  
Count Date: Tuesday, September 20, 2022  
Start Time: 7:00 AM  
End Time: 7:00 PM  
Class:



Articulated Trucks

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total	
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
6:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Grand Total	0	0	29	10	0	39	5	1	3	1	0	10	0	32	0	3	0	35	3	3	0	0	0	6	0	0	0	0	0	0	0	90
Approach %	0.0	0.0	74.4	25.6	0.0		50.0	10.0	30.0	10.0	0.0		0.0	91.4	0.0	8.6	0.0		50.0	50.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	32.2	11.1	0.0	43.3	5.6	1.1	3.3	1.1	0.0	11.1	0.0	35.6	0.0	3.3	0.0	38.9	0.0	3.3	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	37						13						33						6						1						90	

AM Peak Hour Analysis from 07:00 AM to 10:00 AM begins at:

8:45 AM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)							
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		Total
8:45 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:00 AM	0	0	0	1	0	1	0	0	1	1	0	2	0	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7
9:15 AM	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total Volume	0	0	1	3	0	4	1	0	1	1	0	3	0	5	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	13
% Approach Total	0.0	0.0	25.0	75.0	0.0		33.3	0.0	33.3	33.3	0.0		0.0	83.3	0.0	16.7	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.250	0.750	0.000	0.500	0.250	0.000	0.250	0.250	0.000	0.375	0.000	0.417	0.000	0.250	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.464	
Entering Leg	0	0	1	3	0	4	1	0	1	1	0	3	0	5	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Exiting Leg	6						3						2						2						0						13	
Total	10						6						8						2						0						26	

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

11:00 AM	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)							
	from North						from East						from South						from West						from Northwest							
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total		
11:00 AM	0	0	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
11:15 AM	0	0	4	2	0	6	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
11:30 AM	0	0	2	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	4	
11:45 AM	0	0	2	0	0	2	1	0	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0	0	1	0	0	0	0	0	5	
Total Volume	0	0	8	2	0	10	3	1	1	0	0	5	0	0	0	1	0	1	2	0	0	0	0	0	2	0	0	0	0	0	0	18
% Approach Total	0.0	0.0	80.0	20.0	0.0		60.0	20.0	20.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.500	0.250	0.000	0.417	0.750	0.250	0.250	0.000	0.000	0.625	0.000	0.000	0.000	0.250	0.000	0.250	0.500	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.643	
Entering Leg	0	0	8	2	0	10	3	1	1	0	0	5	0	0	0	1	0	1	2	0	0	0	0	2	0	0	0	0	0	0	18	
Exiting Leg	3						2						10						2						1						18	
Total	13						7						11						4						1						36	

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:30 PM	Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Redemption Rock Trail (Route 140)							Princeton Road (Route 62)							Princeton Road (Route 62)							Total	
	from North							from East							from South							from West							from Northwest								
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total							
2:30 PM	0	0	2	1	0	3	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4					
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	4					

PDI File #: **228829 A**  
 Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
 Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
 City, State: **Sterling, MA**  
 Client: **Green International/ D. Perloff**  
 Site Code: **Task Order #32**  
 Count Date: **Tuesday, September 20, 2022**  
 Start Time: **7:00 AM**  
 End Time: **7:00 PM**  
 Class:



### Articulated Trucks

	Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Redemption Rock Trail (Route 140)						Princeton Road (Route 62)						Princeton Road (Route 62)						Total
	from North						from East						from South						from West						from Northwest						
	Hard Right	Right	Thru	Left	U-Turn	Total	Right	Bear Right	Thru	Left	U-Turn	Total	Right	Thru	Bear Left	Left	U-Turn	Total	Right	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	Total	
3:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
3:15 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	5	1	0	6	0	0	0	0	0	0	0	6	0	1	0	7	1	0	0	0	0	1	0	0	0	0	0	0	14
% Approach Total	0.0	0.0	83.3	16.7	0.0		0.0	0.0	0.0	0.0	0.0		0.0	85.7	0.0	14.3	0.0		100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.625	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.583	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.875
Entering Leg	0	0	5	1	0	6	0	0	0	0	0	0	0	6	0	1	0	7	1	0	0	0	0	1	0	0	0	0	0	0	14
Exiting Leg						6						1					6						1						0		14
Total						12						1					13						2						0		28

Class:

Page 19



PDI File #: **228829 A**  
Location: **N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)**  
Location: **E: Princeton Road (Route 62) W: Princeton Road (Route 62)**  
City, State: **Sterling, MA**  
Client: **Green International/ D. Perloff**  
Site Code: **Task Order #32**  
Count Date: **Tuesday, September 20, 2022**  
Start Time: **7:00 AM**  
End Time: **7:00 PM**  
Class:



**Bicycles (on Roadway and Crosswalks)**

	Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Princeton Road (Route 62)								Total					
	from North								from East								from South								from West								from Northwest													
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total						
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Grand Total	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	2	1	1	0	0	0	0	0	2	2	1	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	1		9	
Approach %	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0						
Total %	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	11.1	0.0	0.0	0.0	0.0	0.0	22.2	11.1	11.1	0.0	0.0	0.0	0.0	0.0	22.2	22.2	11.1	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	11.1	0.0	0.0	0.0	11.1				
Exiting Leg Total	3								2								2								1								1													

AM Peak Hour Analysis from 07:00 AM to 10:00 AM begins at:

8:00 AM	Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Princeton Road (Route 62)								Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
8:45 AM	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Total Volume	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
% Approach Total	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
PHF	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Entering Leg	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

11:15 AM	Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Princeton Road (Route 62)								Total				
	from North								from East								from South								from West								from Northwest												
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total					
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
Exiting Leg																																										0	2		
Total																																										0	2		

PDI File #: 228829 A  
Location: N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)  
Location: E: Princeton Road (Route 62) W: Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order #32  
Count Date: Tuesday, September 20, 2022  
Start Time: 7:00 AM  
End Time: 7:00 PM  
Class:



Bicycles (on Roadway and Crosswalks)

	Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Princeton Road (Route 62)								Total	
	from North								from East								from South								from West								from Northwest									
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SB	Total		
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.500
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
Entering Leg	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Exiting Leg								2								0								0															0	2		
Total								2								1							1															0	4			

**ad (Route 2)**



**PRECISION  
DATA  
INDUSTRIES, LLC**

---

157 Washington Street, Suite 2  
Hudson, MA 01749  
Office: 508-875-0100 Fax: 508-875-0118

[illegible]

ad (Route 12)



PRECISION  
DATA  
INDUSTRIES, LLC

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157 Washington Street, Suite 2  
Hudson, MA 01749  
Office: 508-875-0100 Fax: 508-875-0118

		Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Princeton Road (Route 62)												
		from North								from East								from South								from West								from Northwest												
		Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total	Total				
5:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	2	3	3		
Approach %		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	50	50	0	0	0	0			
Total %		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33.3	33.3	0	0	0	0	33.3	33.3	66.7	0	0	0	0		
Exiting Leg Total		0								0								0								1								2												

[illegible][illegible][illegible]

PDI File #: 228829 A  
Location: N: Redemption Rock Trail (Route 140) S: Redemption Rock Trail (Route 140) NW: Princeton Road (Route 62)  
Location: E: Princeton Road (Route 62) W: Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order #32  
Count Date: Tuesday, September 20, 2022  
Start Time: 7:00 AM  
End Time: 7:00 PM  
Class:



Pedestrians

	Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Redemption Rock Trail (Route 140)								Princeton Road (Route 62)								Princeton Road (Route 62)								Total			
	from North								from East								from South								from West								from Northwest											
	Hard Right	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Bear Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Bear Left	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	Hard Left	U-Turn	CW-NB	CW-SB	Total	Hard Right	Bear Right	Bear Left	Hard Left	U-Turn	CW-NB	CW-SWB	Total				
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg	0								0								0							0																		0	0	0
Total									0								0							0																	0	0	0	

Redemption Rock Trail (Route 140)  
north of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-A

Count Date: Tuesday, September 20, 2022  
Direction: NB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	1	0	0	0	1
12:15 AM	0	0	2	0	0	0	2
12:30 AM	0	0	4	0	0	0	4
12:45 AM	0	0	2	0	0	0	2
1:00 AM	0	0	2	0	0	0	2
1:15 AM	0	0	1	0	1	0	2
1:30 AM	0	0	1	0	0	1	2
1:45 AM	0	0	5	0	0	0	5
2:00 AM	0	0	1	0	1	0	2
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	1	0	1
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	2	0	0	1	3
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	5	0	0	0	5
4:15 AM	0	0	7	0	0	0	7
4:30 AM	0	0	4	0	1	0	5
4:45 AM	0	0	3	0	1	0	4
5:00 AM	0	0	2	0	2	0	4
5:15 AM	0	0	11	0	1	0	12
5:30 AM	0	0	14	0	0	0	14
5:45 AM	0	0	16	0	0	0	16
6:00 AM	0	0	23	0	0	0	23
6:15 AM	0	0	32	0	1	0	33
6:30 AM	0	0	41	0	1	0	42
6:45 AM	0	0	40	0	3	2	45
7:00 AM	0	0	18	1	1	1	21
7:15 AM	0	0	35	1	3	4	43
7:30 AM	0	0	37	1	0	0	38
7:45 AM	0	0	47	3	1	1	52
8:00 AM	0	0	41	1	4	0	46
8:15 AM	0	0	45	1	1	1	48
8:30 AM	0	0	36	0	2	1	39
8:45 AM	0	0	29	1	3	0	33
9:00 AM	0	0	35	0	2	2	39
9:15 AM	0	0	46	0	1	2	49
9:30 AM	0	0	30	0	7	1	38
9:45 AM	0	0	41	0	1	0	42
10:00 AM	0	0	43	0	2	0	45
10:15 AM	0	2	34	0	2	2	40
10:30 AM	0	0	27	0	2	2	31
10:45 AM	0	2	35	0	2	0	39
11:00 AM	0	0	25	0	0	1	26
11:15 AM	0	0	35	0	1	1	37
11:30 AM	0	0	24	0	2	1	27
11:45 AM	0	1	39	0	3	1	44

AM Total	0	5	923	9	53	25	1015
Percentage	0.00%	0.49%	90.94%	0.89%	5.22%	2.46%	

AM Peak	12:00 AM	10:00 AM	7:30 AM	7:00 AM	8:45 AM	6:30 AM	7:45 AM
Volume	0	4	170	6	13	7	185

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	31	0	0	1	32
12:15 PM	0	0	45	0	0	1	46
12:30 PM	0	1	27	0	0	0	28
12:45 PM	0	0	23	0	3	0	26
1:00 PM	0	0	46	0	2	1	49
1:15 PM	0	0	38	0	3	0	41
1:30 PM	0	0	43	0	4	2	49
1:45 PM	0	0	58	0	1	2	61
2:00 PM	1	0	57	0	5	0	63
2:15 PM	1	0	63	0	3	0	67
2:30 PM	0	0	64	2	3	1	70
2:45 PM	0	0	93	1	4	2	100
3:00 PM	0	0	85	2	4	1	92
3:15 PM	1	0	87	0	1	1	90
3:30 PM	0	0	94	0	0	1	95
3:45 PM	0	0	96	0	1	3	100
4:00 PM	0	0	118	0	2	1	121
4:15 PM	0	0	139	0	3	0	142
4:30 PM	0	0	120	0	1	0	121
4:45 PM	0	0	131	0	2	0	133
5:00 PM	0	0	123	1	1	1	126
5:15 PM	0	0	111	0	1	0	112
5:30 PM	0	1	94	0	0	0	95
5:45 PM	0	0	94	0	0	0	94
6:00 PM	0	0	71	1	0	0	72
6:15 PM	0	0	56	0	0	0	56
6:30 PM	0	0	49	1	0	0	50
6:45 PM	0	0	37	0	0	0	37
7:00 PM	0	0	28	0	0	0	28
7:15 PM	0	0	31	0	0	0	31
7:30 PM	0	0	44	0	0	0	44
7:45 PM	0	0	38	0	0	0	38
8:00 PM	0	0	24	0	0	0	24
8:15 PM	0	0	36	0	0	0	36
8:30 PM	0	0	27	0	0	0	27
8:45 PM	0	0	19	0	0	0	19
9:00 PM	0	0	28	0	0	0	28
9:15 PM	0	0	18	0	0	0	18
9:30 PM	0	0	8	0	0	0	8
9:45 PM	0	0	11	0	0	0	11
10:00 PM	0	0	16	0	0	0	16
10:15 PM	0	0	9	0	0	0	9
10:30 PM	0	0	9	0	0	0	9
10:45 PM	0	0	12	2	0	0	14
11:00 PM	0	0	11	0	0	0	11
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	8	0	0	0	8
11:45 PM	0	0	11	0	0	0	11

PM Total	3	2	2481	10	44	18	2558
Percentage	0.12%	0.08%	96.99%	0.39%	1.72%	0.70%	

PM Peak	1:30 PM	12:00 PM	4:15 PM	2:15 PM	2:00 PM	3:00 PM	4:15 PM
Volume	2	1	513	5	15	6	522

Day Total	3	7	3404	19	97	43	3573
Percentage	0.08%	0.20%	95.27%	0.53%	2.71%	1.20%	

Redemption Rock Trail (Route 140)  
north of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-A

Count Date: Wednesday, September 21, 2022  
Direction: NB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	3	0	0	0	3
12:15 AM	0	0	2	0	1	0	3
12:30 AM	0	0	3	0	0	0	3
12:45 AM	0	0	3	0	0	0	3
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	3	0	0	0	3
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	1	0	0	0	1
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	1	0	0	0	1
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	4	0	0	0	4
3:15 AM	0	0	2	0	0	0	2
3:30 AM	0	0	1	0	0	0	1
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	7	0	0	0	7
4:15 AM	0	0	3	0	0	0	3
4:30 AM	0	0	4	0	0	1	5
4:45 AM	0	0	3	0	2	0	5
5:00 AM	0	0	10	0	1	0	11
5:15 AM	0	0	10	0	0	0	10
5:30 AM	0	0	13	0	1	0	14
5:45 AM	0	0	13	0	0	0	13
6:00 AM	0	1	22	0	0	0	23
6:15 AM	0	0	29	0	1	0	30
6:30 AM	0	0	39	1	0	2	42
6:45 AM	0	0	36	0	2	1	39
7:00 AM	0	0	30	1	5	0	36
7:15 AM	0	0	29	1	1	0	31
7:30 AM	0	0	39	1	2	0	42
7:45 AM	0	0	44	2	4	0	50
8:00 AM	0	0	36	1	2	2	41
8:15 AM	0	0	36	1	1	0	38
8:30 AM	0	0	31	0	1	1	33
8:45 AM	0	0	40	1	0	1	42
9:00 AM	0	0	44	0	2	1	47
9:15 AM	0	0	46	0	5	1	52
9:30 AM	0	0	35	0	1	0	36
9:45 AM	0	0	27	0	7	2	36
10:00 AM	0	1	41	0	2	2	46
10:15 AM	0	0	40	0	0	0	40
10:30 AM	0	7	38	0	4	0	49
10:45 AM	0	1	32	0	2	1	36
11:00 AM	0	0	37	0	1	2	40
11:15 AM	1	0	42	0	4	0	47
11:30 AM	0	0	41	0	3	2	46
11:45 AM	0	0	39	0	3	0	42

AM Total	1	10	961	9	58	19	1058
Percentage	0.09%	0.95%	90.83%	0.85%	5.48%	1.80%	

AM Peak	10:30 AM	10:00 AM	8:45 AM	7:00 AM	9:00 AM	9:15 AM	8:45 AM
Volume	1	9	165	5	15	5	177

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	2	43	0	2	0	47
12:15 PM	0	1	38	0	1	1	41
12:30 PM	0	0	42	0	1	0	43
12:45 PM	0	0	40	0	0	3	43
1:00 PM	0	1	50	0	0	0	51
1:15 PM	0	0	53	1	3	0	57
1:30 PM	1	2	54	0	2	0	59
1:45 PM	0	1	55	0	1	1	58
2:00 PM	0	0	54	1	2	2	59
2:15 PM	0	0	67	1	3	0	71
2:30 PM	0	0	81	1	1	0	83
2:45 PM	0	1	73	1	3	2	80
3:00 PM	0	0	85	2	1	1	89
3:15 PM	0	1	103	0	3	0	107
3:30 PM	0	0	89	0	0	0	89
3:45 PM	0	0	110	0	0	0	110
4:00 PM	1	1	110	0	3	1	116
4:15 PM	0	1	136	1	3	1	142
4:30 PM	0	1	128	0	4	0	133
4:45 PM	1	3	126	0	0	0	130
5:00 PM	0	0	117	0	0	0	117
5:15 PM	0	2	119	0	1	1	123
5:30 PM	0	1	114	0	0	0	115
5:45 PM	0	1	93	0	1	1	96
6:00 PM	0	0	65	0	0	1	66
6:15 PM	0	0	66	0	0	0	66
6:30 PM	0	1	49	0	0	0	50
6:45 PM	0	1	62	0	0	0	63
7:00 PM	0	0	37	0	0	0	37
7:15 PM	0	0	38	0	2	0	40
7:30 PM	0	0	52	0	0	0	52
7:45 PM	0	0	41	0	1	0	42
8:00 PM	0	0	29	0	0	0	29
8:15 PM	0	0	26	0	0	0	26
8:30 PM	0	0	40	0	0	0	40
8:45 PM	0	0	30	0	0	0	30
9:00 PM	0	0	20	0	0	0	20
9:15 PM	0	0	17	0	0	0	17
9:30 PM	0	0	20	0	0	0	20
9:45 PM	0	0	21	0	0	0	21
10:00 PM	0	0	12	0	0	0	12
10:15 PM	0	0	11	0	1	0	12
10:30 PM	0	0	17	0	0	0	17
10:45 PM	0	0	9	0	0	0	9
11:00 PM	0	0	10	0	0	0	10
11:15 PM	0	0	7	0	0	0	7
11:30 PM	0	0	10	0	0	0	10
11:45 PM	0	0	7	0	0	0	7

PM Total	3	21	2676	8	39	15	2762
Percentage	0.11%	0.76%	96.89%	0.29%	1.41%	0.54%	

PM Peak	4:00 PM	4:00 PM	4:15 PM	2:15 PM	3:45 PM	12:00 PM	4:15 PM
Volume	2	6	507	5	10	4	522

Day Total	4	31	3637	17	97	34	3820
Percentage	0.10%	0.81%	95.21%	0.45%	2.54%	0.89%	

Redemption Rock Trail (Route 140)  
north of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-A

Count Date: Tuesday, September 20, 2022  
Direction: SB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	3	0	0	0	3
12:30 AM	0	0	2	0	0	0	2
12:45 AM	0	0	2	0	0	0	2
1:00 AM	0	0	2	0	0	0	2
1:15 AM	0	0	2	0	0	0	2
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	4	0	0	0	4
2:15 AM	0	0	2	0	0	0	2
2:30 AM	0	0	1	0	1	0	2
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	5	0	0	0	5
3:15 AM	0	0	2	0	0	0	2
3:30 AM	0	0	5	0	0	0	5
3:45 AM	0	0	8	0	0	0	8
4:00 AM	0	0	7	0	0	1	8
4:15 AM	0	0	9	0	0	0	9
4:30 AM	0	0	15	0	0	0	15
4:45 AM	0	0	9	0	1	1	11
5:00 AM	0	0	22	0	0	0	22
5:15 AM	0	0	44	0	2	0	46
5:30 AM	0	0	58	0	1	0	59
5:45 AM	0	0	75	0	1	0	76
6:00 AM	0	0	68	0	0	0	68
6:15 AM	0	0	100	0	1	2	103
6:30 AM	0	0	124	1	2	1	128
6:45 AM	0	0	109	0	3	2	114
7:00 AM	0	0	128	0	0	0	128
7:15 AM	0	0	128	0	1	1	130
7:30 AM	0	0	176	0	3	0	179
7:45 AM	0	0	131	0	2	0	133
8:00 AM	0	0	99	2	3	0	104
8:15 AM	0	0	113	1	3	0	117
8:30 AM	0	0	80	0	0	0	80
8:45 AM	1	0	66	0	5	2	74
9:00 AM	0	0	49	1	1	1	52
9:15 AM	0	0	51	0	3	1	55
9:30 AM	0	0	43	0	0	0	43
9:45 AM	0	0	41	0	1	0	42
10:00 AM	0	0	49	0	2	1	52
10:15 AM	0	0	41	1	3	0	45
10:30 AM	0	0	45	0	3	0	48
10:45 AM	0	0	53	0	2	1	56
11:00 AM	0	1	37	0	0	0	38
11:15 AM	0	0	49	0	0	7	56
11:30 AM	0	0	42	0	0	2	44
11:45 AM	0	0	42	0	1	2	45

AM Total	1	1	2142	6	45	25	2220
Percentage	0.05%	0.05%	96.49%	0.27%	2.03%	1.13%	

AM Peak	8:00 AM	10:15 AM	7:00 AM	7:30 AM	7:30 AM	11:00 AM	7:00 AM
Volume	1	1	563	3	11	11	570

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	38	0	2	1	41
12:15 PM	0	0	31	0	2	0	33
12:30 PM	0	0	38	0	0	0	38
12:45 PM	0	0	42	0	2	2	46
1:00 PM	0	0	34	0	3	2	39
1:15 PM	0	0	38	0	7	1	46
1:30 PM	0	0	45	0	2	2	49
1:45 PM	0	1	48	0	0	1	50
2:00 PM	0	1	59	0	6	0	66
2:15 PM	0	0	52	0	2	1	55
2:30 PM	0	0	53	0	3	3	59
2:45 PM	0	0	49	1	4	0	54
3:00 PM	0	0	51	3	2	1	57
3:15 PM	0	1	69	0	2	2	74
3:30 PM	0	0	76	4	0	0	80
3:45 PM	0	0	42	0	2	0	44
4:00 PM	0	0	66	0	0	2	68
4:15 PM	0	0	63	1	4	0	68
4:30 PM	0	0	64	1	3	0	68
4:45 PM	0	0	52	0	2	0	54
5:00 PM	0	0	54	0	1	0	55
5:15 PM	0	1	71	0	1	0	73
5:30 PM	0	0	44	2	1	1	48
5:45 PM	0	0	42	0	1	1	44
6:00 PM	0	0	29	0	0	1	30
6:15 PM	0	0	33	0	0	0	33
6:30 PM	0	0	34	0	2	0	36
6:45 PM	0	0	28	0	2	0	30
7:00 PM	0	0	18	0	0	0	18
7:15 PM	0	0	35	0	0	0	35
7:30 PM	0	0	22	0	0	0	22
7:45 PM	0	0	12	0	0	0	12
8:00 PM	0	0	16	0	0	0	16
8:15 PM	0	0	23	0	0	0	23
8:30 PM	0	0	15	0	0	0	15
8:45 PM	0	0	21	0	0	0	21
9:00 PM	0	0	12	0	0	0	12
9:15 PM	0	0	10	0	0	0	10
9:30 PM	0	0	7	0	0	0	7
9:45 PM	0	0	5	0	0	0	5
10:00 PM	0	0	8	0	0	0	8
10:15 PM	0	0	13	0	0	0	13
10:30 PM	0	0	10	0	0	0	10
10:45 PM	0	0	3	0	0	0	3
11:00 PM	0	0	7	0	0	0	7
11:15 PM	0	0	3	0	0	0	3
11:30 PM	0	0	7	0	0	0	7
11:45 PM	0	0	5	0	0	0	5

PM Total	0	4	1597	12	56	21	1690
Percentage	0.00%	0.24%	94.50%	0.71%	3.31%	1.24%	

PM Peak	12:00 PM	1:15 PM	3:15 PM	2:45 PM	1:15 PM	12:45 PM	3:15 PM
Volume	0	2	253	8	15	7	266

Day Total	1	5	3739	18	101	46	3910
Percentage	0.03%	0.13%	95.63%	0.46%	2.58%	1.18%	



Redemption Rock Trail (Route 140)  
north of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-A

Count Date: Wednesday, September 21, 2022  
Direction: SB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	1	0	0	0	1
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	3	0	0	0	3
12:45 AM	0	0	1	0	0	0	1
1:00 AM	0	0	2	0	0	0	2
1:15 AM	0	0	2	0	0	0	2
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	1	0	0	0	1
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	3	0	0	0	3
3:00 AM	0	0	6	0	0	0	6
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	4	0	0	0	4
3:45 AM	0	0	6	0	0	0	6
4:00 AM	0	0	4	0	0	0	4
4:15 AM	0	0	16	0	0	0	16
4:30 AM	0	0	13	0	0	0	13
4:45 AM	0	0	16	0	0	0	16
5:00 AM	0	0	20	0	0	0	20
5:15 AM	0	0	48	0	0	1	49
5:30 AM	0	1	49	0	0	0	50
5:45 AM	0	0	74	0	1	0	75
6:00 AM	0	0	70	0	1	0	71
6:15 AM	0	0	101	0	2	2	105
6:30 AM	0	1	112	1	0	2	116
6:45 AM	0	0	112	1	0	1	114
7:00 AM	0	0	109	0	3	0	112
7:15 AM	0	1	129	0	1	1	132
7:30 AM	0	4	164	2	2	0	172
7:45 AM	0	0	116	1	2	0	119
8:00 AM	0	1	94	0	1	0	96
8:15 AM	0	0	100	1	2	0	103
8:30 AM	0	0	99	0	2	0	101
8:45 AM	0	0	64	1	3	2	70
9:00 AM	0	0	60	0	3	1	64
9:15 AM	0	1	62	0	1	0	64
9:30 AM	0	0	48	0	3	0	51
9:45 AM	0	1	43	0	0	0	44
10:00 AM	0	0	45	0	1	2	48
10:15 AM	0	0	48	0	3	0	51
10:30 AM	0	0	40	0	1	0	41
10:45 AM	0	0	51	0	2	1	54
11:00 AM	0	1	37	0	2	1	41
11:15 AM	0	0	58	0	0	2	60
11:30 AM	0	0	38	0	2	2	42
11:45 AM	0	0	56	0	4	0	60

AM Total	0	11	2127	7	42	18	2205
Percentage	0.00%	0.50%	96.46%	0.32%	1.90%	0.82%	
AM Peak	12:00 AM	7:15 AM	7:00 AM	7:30 AM	8:15 AM	10:45 AM	7:00 AM
Volume	0	6	518	4	10	6	535

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	1	45	0	5	0	51
12:15 PM	0	0	38	0	0	0	38
12:30 PM	0	1	50	0	5	1	57
12:45 PM	0	1	51	0	1	2	55
1:00 PM	0	0	43	0	6	0	49
1:15 PM	0	0	45	0	0	1	46
1:30 PM	0	0	46	0	0	1	47
1:45 PM	0	1	49	0	2	1	53
2:00 PM	0	1	70	0	1	0	72
2:15 PM	0	0	51	0	3	0	54
2:30 PM	0	1	62	0	5	0	68
2:45 PM	0	1	55	0	3	1	60
3:00 PM	0	0	75	1	0	0	76
3:15 PM	0	2	78	1	0	1	82
3:30 PM	0	0	62	0	2	0	64
3:45 PM	0	3	60	1	2	0	66
4:00 PM	2	0	68	0	3	1	74
4:15 PM	0	2	81	2	1	0	86
4:30 PM	0	0	79	0	0	1	80
4:45 PM	0	1	58	0	2	1	62
5:00 PM	0	0	48	0	8	0	56
5:15 PM	0	0	78	2	0	0	80
5:30 PM	0	0	40	0	2	1	43
5:45 PM	0	0	52	0	1	1	54
6:00 PM	0	3	54	0	0	0	57
6:15 PM	0	1	48	0	1	0	50
6:30 PM	0	0	32	0	0	0	32
6:45 PM	0	0	23	0	1	0	24
7:00 PM	0	0	29	0	0	0	29
7:15 PM	0	0	25	0	0	1	26
7:30 PM	0	0	19	0	0	0	19
7:45 PM	0	0	21	0	0	0	21
8:00 PM	0	0	18	0	0	0	18
8:15 PM	0	0	22	0	0	0	22
8:30 PM	0	0	17	0	0	0	17
8:45 PM	0	0	11	0	0	0	11
9:00 PM	0	0	11	0	0	0	11
9:15 PM	0	0	8	0	0	0	8
9:30 PM	0	0	15	0	0	0	15
9:45 PM	0	0	8	0	0	0	8
10:00 PM	0	0	9	0	0	0	9
10:15 PM	0	0	11	0	0	0	11
10:30 PM	0	0	12	0	1	0	13
10:45 PM	0	0	2	0	0	0	2
11:00 PM	0	0	6	0	0	0	6
11:15 PM	0	0	4	0	0	0	4
11:30 PM	0	0	5	0	0	0	5
11:45 PM	0	0	0	0	0	0	0

PM Total	2	19	1794	7	55	14	1891
Percentage	0.11%	1.00%	94.87%	0.37%	2.91%	0.74%	
PM Peak	3:15 PM	3:00 PM	3:45 PM	3:00 PM	12:15 PM	12:30 PM	3:45 PM
Volume	2	5	288	3	12	4	306

Day Total	2	30	3921	14	97	32	4096
Percentage	0.05%	0.73%	95.73%	0.34%	2.37%	0.78%	

**Redemption Rock Trail (Route 140)  
north of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32**



**PDI File #            228829 ATR-A**

**Direction:** NB

## Weekly Report

Day	Tuesday		Wednesday												Week	
Date	09/20/22		09/21/22												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	1	32	3	47	0	0	0	0	0	0	0	0	0	0	2	40
12:15	2	46	3	41	0	0	0	0	0	0	0	0	0	0	3	44
12:30	4	28	3	43	0	0	0	0	0	0	0	0	0	0	4	36
12:45	2	26	3	43	0	0	0	0	0	0	0	0	0	0	3	35
1:00	2	49	0	51	0	0	0	0	0	0	0	0	0	0	1	50
1:15	2	41	3	57	0	0	0	0	0	0	0	0	0	0	3	49
1:30	2	49	0	59	0	0	0	0	0	0	0	0	0	0	1	54
1:45	5	61	0	58	0	0	0	0	0	0	0	0	0	0	3	60
2:00	2	63	1	59	0	0	0	0	0	0	0	0	0	0	2	61
2:15	0	67	1	71	0	0	0	0	0	0	0	0	0	0	1	69
2:30	1	70	1	83	0	0	0	0	0	0	0	0	0	0	1	77
2:45	1	100	0	80	0	0	0	0	0	0	0	0	0	0	1	90
3:00	0	92	4	89	0	0	0	0	0	0	0	0	0	0	2	91
3:15	1	90	2	107	0	0	0	0	0	0	0	0	0	0	2	99
3:30	3	95	1	89	0	0	0	0	0	0	0	0	0	0	2	92
3:45	0	100	1	110	0	0	0	0	0	0	0	0	0	0	1	105
4:00	5	121	7	116	0	0	0	0	0	0	0	0	0	0	6	119
4:15	7	142	3	142	0	0	0	0	0	0	0	0	0	0	5	142
4:30	5	121	5	133	0	0	0	0	0	0	0	0	0	0	5	127
4:45	4	133	5	130	0	0	0	0	0	0	0	0	0	0	5	132
5:00	4	126	11	117	0	0	0	0	0	0	0	0	0	0	8	122
5:15	12	112	10	123	0	0	0	0	0	0	0	0	0	0	11	118
5:30	14	95	14	115	0	0	0	0	0	0	0	0	0	0	14	105
5:45	16	94	13	96	0	0	0	0	0	0	0	0	0	0	15	95
6:00	23	72	23	66	0	0	0	0	0	0	0	0	0	0	23	69
6:15	33	56	30	66	0	0	0	0	0	0	0	0	0	0	32	61
6:30	42	50	42	50	0	0	0	0	0	0	0	0	0	0	42	50
6:45	45	37	39	63	0	0	0	0	0	0	0	0	0	0	42	50
7:00	21	28	36	37	0	0	0	0	0	0	0	0	0	0	29	33
7:15	43	31	31	40	0	0	0	0	0	0	0	0	0	0	37	36
7:30	38	44	42	52	0	0	0	0	0	0	0	0	0	0	40	48
7:45	52	38	50	42	0	0	0	0	0	0	0	0	0	0	51	40
8:00	46	24	41	29	0	0	0	0	0	0	0	0	0	0	44	27
8:15	48	36	38	26	0	0	0	0	0	0	0	0	0	0	43	31
8:30	39	27	33	40	0	0	0	0	0	0	0	0	0	0	36	34
8:45	33	19	42	30	0	0	0	0	0	0	0	0	0	0	38	25
9:00	39	28	47	20	0	0	0	0	0	0	0	0	0	0	43	24
9:15	49	18	52	17	0	0	0	0	0	0	0	0	0	0	51	18
9:30	38	8	36	20	0	0	0	0	0	0	0	0	0	0	37	14
9:45	42	11	36	21	0	0	0	0	0	0	0	0	0	0	39	16
10:00	45	16	46	12	0	0	0	0	0	0	0	0	0	0	46	14
10:15	40	9	40	12	0	0	0	0	0	0	0	0	0	0	40	11
10:30	31	9	49	17	0	0	0	0	0	0	0	0	0	0	40	13
10:45	39	14	36	9	0	0	0	0	0	0	0	0	0	0	38	12
11:00	26	11	40	10	0	0	0	0	0	0	0	0	0	0	33	11
11:15	37	0	47	7	0	0	0	0	0	0	0	0	0	0	42	4
11:30	27	8	46	10	0	0	0	0	0	0	0	0	0	0	37	9
11:45	44	11	42	7	0	0	0	0	0	0	0	0	0	0	43	9
Total	1015	2558	1058	2762	0	0	0	0	0	0	0	0	0	0	1037	2660
Day Total	3573		3820		0		0		0		0		0		3697	
Peak HR	7:45 AM	4:15 PM	8:45 AM	4:15 PM											7:30 AM	4:15 PM
Volume	185	522	177	522											178	522

**Redemption Rock Trail (Route 140)  
north of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32**



**PDI File #            228829 ATR-A**

**Direction:** SB

## Weekly Report

[illegible]

Redemption Rock Trail (Route 140)  
south of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-B

Count Date: Tuesday, September 20, 2022  
Direction: NB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	3	0	0	0	3
12:15 AM	0	0	5	0	0	0	5
12:30 AM	0	0	4	0	0	0	4
12:45 AM	0	0	3	0	0	0	3
1:00 AM	0	0	3	0	0	0	3
1:15 AM	0	0	4	0	0	0	4
1:30 AM	0	0	2	0	0	1	3
1:45 AM	0	0	3	0	0	0	3
2:00 AM	0	0	1	0	1	0	2
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	1	0	1	0	2
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	2	0	0	1	3
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	6	0	0	0	6
4:15 AM	0	0	5	0	0	0	5
4:30 AM	0	0	4	0	1	0	5
4:45 AM	0	0	5	0	0	0	5
5:00 AM	0	0	2	0	2	0	4
5:15 AM	0	0	12	0	0	0	12
5:30 AM	0	0	10	0	0	0	10
5:45 AM	0	0	15	0	0	0	15
6:00 AM	0	0	21	0	0	0	21
6:15 AM	0	0	28	1	2	0	31
6:30 AM	0	0	36	0	1	0	37
6:45 AM	0	0	36	0	3	1	40
7:00 AM	0	0	19	2	1	0	22
7:15 AM	0	0	43	1	2	3	49
7:30 AM	0	0	35	1	1	0	37
7:45 AM	0	0	54	1	1	2	58
8:00 AM	0	0	44	1	3	0	48
8:15 AM	0	0	49	0	2	1	52
8:30 AM	0	0	48	0	3	1	52
8:45 AM	0	0	32	1	5	0	38
9:00 AM	0	0	46	0	2	4	52
9:15 AM	0	0	50	0	1	1	52
9:30 AM	0	0	40	0	6	1	47
9:45 AM	0	0	42	0	2	0	44
10:00 AM	0	0	54	0	2	0	56
10:15 AM	0	2	37	0	3	2	44
10:30 AM	0	0	40	0	2	2	44
10:45 AM	0	1	43	0	2	0	46
11:00 AM	0	1	33	0	0	0	34
11:15 AM	0	0	42	0	1	0	43
11:30 AM	0	0	32	0	2	0	34
11:45 AM	0	1	50	0	4	1	56

AM Total	0	5	1046	8	56	21	1136
Percentage	0.00%	0.44%	92.08%	0.70%	4.93%	1.85%	

AM Peak	12:00 AM	10:15 AM	7:45 AM	7:00 AM	8:45 AM	8:15 AM	7:45 AM
Volume	0	4	195	5	14	6	210

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	1	0	46	0	0	1	48
12:15 PM	0	0	55	0	0	1	56
12:30 PM	0	0	40	0	0	0	40
12:45 PM	0	0	32	0	1	0	33
1:00 PM	0	0	62	0	2	1	65
1:15 PM	0	0	55	0	4	0	59
1:30 PM	0	0	57	1	3	2	63
1:45 PM	0	0	74	0	3	2	79
2:00 PM	1	1	69	0	6	0	77
2:15 PM	0	0	86	1	1	0	88
2:30 PM	0	0	88	5	4	1	98
2:45 PM	0	0	117	2	1	3	123
3:00 PM	0	0	106	0	3	2	111
3:15 PM	0	0	118	1	0	1	120
3:30 PM	0	0	124	0	1	1	126
3:45 PM	0	0	129	0	3	3	135
4:00 PM	0	0	142	0	2	1	145
4:15 PM	0	0	160	1	3	0	164
4:30 PM	0	0	154	0	1	0	155
4:45 PM	0	0	151	0	4	0	155
5:00 PM	0	0	150	1	4	0	155
5:15 PM	0	0	142	0	1	0	143
5:30 PM	0	1	117	0	1	0	119
5:45 PM	0	0	118	0	0	0	118
6:00 PM	0	0	104	1	0	0	105
6:15 PM	0	0	78	0	0	0	78
6:30 PM	0	1	70	1	0	0	72
6:45 PM	0	0	60	0	0	0	60
7:00 PM	0	0	41	0	0	0	41
7:15 PM	0	0	46	0	0	0	46
7:30 PM	0	0	65	0	0	0	65
7:45 PM	0	0	56	0	0	0	56
8:00 PM	0	0	38	0	0	0	38
8:15 PM	0	0	42	0	0	0	42
8:30 PM	0	0	39	0	1	0	40
8:45 PM	0	0	30	0	0	0	30
9:00 PM	0	0	41	0	0	0	41
9:15 PM	0	0	25	0	0	0	25
9:30 PM	0	0	20	0	0	0	20
9:45 PM	0	0	16	0	0	0	16
10:00 PM	0	1	15	0	0	0	16
10:15 PM	0	0	14	0	0	0	14
10:30 PM	0	0	11	0	0	0	11
10:45 PM	0	0	18	2	0	0	20
11:00 PM	0	0	11	0	0	0	11
11:15 PM	0	0	3	0	0	0	3
11:30 PM	0	0	10	0	0	0	10
11:45 PM	0	0	14	0	0	0	14

PM Total	2	4	3259	16	49	19	3349
Percentage	0.06%	0.12%	97.31%	0.48%	1.46%	0.57%	

PM Peak	12:00 PM	1:15 PM	4:15 PM	2:00 PM	1:15 PM	2:30 PM	4:15 PM
Volume	1	1	615	8	16	7	629

Day Total	2	9	4305	24	105	40	4485
Percentage	0.04%	0.20%	95.99%	0.54%	2.34%	0.89%	

Redemption Rock Trail (Route 140)  
south of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-B

Count Date: Wednesday, September 21, 2022  
Direction: NB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	4	0	0	0	4
12:15 AM	0	0	3	0	1	0	4
12:30 AM	0	0	4	0	0	0	4
12:45 AM	0	0	3	0	0	0	3
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	3	0	0	0	3
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	1	0	0	0	1
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	5	0	0	0	5
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	2	0	0	0	2
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	7	0	0	0	7
4:15 AM	0	0	3	0	0	0	3
4:30 AM	0	0	3	0	1	0	4
4:45 AM	0	0	4	0	1	0	5
5:00 AM	0	0	11	0	0	0	11
5:15 AM	0	0	12	0	0	0	12
5:30 AM	0	0	13	0	1	0	14
5:45 AM	0	0	12	0	0	0	12
6:00 AM	0	0	18	0	0	0	18
6:15 AM	0	0	26	0	1	0	27
6:30 AM	0	0	34	2	0	0	36
6:45 AM	0	0	31	0	1	0	32
7:00 AM	0	0	32	1	7	0	40
7:15 AM	0	0	34	2	1	1	38
7:30 AM	0	0	42	0	1	0	43
7:45 AM	0	0	56	1	4	0	61
8:00 AM	0	0	40	1	0	1	42
8:15 AM	0	0	39	0	3	0	42
8:30 AM	0	0	39	0	1	1	41
8:45 AM	0	0	43	0	0	1	44
9:00 AM	0	0	46	0	0	1	47
9:15 AM	0	0	45	0	5	1	51
9:30 AM	2	0	41	0	3	0	46
9:45 AM	0	0	44	0	6	2	52
10:00 AM	0	1	48	0	5	2	56
10:15 AM	0	0	43	0	0	0	43
10:30 AM	0	0	55	0	6	0	61
10:45 AM	0	0	39	0	3	0	42
11:00 AM	0	0	54	0	0	1	55
11:15 AM	0	0	55	0	4	1	60
11:30 AM	0	1	59	0	2	1	63
11:45 AM	0	0	45	0	2	1	48

AM Total	2	2	1100	7	59	14	1184
Percentage	0.17%	0.17%	92.91%	0.59%	4.98%	1.18%	

AM Peak	8:45 AM	9:15 AM	11:00 AM	6:30 AM	9:15 AM	9:15 AM	11:00 AM
Volume	2	1	213	5	19	5	226

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	2	53	0	2	0	57
12:15 PM	1	1	46	0	1	1	50
12:30 PM	0	0	53	0	1	0	54
12:45 PM	0	2	55	0	1	3	61
1:00 PM	0	1	61	0	2	0	64
1:15 PM	0	0	70	1	3	1	75
1:30 PM	0	2	65	0	2	0	69
1:45 PM	0	0	75	0	1	2	78
2:00 PM	0	0	65	0	1	2	68
2:15 PM	0	0	81	1	4	0	86
2:30 PM	1	2	101	4	2	0	110
2:45 PM	0	1	91	1	3	1	97
3:00 PM	0	0	100	1	0	1	102
3:15 PM	0	2	137	0	3	0	142
3:30 PM	0	1	123	0	1	0	125
3:45 PM	0	0	138	0	0	0	138
4:00 PM	1	1	131	0	3	1	137
4:15 PM	1	2	180	2	2	1	188
4:30 PM	0	0	165	0	5	0	170
4:45 PM	1	3	154	0	0	0	158
5:00 PM	0	0	150	0	0	1	151
5:15 PM	0	2	151	0	0	0	153
5:30 PM	0	1	141	0	1	0	143
5:45 PM	0	2	122	1	1	1	127
6:00 PM	0	0	93	0	0	1	94
6:15 PM	0	0	78	0	0	0	78
6:30 PM	0	1	54	0	0	0	55
6:45 PM	0	0	74	0	0	0	74
7:00 PM	0	0	45	0	0	0	45
7:15 PM	0	0	51	0	1	0	52
7:30 PM	0	0	66	0	0	0	66
7:45 PM	0	0	53	0	1	0	54
8:00 PM	0	0	48	0	0	0	48
8:15 PM	0	0	33	0	0	0	33
8:30 PM	0	0	49	0	0	0	49
8:45 PM	0	0	39	0	0	0	39
9:00 PM	0	0	31	0	0	0	31
9:15 PM	0	0	23	0	0	0	23
9:30 PM	0	0	33	0	0	0	33
9:45 PM	0	0	25	0	0	0	25
10:00 PM	0	0	17	0	0	0	17
10:15 PM	0	0	17	0	1	0	18
10:30 PM	0	0	17	0	0	0	17
10:45 PM	0	0	12	0	0	0	12
11:00 PM	0	0	13	0	0	0	13
11:15 PM	0	0	9	0	0	0	9
11:30 PM	0	0	11	0	0	0	11
11:45 PM	0	0	11	0	0	0	11

PM Total	5	26	3410	11	42	16	3510
Percentage	0.14%	0.74%	97.15%	0.31%	1.20%	0.46%	

PM Peak	4:00 PM	4:00 PM	4:15 PM	2:15 PM	2:00 PM	1:15 PM	4:15 PM
Volume	3	6	649	7	10	5	667

Day Total	7	28	4510	18	101	30	4694
Percentage	0.15%	0.60%	96.08%	0.38%	2.15%	0.64%	

Redemption Rock Trail (Route 140)  
south of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-B

Count Date: Tuesday, September 20, 2022  
Direction: SB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	4	0	0	0	4
12:30 AM	0	0	3	0	0	0	3
12:45 AM	0	0	2	0	0	0	2
1:00 AM	0	0	2	0	0	0	2
1:15 AM	0	0	2	0	0	0	2
1:30 AM	0	0	1	0	0	0	1
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	3	0	0	0	3
2:15 AM	0	0	2	0	0	0	2
2:30 AM	0	0	2	0	0	0	2
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	5	0	0	0	5
3:15 AM	0	0	3	0	0	0	3
3:30 AM	0	0	6	0	0	0	6
3:45 AM	0	0	8	0	0	0	8
4:00 AM	0	0	10	0	0	1	11
4:15 AM	0	0	11	0	0	0	11
4:30 AM	0	0	20	0	0	0	20
4:45 AM	0	0	13	0	1	1	15
5:00 AM	0	0	30	0	0	0	30
5:15 AM	0	0	53	0	1	0	54
5:30 AM	0	0	59	0	2	0	61
5:45 AM	0	0	90	0	0	1	91
6:00 AM	0	0	83	1	0	0	84
6:15 AM	0	0	135	0	1	1	137
6:30 AM	0	0	157	3	2	0	162
6:45 AM	0	0	139	0	2	2	143
7:00 AM	0	0	160	0	0	0	160
7:15 AM	0	0	169	0	2	1	172
7:30 AM	0	0	196	1	2	0	199
7:45 AM	0	0	161	0	2	0	163
8:00 AM	0	0	134	2	3	0	139
8:15 AM	0	0	154	0	3	1	158
8:30 AM	0	0	108	1	0	0	109
8:45 AM	0	0	87	1	4	1	93
9:00 AM	0	0	69	0	1	1	71
9:15 AM	0	0	67	1	5	0	73
9:30 AM	0	0	57	0	0	0	57
9:45 AM	0	0	55	0	1	0	56
10:00 AM	0	0	53	0	2	1	56
10:15 AM	0	0	71	1	4	0	76
10:30 AM	0	0	63	0	3	0	66
10:45 AM	0	0	62	0	1	0	63
11:00 AM	0	1	56	0	0	0	57
11:15 AM	0	0	54	0	1	4	59
11:30 AM	1	0	56	0	0	3	60
11:45 AM	0	0	51	0	0	3	54

AM Total 1 1 2727 11 43 21 2804  
Percentage 0.04% 0.04% 97.25% 0.39% 1.53% 0.75%

AM Peak 10:45 AM 10:15 AM 7:00 AM 5:45 AM 7:30 AM 11:00 AM 7:00 AM  
Volume 1 1 686 4 10 10 694

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	52	0	0	1	53
12:15 PM	0	0	35	0	0	0	35
12:30 PM	0	0	45	0	0	0	45
12:45 PM	0	1	55	0	2	2	60
1:00 PM	0	0	39	0	4	2	45
1:15 PM	0	0	52	0	5	0	57
1:30 PM	0	0	58	0	3	2	63
1:45 PM	0	0	57	0	0	0	57
2:00 PM	0	1	63	0	5	0	69
2:15 PM	0	0	54	0	3	1	58
2:30 PM	0	0	62	0	1	1	64
2:45 PM	0	0	60	1	5	0	66
3:00 PM	0	0	72	2	1	1	76
3:15 PM	0	0	72	0	3	1	76
3:30 PM	0	0	90	2	0	0	92
3:45 PM	0	0	49	0	2	0	51
4:00 PM	0	0	60	0	0	2	62
4:15 PM	0	0	61	0	4	0	65
4:30 PM	1	0	67	0	4	0	72
4:45 PM	0	0	58	0	2	0	60
5:00 PM	0	0	53	0	1	0	54
5:15 PM	0	0	79	0	1	0	80
5:30 PM	0	0	62	2	0	0	64
5:45 PM	0	0	46	0	1	1	48
6:00 PM	0	0	40	0	0	1	41
6:15 PM	0	0	50	0	0	0	50
6:30 PM	0	0	37	0	2	0	39
6:45 PM	0	0	31	0	2	0	33
7:00 PM	0	1	32	0	0	0	33
7:15 PM	0	0	39	0	0	1	40
7:30 PM	0	0	23	0	0	0	23
7:45 PM	0	0	11	0	0	0	11
8:00 PM	0	0	13	0	0	0	13
8:15 PM	0	0	23	0	0	0	23
8:30 PM	0	0	18	0	1	0	19
8:45 PM	0	0	23	0	0	0	23
9:00 PM	0	0	10	0	0	0	10
9:15 PM	0	0	13	0	0	0	13
9:30 PM	0	0	11	0	0	0	11
9:45 PM	0	0	5	0	0	0	5
10:00 PM	0	0	12	0	0	0	12
10:15 PM	0	0	15	0	0	0	15
10:30 PM	0	0	9	0	0	0	9
10:45 PM	0	0	3	0	0	0	3
11:00 PM	0	0	6	0	0	0	6
11:15 PM	0	0	4	0	0	0	4
11:30 PM	0	0	8	0	0	0	8
11:45 PM	0	0	4	0	0	0	4

PM Total 1 3 1841 7 52 16 1920  
Percentage 0.05% 0.16% 95.89% 0.36% 2.71% 0.83%

PM Peak 3:45 PM 12:00 PM 2:45 PM 2:45 PM 12:45 PM 12:45 PM 2:45 PM  
Volume 1 1 294 5 14 6 310

Day Total 2 4 4568 18 95 37 4724  
Percentage 0.04% 0.08% 96.70% 0.38% 2.01% 0.78%

Redemption Rock Trail (Route 140)  
south of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-B

Count Date: Wednesday, September 21, 2022  
Direction: SB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	3	0	0	0	3
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	4	0	0	0	4
12:45 AM	0	0	1	0	0	0	1
1:00 AM	0	0	2	0	0	0	2
1:15 AM	0	0	2	0	0	0	2
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	2	0	0	0	2
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	3	0	0	0	3
3:00 AM	0	0	8	0	0	0	8
3:15 AM	0	0	2	0	0	0	2
3:30 AM	0	0	4	0	0	0	4
3:45 AM	0	0	6	0	0	0	6
4:00 AM	0	0	10	0	0	0	10
4:15 AM	0	0	17	0	0	0	17
4:30 AM	0	0	14	0	0	0	14
4:45 AM	0	0	21	0	0	0	21
5:00 AM	0	0	23	0	0	0	23
5:15 AM	0	0	64	0	0	1	65
5:30 AM	0	1	61	0	0	0	62
5:45 AM	0	0	87	0	2	0	89
6:00 AM	0	0	85	1	1	0	87
6:15 AM	0	0	132	0	2	0	134
6:30 AM	0	2	150	3	1	1	157
6:45 AM	0	0	146	0	1	1	148
7:00 AM	0	1	153	0	3	1	158
7:15 AM	0	0	172	0	1	1	174
7:30 AM	0	4	187	0	3	1	195
7:45 AM	0	0	145	1	2	0	148
8:00 AM	0	1	129	0	0	0	130
8:15 AM	0	0	130	0	2	0	132
8:30 AM	0	0	125	0	0	1	126
8:45 AM	0	0	80	1	2	0	83
9:00 AM	0	0	77	0	4	1	82
9:15 AM	0	1	77	0	0	0	78
9:30 AM	0	0	58	0	1	0	59
9:45 AM	0	2	55	0	1	0	58
10:00 AM	0	0	60	0	4	2	66
10:15 AM	0	0	63	0	3	0	66
10:30 AM	0	0	55	0	2	0	57
10:45 AM	2	0	60	0	2	0	64
11:00 AM	0	1	52	0	2	0	55
11:15 AM	0	0	65	0	0	1	66
11:30 AM	0	0	53	0	2	2	57
11:45 AM	0	0	69	0	4	0	73

AM Total 2 13 2713 6 45 13 2792  
Percentage 0.07% 0.47% 97.17% 0.21% 1.61% 0.47%

AM Peak 10:00 AM 6:45 AM 6:45 AM 5:45 AM 10:00 AM 6:30 AM 6:45 AM  
Volume 2 5 658 4 11 4 675

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	1	45	0	4	0	50
12:15 PM	0	0	50	0	1	0	51
12:30 PM	0	2	67	0	4	1	74
12:45 PM	0	1	56	0	3	2	62
1:00 PM	0	0	62	0	5	0	67
1:15 PM	0	0	52	0	0	1	53
1:30 PM	0	2	60	0	0	0	62
1:45 PM	0	3	55	0	1	1	60
2:00 PM	0	2	80	0	2	1	85
2:15 PM	0	0	55	0	5	0	60
2:30 PM	0	1	76	0	6	0	83
2:45 PM	0	1	61	0	2	1	65
3:00 PM	0	0	93	1	1	0	95
3:15 PM	0	1	85	0	0	1	87
3:30 PM	0	0	71	0	2	0	73
3:45 PM	0	2	63	1	3	0	69
4:00 PM	2	0	70	0	2	0	74
4:15 PM	0	0	87	1	2	0	90
4:30 PM	0	1	81	0	0	1	83
4:45 PM	0	0	65	0	2	1	68
5:00 PM	0	0	51	0	6	0	57
5:15 PM	0	1	82	2	0	0	85
5:30 PM	0	1	50	0	2	1	54
5:45 PM	0	0	58	0	1	0	59
6:00 PM	0	1	61	0	1	0	63
6:15 PM	1	1	53	0	1	0	56
6:30 PM	0	0	37	0	2	0	39
6:45 PM	0	0	23	0	1	0	24
7:00 PM	0	1	38	0	0	0	39
7:15 PM	0	0	35	0	0	1	36
7:30 PM	0	0	19	0	0	0	19
7:45 PM	0	0	19	0	0	0	19
8:00 PM	0	0	21	0	0	0	21
8:15 PM	0	0	26	0	0	0	26
8:30 PM	0	1	23	0	0	0	24
8:45 PM	0	0	13	0	0	0	13
9:00 PM	0	0	15	0	0	0	15
9:15 PM	0	0	7	0	0	0	7
9:30 PM	0	0	15	0	0	0	15
9:45 PM	0	0	9	0	0	0	9
10:00 PM	0	0	13	0	0	0	13
10:15 PM	0	0	12	0	0	0	12
10:30 PM	0	0	12	0	0	0	12
10:45 PM	0	0	3	0	0	0	3
11:00 PM	0	0	6	0	0	0	6
11:15 PM	0	0	6	0	0	0	6
11:30 PM	0	0	5	0	0	0	5
11:45 PM	0	0	1	0	0	0	1

PM Total 3 23 2047 5 59 12 2149  
Percentage 0.14% 1.07% 95.25% 0.23% 2.75% 0.56%

PM Peak 3:15 PM 1:15 PM 2:30 PM 3:00 PM 2:00 PM 12:30 PM 2:30 PM  
Volume 2 7 315 2 15 4 330

Day Total 5 36 4760 11 104 25 4941  
Percentage 0.10% 0.73% 96.34% 0.22% 2.10% 0.51%

**Redemption Rock Trail (Route 140)  
south of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32**



**PDI File #            228829 ATR-B**

**Direction:** NB

## Weekly Report

Day	Tuesday		Wednesday												Week	
Date	09/20/22		09/21/22												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	3	48	4	57	0	0	0	0	0	0	0	0	0	0	4	53
12:15	5	56	4	50	0	0	0	0	0	0	0	0	0	0	5	53
12:30	4	40	4	54	0	0	0	0	0	0	0	0	0	0	4	47
12:45	3	33	3	61	0	0	0	0	0	0	0	0	0	0	3	47
1:00	3	65	0	64	0	0	0	0	0	0	0	0	0	0	2	65
1:15	4	59	3	75	0	0	0	0	0	0	0	0	0	0	4	67
1:30	3	63	0	69	0	0	0	0	0	0	0	0	0	0	2	66
1:45	3	79	0	78	0	0	0	0	0	0	0	0	0	0	2	79
2:00	2	77	0	68	0	0	0	0	0	0	0	0	0	0	1	73
2:15	0	88	0	86	0	0	0	0	0	0	0	0	0	0	0	87
2:30	2	98	1	110	0	0	0	0	0	0	0	0	0	0	2	104
2:45	1	123	0	97	0	0	0	0	0	0	0	0	0	0	1	110
3:00	0	111	5	102	0	0	0	0	0	0	0	0	0	0	3	107
3:15	0	120	1	142	0	0	0	0	0	0	0	0	0	0	1	131
3:30	3	126	2	125	0	0	0	0	0	0	0	0	0	0	3	126
3:45	1	135	1	138	0	0	0	0	0	0	0	0	0	0	1	137
4:00	6	145	7	137	0	0	0	0	0	0	0	0	0	0	7	141
4:15	5	164	3	188	0	0	0	0	0	0	0	0	0	0	4	176
4:30	5	155	4	170	0	0	0	0	0	0	0	0	0	0	5	163
4:45	5	155	5	158	0	0	0	0	0	0	0	0	0	0	5	157
5:00	4	155	11	151	0	0	0	0	0	0	0	0	0	0	8	153
5:15	12	143	12	153	0	0	0	0	0	0	0	0	0	0	12	148
5:30	10	119	14	143	0	0	0	0	0	0	0	0	0	0	12	131
5:45	15	118	12	127	0	0	0	0	0	0	0	0	0	0	14	123
6:00	21	105	18	94	0	0	0	0	0	0	0	0	0	0	20	100
6:15	31	78	27	78	0	0	0	0	0	0	0	0	0	0	29	78
6:30	37	72	36	55	0	0	0	0	0	0	0	0	0	0	37	64
6:45	40	60	32	74	0	0	0	0	0	0	0	0	0	0	36	67
7:00	22	41	40	45	0	0	0	0	0	0	0	0	0	0	31	43
7:15	49	46	38	52	0	0	0	0	0	0	0	0	0	0	44	49
7:30	37	65	43	66	0	0	0	0	0	0	0	0	0	0	40	66
7:45	58	56	61	54	0	0	0	0	0	0	0	0	0	0	60	55
8:00	48	38	42	48	0	0	0	0	0	0	0	0	0	0	45	43
8:15	52	42	42	33	0	0	0	0	0	0	0	0	0	0	47	38
8:30	52	40	41	49	0	0	0	0	0	0	0	0	0	0	47	45
8:45	38	30	44	39	0	0	0	0	0	0	0	0	0	0	41	35
9:00	52	41	47	31	0	0	0	0	0	0	0	0	0	0	50	36
9:15	52	25	51	23	0	0	0	0	0	0	0	0	0	0	52	24
9:30	47	20	46	33	0	0	0	0	0	0	0	0	0	0	47	27
9:45	44	16	52	25	0	0	0	0	0	0	0	0	0	0	48	21
10:00	56	16	56	17	0	0	0	0	0	0	0	0	0	0	56	17
10:15	44	14	43	18	0	0	0	0	0	0	0	0	0	0	44	16
10:30	44	11	61	17	0	0	0	0	0	0	0	0	0	0	53	14
10:45	46	20	42	12	0	0	0	0	0	0	0	0	0	0	44	16
11:00	34	11	55	13	0	0	0	0	0	0	0	0	0	0	45	12
11:15	43	3	60	9	0	0	0	0	0	0	0	0	0	0	52	6
11:30	34	10	63	11	0	0	0	0	0	0	0	0	0	0	49	11
11:45	56	14	48	11	0	0	0	0	0	0	0	0	0	0	52	13
Total	1136	3349	1184	3510	0	0	0	0	0	0	0	0	0	0	1160	3430
Day Total	4485		4694		0		0		0		0		0		4590	
Peak HR	7:45 AM	4:15 PM	11:00 AM	4:15 PM												
Volume	210	629	226	667												



**Redemption Rock Trail (Route 140)  
south of Princeton Road (Route 62)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32**



**PDI File #            228829 ATR-B**

**Direction:** SB

## Weekly Report

Day	Tuesday		Wednesday												Week	
Date	09/20/22		09/21/22												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	53	3	50	0	0	0	0	0	0	0	0	0	0	2	52
12:15	4	35	0	51	0	0	0	0	0	0	0	0	0	0	2	43
12:30	3	45	4	74	0	0	0	0	0	0	0	0	0	0	4	60
12:45	2	60	1	62	0	0	0	0	0	0	0	0	0	0	2	61
1:00	2	45	2	67	0	0	0	0	0	0	0	0	0	0	2	56
1:15	2	57	2	53	0	0	0	0	0	0	0	0	0	0	2	55
1:30	1	63	0	62	0	0	0	0	0	0	0	0	0	0	1	63
1:45	0	57	2	60	0	0	0	0	0	0	0	0	0	0	1	59
2:00	3	69	0	85	0	0	0	0	0	0	0	0	0	0	2	77
2:15	2	58	1	60	0	0	0	0	0	0	0	0	0	0	2	59
2:30	2	64	0	83	0	0	0	0	0	0	0	0	0	0	1	74
2:45	1	66	3	65	0	0	0	0	0	0	0	0	0	0	2	66
3:00	5	76	8	95	0	0	0	0	0	0	0	0	0	0	7	86
3:15	3	76	2	87	0	0	0	0	0	0	0	0	0	0	3	82
3:30	6	92	4	73	0	0	0	0	0	0	0	0	0	0	5	83
3:45	8	51	6	69	0	0	0	0	0	0	0	0	0	0	7	60
4:00	11	62	10	74	0	0	0	0	0	0	0	0	0	0	11	68
4:15	11	65	17	90	0	0	0	0	0	0	0	0	0	0	14	78
4:30	20	72	14	83	0	0	0	0	0	0	0	0	0	0	17	78
4:45	15	60	21	68	0	0	0	0	0	0	0	0	0	0	18	64
5:00	30	54	23	57	0	0	0	0	0	0	0	0	0	0	27	56
5:15	54	80	65	85	0	0	0	0	0	0	0	0	0	0	60	83
5:30	61	64	62	54	0	0	0	0	0	0	0	0	0	0	62	59
5:45	91	48	89	59	0	0	0	0	0	0	0	0	0	0	90	54
6:00	84	41	87	63	0	0	0	0	0	0	0	0	0	0	86	52
6:15	137	50	134	56	0	0	0	0	0	0	0	0	0	0	136	53
6:30	162	39	157	39	0	0	0	0	0	0	0	0	0	0	160	39
6:45	143	33	148	24	0	0	0	0	0	0	0	0	0	0	146	29
7:00	160	33	158	39	0	0	0	0	0	0	0	0	0	0	159	36
7:15	172	40	174	36	0	0	0	0	0	0	0	0	0	0	173	38
7:30	199	23	195	19	0	0	0	0	0	0	0	0	0	0	197	21
7:45	163	11	148	19	0	0	0	0	0	0	0	0	0	0	156	15
8:00	139	13	130	21	0	0	0	0	0	0	0	0	0	0	135	17
8:15	158	23	132	26	0	0	0	0	0	0	0	0	0	0	145	25
8:30	109	19	126	24	0	0	0	0	0	0	0	0	0	0	118	22
8:45	93	23	83	13	0	0	0	0	0	0	0	0	0	0	88	18
9:00	71	10	82	15	0	0	0	0	0	0	0	0	0	0	77	13
9:15	73	13	78	7	0	0	0	0	0	0	0	0	0	0	76	10
9:30	57	11	59	15	0	0	0	0	0	0	0	0	0	0	58	13
9:45	56	5	58	9	0	0	0	0	0	0	0	0	0	0	57	7
10:00	56	12	66	13	0	0	0	0	0	0	0	0	0	0	61	13
10:15	76	15	66	12	0	0	0	0	0	0	0	0	0	0	71	14
10:30	66	9	57	12	0	0	0	0	0	0	0	0	0	0	62	11
10:45	63	3	64	3	0	0	0	0	0	0	0	0	0	0	64	3
11:00	57	6	55	6	0	0	0	0	0	0	0	0	0	0	56	6
11:15	59	4	66	6	0	0	0	0	0	0	0	0	0	0	63	5
11:30	60	8	57	5	0	0	0	0	0	0	0	0	0	0	59	7
11:45	54	4	73	1	0	0	0	0	0	0	0	0	0	0	64	3
Total	2804	1920	2792	2149	0	0	0	0	0	0	0	0	0	0	2798	2035
Day Total	4724		4941		0		0		0		0		0		4833	
Peak HR	7:00 AM	2:45 PM	6:45 AM	2:30 PM											7:00 AM	2:45 PM
Volume	694	310	675	330											685	315

Princeton Road (Route 62)  
east of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-C

Count Date: Tuesday, September 20, 2022  
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	2	0	0	0	2
12:30 AM	0	0	2	0	0	0	2
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	1	0	0	0	1
1:15 AM	0	0	1	0	0	0	1
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	1	0	0	0	1
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	1	0	0	0	1
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	3	0	1	0	4
4:15 AM	0	0	1	0	0	0	1
4:30 AM	0	0	2	0	0	0	2
4:45 AM	0	0	9	0	0	0	9
5:00 AM	0	0	10	0	0	0	10
5:15 AM	0	0	11	0	0	0	11
5:30 AM	0	0	18	0	0	0	18
5:45 AM	0	0	20	0	0	0	20
6:00 AM	0	0	18	0	0	0	18
6:15 AM	0	0	25	1	0	1	27
6:30 AM	0	0	26	0	2	1	29
6:45 AM	0	0	50	0	0	0	50
7:00 AM	0	0	28	1	1	0	30
7:15 AM	0	0	36	0	2	0	38
7:30 AM	0	0	45	1	0	0	46
7:45 AM	0	0	49	1	1	0	51
8:00 AM	0	0	42	0	1	0	43
8:15 AM	0	0	36	1	0	0	37
8:30 AM	0	0	27	0	2	0	29
8:45 AM	0	0	31	0	1	1	33
9:00 AM	0	0	24	1	2	1	28
9:15 AM	0	0	25	0	0	1	26
9:30 AM	0	0	27	0	0	0	27
9:45 AM	0	0	21	0	2	0	23
10:00 AM	0	0	27	0	2	0	29
10:15 AM	0	0	15	0	2	0	17
10:30 AM	0	0	18	0	0	0	18
10:45 AM	0	0	17	0	1	1	19
11:00 AM	0	0	12	0	2	0	14
11:15 AM	0	0	21	0	1	2	24
11:30 AM	0	0	14	0	1	0	15
11:45 AM	0	0	21	0	3	0	24

AM Total	0	0	738	6	27	8	779
Percentage	0.00%	0.00%	94.74%	0.77%	3.47%	1.03%	

AM Peak	12:00 AM	12:00 AM	7:15 AM	7:00 AM	11:00 AM	8:30 AM	7:15 AM
Volume	0	0	172	3	7	3	178

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	1	0	19	0	2	0	22
12:15 PM	0	0	21	0	3	0	24
12:30 PM	0	0	17	0	0	0	17
12:45 PM	0	0	20	1	0	0	21
1:00 PM	0	0	19	0	4	0	23
1:15 PM	0	0	20	0	5	1	26
1:30 PM	0	0	16	0	0	0	16
1:45 PM	0	1	21	0	2	1	25
2:00 PM	0	0	21	0	2	0	23
2:15 PM	0	0	23	0	1	1	25
2:30 PM	0	0	19	4	3	1	27
2:45 PM	0	0	23	0	1	0	24
3:00 PM	0	0	29	1	1	0	31
3:15 PM	0	0	29	0	4	0	33
3:30 PM	0	0	30	2	0	0	32
3:45 PM	0	0	27	0	0	0	27
4:00 PM	0	0	13	0	0	0	13
4:15 PM	0	0	25	1	1	1	28
4:30 PM	0	0	37	2	0	0	39
4:45 PM	1	0	27	0	0	0	28
5:00 PM	0	0	21	1	1	0	23
5:15 PM	0	1	27	0	1	0	29
5:30 PM	0	0	17	0	0	1	18
5:45 PM	0	0	25	0	0	0	25
6:00 PM	0	0	16	0	0	0	16
6:15 PM	0	0	20	0	0	0	20
6:30 PM	0	0	18	0	0	0	18
6:45 PM	0	0	18	0	1	0	19
7:00 PM	0	0	10	0	0	0	10
7:15 PM	0	0	11	0	0	0	11
7:30 PM	0	0	9	0	0	0	9
7:45 PM	0	0	9	0	0	0	9
8:00 PM	0	0	9	0	0	0	9
8:15 PM	0	0	10	0	0	0	10
8:30 PM	0	0	8	0	0	0	8
8:45 PM	0	0	7	0	0	0	7
9:00 PM	0	0	8	0	0	0	8
9:15 PM	0	0	1	0	0	0	1
9:30 PM	0	0	5	0	0	0	5
9:45 PM	0	0	3	0	0	0	3
10:00 PM	0	0	4	0	0	0	4
10:15 PM	0	0	3	0	0	0	3
10:30 PM	0	0	1	0	0	0	1
10:45 PM	0	0	4	0	0	0	4
11:00 PM	0	0	2	0	0	0	2
11:15 PM	0	0	2	0	0	0	2
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	4	0	0	0	4

PM Total	2	2	728	12	32	6	782
Percentage	0.26%	0.26%	93.09%	1.53%	4.09%	0.77%	

PM Peak	12:00 PM	1:00 PM	3:00 PM	2:15 PM	1:00 PM	1:45 PM	3:00 PM
Volume	1	1	115	5	11	3	123

Day Total	2	2	1466	18	59	14	1561
Percentage	0.13%	0.13%	93.91%	1.15%	3.78%	0.90%	

Princeton Road (Route 62)  
east of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-C

Count Date: Wednesday, September 21, 2022  
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	1	0	0	0	1
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	1	0	0	0	1
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	2	0	0	0	2
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	1	0	1	0	2
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	1	0	0	0	1
4:15 AM	0	0	4	0	0	0	4
4:30 AM	0	0	3	0	0	0	3
4:45 AM	0	0	5	0	0	0	5
5:00 AM	0	0	10	0	0	0	10
5:15 AM	0	0	13	0	0	0	13
5:30 AM	1	0	23	0	0	0	24
5:45 AM	0	0	17	0	0	0	17
6:00 AM	0	0	19	0	0	0	19
6:15 AM	0	0	23	1	0	2	26
6:30 AM	0	0	25	0	1	1	27
6:45 AM	0	0	32	0	1	0	33
7:00 AM	0	1	33	0	3	0	37
7:15 AM	0	2	38	1	2	0	43
7:30 AM	0	0	35	2	1	0	38
7:45 AM	0	0	34	1	2	0	37
8:00 AM	0	0	35	0	0	0	35
8:15 AM	0	0	46	1	2	0	49
8:30 AM	0	0	28	0	1	0	29
8:45 AM	0	1	27	1	3	2	34
9:00 AM	0	0	26	0	1	0	27
9:15 AM	0	0	29	0	1	0	30
9:30 AM	2	0	27	0	2	0	31
9:45 AM	1	1	15	0	1	1	19
10:00 AM	0	0	12	0	3	0	15
10:15 AM	0	0	30	0	1	0	31
10:30 AM	0	0	17	0	4	0	21
10:45 AM	0	0	10	0	0	1	11
11:00 AM	0	1	24	0	0	0	25
11:15 AM	0	0	28	0	2	2	32
11:30 AM	0	0	15	0	1	0	16
11:45 AM	0	0	24	0	0	0	24

AM Total	4	6	716	7	33	9	775
Percentage	0.52%	0.77%	92.39%	0.90%	4.26%	1.16%	
AM Peak	9:00 AM	6:30 AM	7:30 AM	7:00 AM	9:45 AM	5:45 AM	7:30 AM
Volume	3	3	150	4	9	3	159

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	15	0	1	0	16
12:15 PM	0	0	20	0	1	0	21
12:30 PM	0	0	19	0	1	0	20
12:45 PM	0	1	22	0	2	0	25
1:00 PM	0	0	24	0	3	0	27
1:15 PM	0	0	22	0	1	0	23
1:30 PM	1	0	22	0	0	1	24
1:45 PM	0	5	25	0	0	0	30
2:00 PM	0	1	21	0	2	0	24
2:15 PM	0	0	20	0	0	0	20
2:30 PM	0	2	24	4	2	0	32
2:45 PM	0	2	17	0	1	0	20
3:00 PM	0	1	34	1	1	0	37
3:15 PM	0	1	32	1	0	0	34
3:30 PM	0	0	24	0	2	0	26
3:45 PM	0	2	29	0	0	0	31
4:00 PM	0	0	30	2	0	1	33
4:15 PM	1	3	29	2	1	0	36
4:30 PM	0	0	37	0	1	0	38
4:45 PM	0	2	33	0	1	0	36
5:00 PM	0	0	33	0	1	0	34
5:15 PM	0	0	30	0	1	0	31
5:30 PM	0	0	29	0	0	0	29
5:45 PM	0	1	28	0	1	1	31
6:00 PM	0	0	27	0	0	0	27
6:15 PM	0	1	18	0	0	0	19
6:30 PM	0	0	18	0	0	0	18
6:45 PM	0	0	27	0	0	0	27
7:00 PM	0	0	12	0	0	0	12
7:15 PM	0	1	13	0	0	0	14
7:30 PM	0	0	15	0	0	0	15
7:45 PM	0	0	15	0	0	0	15
8:00 PM	0	0	13	0	0	0	13
8:15 PM	0	0	7	0	0	0	7
8:30 PM	0	0	12	0	0	0	12
8:45 PM	0	0	5	0	0	0	5
9:00 PM	0	0	7	0	0	0	7
9:15 PM	0	0	7	0	0	0	7
9:30 PM	0	0	6	0	0	0	6
9:45 PM	0	0	4	0	0	0	4
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	4	0	0	0	4
10:30 PM	0	0	3	0	0	0	3
10:45 PM	0	0	1	0	0	0	1
11:00 PM	0	0	5	0	0	0	5
11:15 PM	0	0	3	0	0	0	3
11:30 PM	0	0	3	0	0	0	3
11:45 PM	0	0	1	0	0	0	1

PM Total	2	23	845	10	23	3	906
Percentage	0.22%	2.54%	93.27%	1.10%	2.54%	0.33%	
PM Peak	12:45 PM	1:45 PM	4:30 PM	2:30 PM	12:15 PM	12:45 PM	4:15 PM
Volume	1	8	133	6	7	1	144
Day Total	6	29	1561	17	56	12	1681
Percentage	0.36%	1.73%	92.86%	1.01%	3.33%	0.71%	

Princeton Road (Route 62)  
east of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-C

Count Date: Tuesday, September 20, 2022  
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	1	1	0	0	0	2
12:30 AM	0	0	1	0	0	0	1
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	1	0	0	0	1
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	2	0	0	0	2
1:45 AM	0	0	3	0	0	0	3
2:00 AM	0	0	1	0	0	0	1
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	1	0	0	0	1
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	1	0	0	0	1
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	1	0	0	0	1
4:30 AM	0	0	2	0	0	0	2
4:45 AM	0	0	1	0	0	0	1
5:00 AM	0	0	1	0	0	0	1
5:15 AM	0	0	1	0	0	0	1
5:30 AM	0	0	11	0	0	0	11
5:45 AM	0	0	7	1	0	0	8
6:00 AM	0	0	10	0	0	0	10
6:15 AM	0	0	12	0	0	0	12
6:30 AM	0	0	15	3	4	0	22
6:45 AM	0	0	16	0	3	1	20
7:00 AM	0	0	13	0	0	1	14
7:15 AM	0	0	13	0	2	0	15
7:30 AM	0	0	19	1	0	0	20
7:45 AM	0	0	25	1	1	0	27
8:00 AM	0	0	32	0	4	0	36
8:15 AM	0	0	27	1	0	0	28
8:30 AM	0	0	20	0	0	0	20
8:45 AM	0	0	19	2	0	0	21
9:00 AM	0	0	21	0	3	2	26
9:15 AM	0	0	26	0	0	1	27
9:30 AM	0	0	14	1	0	0	15
9:45 AM	0	0	16	0	0	0	16
10:00 AM	0	0	14	0	0	1	15
10:15 AM	0	0	21	0	2	0	23
10:30 AM	0	0	19	0	1	0	20
10:45 AM	0	0	20	0	0	0	20
11:00 AM	0	0	15	0	0	2	17
11:15 AM	0	0	18	0	1	1	20
11:30 AM	0	0	13	0	2	1	16
11:45 AM	0	0	19	0	2	1	22

AM Total	0	1	473	10	25	11	520
Percentage	0.00%	0.19%	90.96%	1.92%	4.81%	2.12%	

AM Peak	12:00 AM	12:00 AM	7:45 AM	5:45 AM	6:30 AM	11:00 AM	7:30 AM
Volume	0	1	104	4	9	5	111

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	14	0	1	0	15
12:15 PM	0	0	15	0	0	0	15
12:30 PM	0	1	21	1	1	0	24
12:45 PM	0	0	14	0	4	0	18
1:00 PM	0	0	16	0	1	0	17
1:15 PM	0	0	11	0	0	0	11
1:30 PM	0	0	17	0	1	0	18
1:45 PM	0	0	23	0	1	0	24
2:00 PM	0	0	18	0	1	0	19
2:15 PM	1	0	24	0	1	0	26
2:30 PM	0	0	34	0	2	0	36
2:45 PM	0	0	29	0	0	0	29
3:00 PM	0	0	40	1	2	0	43
3:15 PM	0	0	34	0	1	0	35
3:30 PM	0	0	45	0	0	0	45
3:45 PM	1	0	29	1	1	0	32
4:00 PM	0	0	40	0	1	0	41
4:15 PM	0	0	39	0	0	0	39
4:30 PM	0	0	44	0	0	0	44
4:45 PM	0	0	48	1	1	0	50
5:00 PM	0	0	48	0	0	0	48
5:15 PM	0	0	36	0	0	0	36
5:30 PM	0	0	36	0	1	0	37
5:45 PM	0	0	32	0	0	0	32
6:00 PM	0	0	29	0	0	0	29
6:15 PM	1	0	19	0	0	0	20
6:30 PM	0	0	17	0	0	0	17
6:45 PM	0	0	13	0	0	1	14
7:00 PM	0	0	23	0	0	0	23
7:15 PM	0	0	11	0	0	0	11
7:30 PM	0	0	16	0	0	0	16
7:45 PM	0	0	10	0	0	0	10
8:00 PM	0	0	15	0	0	0	15
8:15 PM	0	0	7	0	0	0	7
8:30 PM	0	0	4	0	1	0	5
8:45 PM	0	0	4	0	0	0	4
9:00 PM	0	0	7	0	0	0	7
9:15 PM	0	0	6	0	0	0	6
9:30 PM	0	0	7	0	0	0	7
9:45 PM	0	0	4	0	0	0	4
10:00 PM	0	0	7	0	0	0	7
10:15 PM	0	0	2	0	0	0	2
10:30 PM	0	0	5	0	0	0	5
10:45 PM	0	0	2	0	0	0	2
11:00 PM	0	0	1	0	0	0	1
11:15 PM	0	0	2	0	0	0	2
11:30 PM	0	0	1	0	0	0	1
11:45 PM	0	0	2	0	0	0	2

PM Total	3	1	921	4	21	1	951
Percentage	0.32%	0.11%	96.85%	0.42%	2.21%	0.11%	

PM Peak	1:30 PM	12:00 PM	4:15 PM	3:00 PM	12:00 PM	6:00 PM	4:15 PM
Volume	1	1	179	2	6	1	181

Day Total	3	2	1394	14	46	12	1471
Percentage	0.20%	0.14%	94.77%	0.95%	3.13%	0.82%	

Princeton Road (Route 62)  
east of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-C

Count Date: Wednesday, September 21, 2022  
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	2	0	0	0	2
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	2	0	0	0	2
12:45 AM	0	0	1	0	0	0	1
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	1	0	0	0	1
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	1	0	0	0	1
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	1	0	0	0	1
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	2	0	0	0	2
4:45 AM	0	0	0	0	1	0	1
5:00 AM	0	0	1	0	0	0	1
5:15 AM	0	0	1	0	0	0	1
5:30 AM	0	0	10	0	0	0	10
5:45 AM	0	0	7	1	0	0	8
6:00 AM	0	1	10	0	0	0	11
6:15 AM	0	0	15	0	1	0	16
6:30 AM	0	0	16	3	1	2	22
6:45 AM	0	0	14	0	1	1	16
7:00 AM	0	0	17	0	0	1	18
7:15 AM	0	0	16	1	0	0	17
7:30 AM	0	0	12	1	1	0	14
7:45 AM	0	0	26	1	3	0	30
8:00 AM	0	0	23	0	3	1	27
8:15 AM	0	0	22	1	0	0	23
8:30 AM	0	0	28	1	1	0	30
8:45 AM	0	0	16	1	2	0	19
9:00 AM	0	0	25	0	3	1	29
9:15 AM	0	0	20	1	1	0	22
9:30 AM	0	0	20	0	1	0	21
9:45 AM	0	5	21	0	2	0	28
10:00 AM	0	0	10	0	3	0	13
10:15 AM	0	0	21	0	2	0	23
10:30 AM	0	7	10	0	1	0	18
10:45 AM	0	2	16	0	2	0	20
11:00 AM	0	0	16	0	2	1	19
11:15 AM	0	0	16	0	2	0	18
11:30 AM	0	1	13	0	2	1	17
11:45 AM	0	6	17	1	1	0	25

AM Total	0	22	452	12	36	8	530
Percentage	0.00%	4.15%	85.28%	2.26%	6.79%	1.51%	

AM Peak	12:00 AM	9:45 AM	7:45 AM	5:45 AM	9:30 AM	6:15 AM	7:45 AM
Volume	0	12	99	4	8	4	110

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	16	0	2	0	18
12:15 PM	0	0	16	0	1	0	17
12:30 PM	0	0	24	0	2	1	27
12:45 PM	0	0	21	0	2	0	23
1:00 PM	0	0	18	0	1	0	19
1:15 PM	0	0	26	0	1	0	27
1:30 PM	0	2	25	0	2	0	29
1:45 PM	0	2	24	0	0	0	26
2:00 PM	1	1	26	1	1	0	30
2:15 PM	0	0	15	0	0	0	15
2:30 PM	0	1	28	0	1	0	30
2:45 PM	0	0	26	0	3	0	29
3:00 PM	0	1	28	1	2	0	32
3:15 PM	0	2	33	0	1	0	36
3:30 PM	0	0	42	0	0	0	42
3:45 PM	0	0	44	1	1	0	46
4:00 PM	1	0	44	0	0	0	45
4:15 PM	0	2	48	0	3	0	53
4:30 PM	0	1	44	0	0	0	45
4:45 PM	0	5	46	0	0	0	51
5:00 PM	0	0	53	0	1	0	54
5:15 PM	0	0	53	0	0	1	54
5:30 PM	0	1	41	0	1	0	43
5:45 PM	0	1	36	0	0	0	37
6:00 PM	0	0	21	0	1	0	22
6:15 PM	0	0	21	0	1	0	22
6:30 PM	0	0	22	0	0	0	22
6:45 PM	0	0	26	0	0	0	26
7:00 PM	0	1	25	0	0	0	26
7:15 PM	0	0	23	0	2	0	25
7:30 PM	0	0	15	0	0	0	15
7:45 PM	0	0	17	0	1	0	18
8:00 PM	0	0	17	0	0	0	17
8:15 PM	0	0	14	0	0	0	14
8:30 PM	0	0	18	0	0	0	18
8:45 PM	0	0	14	0	0	0	14
9:00 PM	0	0	7	0	0	0	7
9:15 PM	0	0	6	0	0	0	6
9:30 PM	0	0	5	0	0	0	5
9:45 PM	0	0	5	0	0	0	5
10:00 PM	0	0	4	0	0	0	4
10:15 PM	0	0	5	0	0	0	5
10:30 PM	0	0	4	0	0	0	4
10:45 PM	0	0	1	0	0	0	1
11:00 PM	0	0	2	0	0	0	2
11:15 PM	0	0	3	0	0	0	3
11:30 PM	0	0	2	0	0	0	2
11:45 PM	0	0	0	0	0	0	0

PM Total	2	20	1054	3	30	2	1111
Percentage	0.18%	1.80%	94.87%	0.27%	2.70%	0.18%	

PM Peak	1:15 PM	4:00 PM	4:30 PM	3:00 PM	12:00 PM	12:00 PM	4:30 PM
Volume	1	8	196	2	7	1	204

Day Total	2	42	1506	15	66	10	1641
Percentage	0.12%	2.56%	91.77%	0.91%	4.02%	0.61%	

**Princeton Road (Route 62)**  
**east of Redemption Rock Trail (Route 140)**  
**City, State: Sterling, MA**  
**Client: Green International/ D. Perloff**  
**Site Code: Task Order 32**



PDI File # 228829 ATR-C

**Direction:** EB

## Weekly Report

Day	Tuesday		Wednesday												Week	
Date	09/20/22		09/21/22												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	22	1	16	0	0	0	0	0	0	0	0	0	0	1	19
12:15	2	24	0	21	0	0	0	0	0	0	0	0	0	0	1	23
12:30	2	17	0	20	0	0	0	0	0	0	0	0	0	0	1	19
12:45	0	21	0	25	0	0	0	0	0	0	0	0	0	0	0	23
1:00	1	23	1	27	0	0	0	0	0	0	0	0	0	0	1	25
1:15	1	26	0	23	0	0	0	0	0	0	0	0	0	0	1	25
1:30	0	16	0	24	0	0	0	0	0	0	0	0	0	0	0	20
1:45	0	25	0	30	0	0	0	0	0	0	0	0	0	0	0	28
2:00	1	23	0	24	0	0	0	0	0	0	0	0	0	0	1	24
2:15	0	25	1	20	0	0	0	0	0	0	0	0	0	0	1	23
2:30	0	27	0	32	0	0	0	0	0	0	0	0	0	0	0	30
2:45	0	24	2	20	0	0	0	0	0	0	0	0	0	0	1	22
3:00	0	31	0	37	0	0	0	0	0	0	0	0	0	0	0	34
3:15	0	33	1	34	0	0	0	0	0	0	0	0	0	0	1	34
3:30	1	32	2	26	0	0	0	0	0	0	0	0	0	0	2	29
3:45	1	27	1	31	0	0	0	0	0	0	0	0	0	0	1	29
4:00	4	13	1	33	0	0	0	0	0	0	0	0	0	0	3	23
4:15	1	28	4	36	0	0	0	0	0	0	0	0	0	0	3	32
4:30	2	39	3	38	0	0	0	0	0	0	0	0	0	0	3	39
4:45	9	28	5	36	0	0	0	0	0	0	0	0	0	0	7	32
5:00	10	23	10	34	0	0	0	0	0	0	0	0	0	0	10	29
5:15	11	29	13	31	0	0	0	0	0	0	0	0	0	0	12	30
5:30	18	18	24	29	0	0	0	0	0	0	0	0	0	0	21	24
5:45	20	25	17	31	0	0	0	0	0	0	0	0	0	0	19	28
6:00	18	16	19	27	0	0	0	0	0	0	0	0	0	0	19	22
6:15	27	20	26	19	0	0	0	0	0	0	0	0	0	0	27	20
6:30	29	18	27	18	0	0	0	0	0	0	0	0	0	0	28	18
6:45	50	19	33	27	0	0	0	0	0	0	0	0	0	0	42	23
7:00	30	10	37	12	0	0	0	0	0	0	0	0	0	0	34	11
7:15	38	11	43	14	0	0	0	0	0	0	0	0	0	0	41	13
7:30	46	9	38	15	0	0	0	0	0	0	0	0	0	0	42	12
7:45	51	9	37	15	0	0	0	0	0	0	0	0	0	0	44	12
8:00	43	9	35	13	0	0	0	0	0	0	0	0	0	0	39	11
8:15	37	10	49	7	0	0	0	0	0	0	0	0	0	0	43	9
8:30	29	8	29	12	0	0	0	0	0	0	0	0	0	0	29	10
8:45	33	7	34	5	0	0	0	0	0	0	0	0	0	0	34	6
9:00	28	8	27	7	0	0	0	0	0	0	0	0	0	0	28	8
9:15	26	1	30	7	0	0	0	0	0	0	0	0	0	0	28	4
9:30	27	5	31	6	0	0	0	0	0	0	0	0	0	0	29	6
9:45	23	3	19	4	0	0	0	0	0	0	0	0	0	0	21	4
10:00	29	4	15	0	0	0	0	0	0	0	0	0	0	0	22	2
10:15	17	3	31	4	0	0	0	0	0	0	0	0	0	0	24	4
10:30	18	1	21	3	0	0	0	0	0	0	0	0	0	0	20	2
10:45	19	4	11	1	0	0	0	0	0	0	0	0	0	0	15	3
11:00	14	2	25	5	0	0	0	0	0	0	0	0	0	0	20	4
11:15	24	2	32	3	0	0	0	0	0	0	0	0	0	0	28	3
11:30	15	0	16	3	0	0	0	0	0	0	0	0	0	0	16	2
11:45	24	4	24	1	0	0	0	0	0	0	0	0	0	0	24	3
Total	779	782	775	906	0	0	0	0	0	0	0	0	0	0	777	844
Day Total	1561		1681		0		0		0		0		0		1621	
Peak HR	7:15 AM	3:00 PM	7:30 AM	4:15 PM											7:30 AM	4:15 PM
Volume	178	123	159	144											168	131

**Princeton Road (Route 62)**  
**east of Redemption Rock Trail (Route 140)**  
**City, State: Sterling, MA**  
**Client: Green International/ D. Perloff**  
**Site Code: Task Order 32**



PDI File # 228829 ATR-C

**Direction:** WB

## Weekly Report

Day Date	Tuesday 09/20/22		Wednesday 09/21/22												Week Ave			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
12:00	0	15	2	18	0	0	0	0	0	0	0	0	0	0	1	17		
12:15	2	15	0	17	0	0	0	0	0	0	0	0	0	0	1	16		
12:30	1	24	2	27	0	0	0	0	0	0	0	0	0	0	2	26		
12:45	0	18	1	23	0	0	0	0	0	0	0	0	0	0	1	21		
1:00	1	17	0	19	0	0	0	0	0	0	0	0	0	0	1	18		
1:15	0	11	0	27	0	0	0	0	0	0	0	0	0	0	0	19		
1:30	2	18	0	29	0	0	0	0	0	0	0	0	0	0	1	24		
1:45	3	24	0	26	0	0	0	0	0	0	0	0	0	0	2	25		
2:00	1	19	1	30	0	0	0	0	0	0	0	0	0	0	1	25		
2:15	0	26	1	15	0	0	0	0	0	0	0	0	0	0	1	21		
2:30	1	36	0	30	0	0	0	0	0	0	0	0	0	0	1	33		
2:45	0	29	1	29	0	0	0	0	0	0	0	0	0	0	1	29		
3:00	0	43	0	32	0	0	0	0	0	0	0	0	0	0	0	38		
3:15	1	35	1	36	0	0	0	0	0	0	0	0	0	0	1	36		
3:30	1	45	1	42	0	0	0	0	0	0	0	0	0	0	1	44		
3:45	0	32	0	46	0	0	0	0	0	0	0	0	0	0	0	39		
4:00	0	41	1	45	0	0	0	0	0	0	0	0	0	0	1	43		
4:15	1	39	0	53	0	0	0	0	0	0	0	0	0	0	1	46		
4:30	2	44	2	45	0	0	0	0	0	0	0	0	0	0	2	45		
4:45	1	50	1	51	0	0	0	0	0	0	0	0	0	0	1	51		
5:00	1	48	1	54	0	0	0	0	0	0	0	0	0	0	1	51		
5:15	1	36	1	54	0	0	0	0	0	0	0	0	0	0	1	45		
5:30	11	37	10	43	0	0	0	0	0	0	0	0	0	0	11	40		
5:45	8	32	8	37	0	0	0	0	0	0	0	0	0	0	8	35		
6:00	10	29	11	22	0	0	0	0	0	0	0	0	0	0	11	26		
6:15	12	20	16	22	0	0	0	0	0	0	0	0	0	0	14	21		
6:30	22	17	22	22	0	0	0	0	0	0	0	0	0	0	22	20		
6:45	20	14	16	26	0	0	0	0	0	0	0	0	0	0	18	20		
7:00	14	23	18	26	0	0	0	0	0	0	0	0	0	0	16	25		
7:15	15	11	17	25	0	0	0	0	0	0	0	0	0	0	16	18		
7:30	20	16	14	15	0	0	0	0	0	0	0	0	0	0	17	16		
7:45	27	10	30	18	0	0	0	0	0	0	0	0	0	0	29	14		
8:00	36	15	27	17	0	0	0	0	0	0	0	0	0	0	32	16		
8:15	28	7	23	14	0	0	0	0	0	0	0	0	0	0	26	11		
8:30	20	5	30	18	0	0	0	0	0	0	0	0	0	0	25	12		
8:45	21	4	19	14	0	0	0	0	0	0	0	0	0	0	20	9		
9:00	26	7	29	7	0	0	0	0	0	0	0	0	0	0	28	7		
9:15	27	6	22	6	0	0	0	0	0	0	0	0	0	0	25	6		
9:30	15	7	21	5	0	0	0	0	0	0	0	0	0	0	18	6		
9:45	16	4	28	5	0	0	0	0	0	0	0	0	0	0	22	5		
10:00	15	7	13	4	0	0	0	0	0	0	0	0	0	0	14	6		
10:15	23	2	23	5	0	0	0	0	0	0	0	0	0	0	23	4		
10:30	20	5	18	4	0	0	0	0	0	0	0	0	0	0	19	5		
10:45	20	2	20	1	0	0	0	0	0	0	0	0	0	0	20	2		
11:00	17	1	19	2	0	0	0	0	0	0	0	0	0	0	18	2		
11:15	20	2	18	3	0	0	0	0	0	0	0	0	0	0	19	3		
11:30	16	1	17	2	0	0	0	0	0	0	0	0	0	0	17	2		
11:45	22	2	25	0	0	0	0	0	0	0	0	0	0	0	24	1		
Total	520	951	530	1111	0	0	0	0	0	0	0	0	0	0	525	1031		
Day Total	1471		1641		0		0		0		0		0		1556			
Peak HR	7:30 AM	4:15 PM	7:45 AM	4:30 PM													7:45 AM	4:15 PM
Volume	111	181	110	204													111	192

Princeton Road (Route 62)  
west of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-D

Count Date: Tuesday, September 20, 2022  
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	1	0	0	0	1
12:30 AM	0	0	2	0	0	0	2
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	1	0	0	0	1
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	1	0	0	0	1
3:30 AM	0	0	2	0	0	0	2
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	6	0	1	0	7
4:15 AM	0	0	2	0	0	0	2
4:30 AM	0	0	6	0	0	0	6
4:45 AM	0	0	10	0	0	0	10
5:00 AM	0	0	16	0	0	0	16
5:15 AM	0	0	20	0	0	0	20
5:30 AM	0	0	19	0	1	0	20
5:45 AM	0	0	33	0	0	1	34
6:00 AM	0	0	34	2	0	0	36
6:15 AM	0	0	50	0	0	0	50
6:30 AM	0	0	59	0	3	0	62
6:45 AM	0	0	76	0	0	0	76
7:00 AM	0	0	58	0	1	0	59
7:15 AM	0	0	71	0	3	0	74
7:30 AM	0	0	72	1	1	0	74
7:45 AM	0	0	71	1	1	0	73
8:00 AM	0	0	70	1	1	0	72
8:15 AM	0	0	67	0	1	0	68
8:30 AM	0	0	38	1	2	0	41
8:45 AM	0	0	39	1	0	0	40
9:00 AM	0	0	37	0	1	0	38
9:15 AM	0	0	37	1	2	1	41
9:30 AM	0	0	36	0	0	0	36
9:45 AM	0	0	36	0	3	0	39
10:00 AM	0	0	30	0	2	0	32
10:15 AM	0	0	36	0	3	1	40
10:30 AM	0	0	31	0	1	0	32
10:45 AM	0	1	27	0	0	0	28
11:00 AM	0	0	29	0	2	0	31
11:15 AM	0	0	20	0	0	0	20
11:30 AM	1	0	20	0	1	1	23
11:45 AM	0	0	22	0	0	1	23

AM Total	1	1	1186	8	30	5	1231
Percentage	0.08%	0.08%	96.34%	0.65%	2.44%	0.41%	

AM Peak	10:45 AM	10:00 AM	7:15 AM	7:15 AM	9:45 AM	11:00 AM	7:15 AM
Volume	1	1	284	3	9	2	293

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	25	0	0	0	25
12:15 PM	0	0	26	0	2	0	28
12:30 PM	0	0	20	0	0	0	20
12:45 PM	0	1	29	1	1	1	33
1:00 PM	0	0	17	0	4	0	21
1:15 PM	0	0	33	0	4	0	37
1:30 PM	0	0	29	0	0	0	29
1:45 PM	0	1	23	0	1	0	25
2:00 PM	0	0	21	0	2	0	23
2:15 PM	0	0	25	0	2	1	28
2:30 PM	0	0	18	1	2	0	21
2:45 PM	0	0	30	0	3	1	34
3:00 PM	0	0	45	1	1	0	47
3:15 PM	0	1	31	0	4	0	36
3:30 PM	0	0	42	0	1	0	43
3:45 PM	0	0	33	0	0	0	33
4:00 PM	0	0	22	0	1	0	23
4:15 PM	0	0	26	0	1	1	28
4:30 PM	1	0	27	1	0	0	29
4:45 PM	1	0	25	0	0	0	26
5:00 PM	0	0	18	1	0	0	19
5:15 PM	0	0	26	0	1	0	27
5:30 PM	0	0	27	0	0	0	27
5:45 PM	0	0	22	0	0	0	22
6:00 PM	0	0	26	0	0	0	26
6:15 PM	0	0	27	0	0	0	27
6:30 PM	0	0	17	0	0	0	17
6:45 PM	0	0	15	0	0	0	15
7:00 PM	0	1	16	0	0	0	17
7:15 PM	0	0	14	0	1	0	15
7:30 PM	0	0	4	0	0	0	4
7:45 PM	0	0	6	0	0	0	6
8:00 PM	0	0	2	0	0	0	2
8:15 PM	0	0	10	0	0	0	10
8:30 PM	0	0	4	0	0	0	4
8:45 PM	0	0	7	0	0	0	7
9:00 PM	0	0	5	0	0	0	5
9:15 PM	0	0	2	0	0	0	2
9:30 PM	0	0	2	0	0	0	2
9:45 PM	0	0	1	0	0	0	1
10:00 PM	0	0	4	0	0	0	4
10:15 PM	0	0	4	0	0	0	4
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	3	0	0	0	3
11:00 PM	0	0	1	0	0	0	1
11:15 PM	0	0	2	0	0	0	2
11:30 PM	0	0	1	0	0	0	1
11:45 PM	0	0	0	0	0	0	0

PM Total	2	4	813	5	31	4	859
Percentage	0.23%	0.47%	94.64%	0.58%	3.61%	0.47%	

PM Peak	4:00 PM	12:00 PM	3:00 PM	2:15 PM	2:30 PM	2:00 PM	2:45 PM
Volume	2	1	151	2	10	2	160

Day Total	3	5	1999	13	61	9	2090
Percentage	0.14%	0.24%	95.65%	0.62%	2.92%	0.43%	



Princeton Road (Route 62)  
west of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-D

Count Date: Wednesday, September 21, 2022  
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	2	0	0	0	2
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	1	0	0	0	1
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	1	0	0	0	1
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	1	0	0	0	1
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	2	0	0	0	2
3:15 AM	0	0	2	0	0	0	2
3:30 AM	0	0	1	0	1	0	2
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	6	0	0	0	6
4:15 AM	0	0	5	0	0	0	5
4:30 AM	0	0	3	0	0	0	3
4:45 AM	0	0	10	0	0	0	10
5:00 AM	0	0	12	0	0	0	12
5:15 AM	0	0	28	0	0	0	28
5:30 AM	1	0	30	0	0	0	31
5:45 AM	0	0	29	0	1	0	30
6:00 AM	0	0	31	0	0	1	32
6:15 AM	0	0	46	1	1	0	48
6:30 AM	0	1	63	0	1	0	65
6:45 AM	0	1	59	0	2	0	62
7:00 AM	0	1	70	0	2	0	73
7:15 AM	0	1	72	0	2	0	75
7:30 AM	0	0	67	0	2	2	71
7:45 AM	0	0	51	0	3	0	54
8:00 AM	0	0	62	1	0	0	63
8:15 AM	0	0	73	0	0	0	73
8:30 AM	0	0	43	0	1	0	44
8:45 AM	0	1	41	1	2	0	45
9:00 AM	0	0	38	0	2	0	40
9:15 AM	0	0	39	0	0	0	39
9:30 AM	0	0	31	0	2	0	33
9:45 AM	1	1	18	0	1	1	22
10:00 AM	0	0	29	0	6	0	35
10:15 AM	0	0	42	0	2	0	44
10:30 AM	0	0	26	0	5	0	31
10:45 AM	2	1	22	0	1	0	26
11:00 AM	0	1	32	0	1	0	34
11:15 AM	1	0	32	0	2	0	35
11:30 AM	0	0	29	0	1	0	30
11:45 AM	0	0	31	0	0	0	31

AM Total	5	8	1182	3	41	4	1243
Percentage	0.40%	0.64%	95.09%	0.24%	3.30%	0.32%	

AM Peak	10:30 AM	6:30 AM	6:45 AM	8:00 AM	9:45 AM	6:45 AM	6:45 AM
Volume	3	4	268	2	14	2	281

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	16	0	1	0	17
12:15 PM	0	0	26	0	2	0	28
12:30 PM	0	0	29	0	1	0	30
12:45 PM	0	1	25	0	3	0	29
1:00 PM	0	0	39	0	3	0	42
1:15 PM	0	0	22	0	0	0	22
1:30 PM	1	2	32	0	0	0	35
1:45 PM	0	6	24	0	0	0	30
2:00 PM	0	2	25	0	4	1	32
2:15 PM	0	0	25	0	2	0	27
2:30 PM	0	1	34	1	3	0	39
2:45 PM	0	2	22	0	1	0	25
3:00 PM	0	1	55	2	1	0	59
3:15 PM	0	0	44	0	1	0	45
3:30 PM	0	0	27	0	1	0	28
3:45 PM	0	1	26	0	1	0	28
4:00 PM	0	0	35	2	1	0	38
4:15 PM	0	1	30	1	2	0	34
4:30 PM	0	1	36	0	0	0	37
4:45 PM	0	1	34	0	1	0	36
5:00 PM	0	0	30	0	0	0	30
5:15 PM	0	1	28	0	1	0	30
5:30 PM	0	0	30	0	0	0	30
5:45 PM	0	1	27	0	1	0	29
6:00 PM	0	0	31	0	1	0	32
6:15 PM	0	1	23	0	0	0	24
6:30 PM	0	0	25	0	2	0	27
6:45 PM	0	0	31	0	0	0	31
7:00 PM	0	1	14	0	0	0	15
7:15 PM	0	1	19	0	0	0	20
7:30 PM	0	0	10	0	0	0	10
7:45 PM	0	0	10	0	0	0	10
8:00 PM	0	0	9	0	0	0	9
8:15 PM	0	0	10	0	0	0	10
8:30 PM	0	0	12	0	0	0	12
8:45 PM	0	0	4	0	0	0	4
9:00 PM	0	0	4	0	0	0	4
9:15 PM	0	0	5	0	0	0	5
9:30 PM	0	0	6	0	0	0	6
9:45 PM	0	0	1	0	0	0	1
10:00 PM	0	0	3	0	0	0	3
10:15 PM	0	0	3	0	0	0	3
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	1	0	0	0	1
11:00 PM	0	0	5	0	0	0	5
11:15 PM	0	0	3	0	0	0	3
11:30 PM	0	0	2	0	0	0	2
11:45 PM	0	0	2	0	0	0	2

PM Total	1	24	954	6	33	1	1019
Percentage	0.10%	2.36%	93.62%	0.59%	3.24%	0.10%	

PM Peak	12:45 PM	1:15 PM	2:30 PM	2:15 PM	2:00 PM	1:15 PM	2:30 PM
Volume	1	10	155	3	10	1	168

Day Total	6	32	2136	9	74	5	2262
Percentage	0.27%	1.41%	94.43%	0.40%	3.27%	0.22%	

Princeton Road (Route 62)  
west of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-D

Count Date: Tuesday, September 20, 2022  
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	2	0	0	0	2
12:15 AM	0	1	3	0	0	0	4
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	3	0	0	0	3
1:15 AM	0	0	1	0	0	0	1
1:30 AM	0	0	2	0	0	0	2
1:45 AM	0	0	1	0	0	0	1
2:00 AM	0	0	1	0	0	0	1
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	1	0	1	0	2
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	1	0	0	0	1
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	1	0	0	0	1
5:45 AM	0	0	3	1	0	0	4
6:00 AM	0	0	7	0	0	0	7
6:15 AM	0	0	6	1	1	0	8
6:30 AM	0	0	7	1	5	0	13
6:45 AM	0	0	10	0	3	0	13
7:00 AM	0	0	5	0	0	0	5
7:15 AM	0	0	14	0	1	0	15
7:30 AM	0	0	19	1	1	0	21
7:45 AM	0	0	24	0	1	0	25
8:00 AM	0	0	31	1	3	0	35
8:15 AM	0	0	22	0	1	0	23
8:30 AM	0	0	23	0	1	0	24
8:45 AM	1	0	18	2	1	0	22
9:00 AM	0	0	22	0	4	2	28
9:15 AM	0	0	25	0	0	0	25
9:30 AM	0	0	21	1	0	0	22
9:45 AM	0	0	18	0	1	0	19
10:00 AM	0	0	22	0	0	1	23
10:15 AM	0	0	19	0	4	0	23
10:30 AM	0	0	27	0	1	0	28
10:45 AM	0	0	29	0	0	0	29
11:00 AM	0	1	21	0	1	1	24
11:15 AM	0	0	21	0	0	0	21
11:30 AM	0	0	15	0	2	0	17
11:45 AM	0	0	19	0	1	1	21

AM Total	1	2	465	8	33	5	514
Percentage	0.19%	0.39%	90.47%	1.56%	6.42%	0.97%	

AM Peak	8:00 AM	12:00 AM	7:45 AM	5:45 AM	6:00 AM	8:15 AM	7:45 AM
Volume	1	1	100	3	9	2	107

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	25	0	1	0	26
12:15 PM	0	0	23	0	1	0	24
12:30 PM	0	0	28	1	1	0	30
12:45 PM	0	0	19	0	3	0	22
1:00 PM	0	0	27	0	0	0	27
1:15 PM	0	0	25	0	1	0	26
1:30 PM	0	0	32	1	0	0	33
1:45 PM	0	1	36	0	2	0	39
2:00 PM	0	1	22	0	2	0	25
2:15 PM	0	0	45	0	1	0	46
2:30 PM	0	0	48	0	4	0	52
2:45 PM	0	0	52	0	0	0	52
3:00 PM	0	0	54	0	3	1	58
3:15 PM	0	0	59	1	0	0	60
3:30 PM	0	0	70	0	0	0	70
3:45 PM	1	0	54	1	2	0	58
4:00 PM	0	0	71	0	1	0	72
4:15 PM	0	0	64	1	0	0	65
4:30 PM	0	0	59	0	0	0	59
4:45 PM	0	0	63	1	1	0	65
5:00 PM	0	0	73	0	1	0	74
5:15 PM	0	0	60	0	0	0	60
5:30 PM	0	0	59	0	1	0	60
5:45 PM	0	0	44	0	0	0	44
6:00 PM	0	0	59	0	0	0	59
6:15 PM	1	0	31	0	0	0	32
6:30 PM	0	1	30	0	0	0	31
6:45 PM	0	0	30	0	1	0	31
7:00 PM	0	0	32	0	0	0	32
7:15 PM	0	0	24	0	0	0	24
7:30 PM	0	0	33	0	0	0	33
7:45 PM	0	0	27	0	0	0	27
8:00 PM	0	0	27	0	0	0	27
8:15 PM	0	0	11	0	0	0	11
8:30 PM	0	0	12	0	0	0	12
8:45 PM	0	0	13	0	0	0	13
9:00 PM	0	0	18	0	1	0	19
9:15 PM	0	0	11	0	0	0	11
9:30 PM	0	0	11	0	0	0	11
9:45 PM	0	0	8	0	0	0	8
10:00 PM	0	0	4	0	0	0	4
10:15 PM	0	0	6	0	0	0	6
10:30 PM	0	0	7	0	0	0	7
10:45 PM	0	0	6	0	0	0	6
11:00 PM	0	0	2	0	0	0	2
11:15 PM	0	0	4	0	0	0	4
11:30 PM	0	0	3	0	0	0	3
11:45 PM	0	0	3	0	0	0	3

PM Total	2	3	1524	6	27	1	1563
Percentage	0.13%	0.19%	97.50%	0.38%	1.73%	0.06%	

PM Peak	3:00 PM	1:15 PM	3:30 PM	3:00 PM	1:45 PM	2:15 PM	3:30 PM
Volume	1	2	259	2	9	1	265

Day Total	3	5	1989	14	60	6	2077
Percentage	0.14%	0.24%	95.76%	0.67%	2.89%	0.29%	

Princeton Road (Route 62)  
west of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32



PDI File #: 228829 ATR-D

Count Date: Wednesday, September 21, 2022  
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	2	0	0	0	2
12:15 AM	0	0	1	0	0	0	1
12:30 AM	0	0	2	0	0	0	2
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	1	0	0	0	1
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	1	0	0	0	1
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	2	0	0	0	2
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	1	0	0	0	1
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	2	0	0	0	2
5:30 AM	0	0	3	0	0	0	3
5:45 AM	0	0	4	1	0	0	5
6:00 AM	0	0	2	0	0	0	2
6:15 AM	0	0	8	0	1	0	9
6:30 AM	0	0	7	2	1	0	10
6:45 AM	0	0	4	0	0	0	4
7:00 AM	0	0	10	0	0	0	10
7:15 AM	0	0	15	1	1	0	17
7:30 AM	0	0	17	0	0	0	17
7:45 AM	0	0	27	0	3	0	30
8:00 AM	0	0	22	1	2	0	25
8:15 AM	0	0	29	0	0	0	29
8:30 AM	0	0	26	1	1	0	28
8:45 AM	0	0	18	0	2	0	20
9:00 AM	0	0	21	0	1	0	22
9:15 AM	0	0	17	1	2	0	20
9:30 AM	0	0	18	0	3	0	21
9:45 AM	0	4	33	0	2	0	39
10:00 AM	0	0	20	0	4	1	25
10:15 AM	0	0	20	0	2	0	22
10:30 AM	0	0	18	0	4	0	22
10:45 AM	0	2	24	0	2	0	28
11:00 AM	0	0	25	0	2	0	27
11:15 AM	0	0	28	0	2	1	31
11:30 AM	0	2	26	0	2	0	30
11:45 AM	0	6	18	0	1	1	26

AM Total	0	14	473	7	38	3	535
Percentage	0.00%	2.62%	88.41%	1.31%	7.10%	0.56%	

AM Peak	12:00 AM	11:00 AM	7:45 AM	5:45 AM	9:45 AM	11:00 AM	10:45 AM
Volume	0	8	104	3	12	2	116

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	24	0	2	0	26
12:15 PM	1	0	21	0	1	0	23
12:30 PM	0	0	26	0	3	1	30
12:45 PM	0	2	34	0	1	0	37
1:00 PM	0	0	28	0	2	0	30
1:15 PM	0	0	35	0	1	0	36
1:30 PM	0	1	31	0	3	0	35
1:45 PM	0	0	38	0	0	1	39
2:00 PM	2	1	32	0	0	0	35
2:15 PM	0	0	27	0	1	0	28
2:30 PM	1	2	44	0	2	0	49
2:45 PM	0	0	43	0	3	0	46
3:00 PM	0	1	49	1	1	0	52
3:15 PM	0	3	71	0	1	0	75
3:30 PM	0	1	75	0	0	0	76
3:45 PM	0	0	65	1	1	0	67
4:00 PM	0	0	67	0	0	0	67
4:15 PM	0	1	84	1	3	0	89
4:30 PM	0	0	72	0	0	0	72
4:45 PM	0	4	66	0	0	0	70
5:00 PM	0	0	80	0	2	0	82
5:15 PM	0	0	81	0	0	0	81
5:30 PM	0	0	62	0	2	0	64
5:45 PM	0	2	55	1	0	0	58
6:00 PM	0	1	47	0	1	0	49
6:15 PM	0	0	33	0	0	0	33
6:30 PM	0	0	32	0	0	0	32
6:45 PM	0	0	39	0	0	0	39
7:00 PM	0	1	24	0	0	0	25
7:15 PM	0	0	37	0	1	0	38
7:30 PM	0	0	26	0	0	0	26
7:45 PM	0	0	25	0	0	1	26
8:00 PM	0	0	32	0	0	0	32
8:15 PM	0	0	18	0	0	0	18
8:30 PM	0	0	22	0	0	0	22
8:45 PM	0	0	19	0	0	0	19
9:00 PM	0	0	15	0	0	0	15
9:15 PM	0	0	11	0	0	0	11
9:30 PM	0	0	17	0	0	0	17
9:45 PM	0	0	6	0	0	0	6
10:00 PM	0	0	6	0	0	0	6
10:15 PM	0	0	11	0	0	0	11
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	4	0	0	0	4
11:00 PM	0	0	4	0	0	0	4
11:15 PM	0	0	3	0	0	0	3
11:30 PM	0	0	3	0	0	0	3
11:45 PM	0	0	4	0	0	0	4

PM Total	4	20	1648	4	31	3	1710
Percentage	0.23%	1.17%	96.37%	0.23%	1.81%	0.18%	

PM Peak	1:45 PM	2:30 PM	4:15 PM	3:00 PM	12:00 PM	12:00 PM	4:15 PM
Volume	3	6	302	2	7	1	313

Day Total	4	34	2121	11	69	6	2245
Percentage	0.18%	1.51%	94.48%	0.49%	3.07%	0.27%	

**Princeton Road (Route 62)  
west of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32**



**PDI File #            228829 ATR-D**

**Direction:** EB

## Weekly Report

Day Date	Tuesday 09/20/22		Wednesday 09/21/22												Week Ave			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
12:00	0	25	2	17	0	0	0	0	0	0	0	0	0	0	1	21		
12:15	1	28	0	28	0	0	0	0	0	0	0	0	0	0	1	28		
12:30	2	20	0	30	0	0	0	0	0	0	0	0	0	0	1	25		
12:45	0	33	0	29	0	0	0	0	0	0	0	0	0	0	0	31		
1:00	1	21	1	42	0	0	0	0	0	0	0	0	0	0	1	32		
1:15	0	37	0	22	0	0	0	0	0	0	0	0	0	0	0	30		
1:30	0	29	0	35	0	0	0	0	0	0	0	0	0	0	0	32		
1:45	0	25	1	30	0	0	0	0	0	0	0	0	0	0	1	28		
2:00	0	23	0	32	0	0	0	0	0	0	0	0	0	0	0	28		
2:15	0	28	1	27	0	0	0	0	0	0	0	0	0	0	1	28		
2:30	0	21	0	39	0	0	0	0	0	0	0	0	0	0	0	30		
2:45	0	34	1	25	0	0	0	0	0	0	0	0	0	0	1	30		
3:00	0	47	2	59	0	0	0	0	0	0	0	0	0	0	1	53		
3:15	1	36	2	45	0	0	0	0	0	0	0	0	0	0	2	41		
3:30	2	43	2	28	0	0	0	0	0	0	0	0	0	0	2	36		
3:45	1	33	1	28	0	0	0	0	0	0	0	0	0	0	1	31		
4:00	7	23	6	38	0	0	0	0	0	0	0	0	0	0	7	31		
4:15	2	28	5	34	0	0	0	0	0	0	0	0	0	0	4	31		
4:30	6	29	3	37	0	0	0	0	0	0	0	0	0	0	5	33		
4:45	10	26	10	36	0	0	0	0	0	0	0	0	0	0	10	31		
5:00	16	19	12	30	0	0	0	0	0	0	0	0	0	0	14	25		
5:15	20	27	28	30	0	0	0	0	0	0	0	0	0	0	24	29		
5:30	20	27	31	30	0	0	0	0	0	0	0	0	0	0	26	29		
5:45	34	22	30	29	0	0	0	0	0	0	0	0	0	0	32	26		
6:00	36	26	32	32	0	0	0	0	0	0	0	0	0	0	34	29		
6:15	50	27	48	24	0	0	0	0	0	0	0	0	0	0	49	26		
6:30	62	17	65	27	0	0	0	0	0	0	0	0	0	0	64	22		
6:45	76	15	62	31	0	0	0	0	0	0	0	0	0	0	69	23		
7:00	59	17	73	15	0	0	0	0	0	0	0	0	0	0	66	16		
7:15	74	15	75	20	0	0	0	0	0	0	0	0	0	0	75	18		
7:30	74	4	71	10	0	0	0	0	0	0	0	0	0	0	73	7		
7:45	73	6	54	10	0	0	0	0	0	0	0	0	0	0	64	8		
8:00	72	2	63	9	0	0	0	0	0	0	0	0	0	0	68	6		
8:15	68	10	73	10	0	0	0	0	0	0	0	0	0	0	71	10		
8:30	41	4	44	12	0	0	0	0	0	0	0	0	0	0	43	8		
8:45	40	7	45	4	0	0	0	0	0	0	0	0	0	0	43	6		
9:00	38	5	40	4	0	0	0	0	0	0	0	0	0	0	39	5		
9:15	41	2	39	5	0	0	0	0	0	0	0	0	0	0	40	4		
9:30	36	2	33	6	0	0	0	0	0	0	0	0	0	0	35	4		
9:45	39	1	22	1	0	0	0	0	0	0	0	0	0	0	31	1		
10:00	32	4	35	3	0	0	0	0	0	0	0	0	0	0	34	4		
10:15	40	4	44	3	0	0	0	0	0	0	0	0	0	0	42	4		
10:30	32	0	31	0	0	0	0	0	0	0	0	0	0	0	32	0		
10:45	28	3	26	1	0	0	0	0	0	0	0	0	0	0	27	2		
11:00	31	1	34	5	0	0	0	0	0	0	0	0	0	0	33	3		
11:15	20	2	35	3	0	0	0	0	0	0	0	0	0	0	28	3		
11:30	23	1	30	2	0	0	0	0	0	0	0	0	0	0	27	2		
11:45	23	0	31	2	0	0	0	0	0	0	0	0	0	0	27	1		
Total	1231	859	1243	1019	0	0	0	0	0	0	0	0	0	0	1237	939		
Day Total	2090		2262		0		0		0		0		0		2176			
Peak HR	7:15 AM	2:45 PM	6:45 AM	2:30 PM													6:45 AM	3:00 PM
Volume	293	160	281	168													282	160

**Princeton Road (Route 62)  
west of Redemption Rock Trail (Route 140)  
City, State: Sterling, MA  
Client: Green International/ D. Perloff  
Site Code: Task Order 32**



**PDI File #            228829 ATR-D**

**Direction:** WB

## Weekly Report

Day Date	Tuesday 09/20/22		Wednesday 09/21/22												Week Ave			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
12:00	2	26	2	26	0	0	0	0	0	0	0	0	0	0	2	26		
12:15	4	24	1	23	0	0	0	0	0	0	0	0	0	0	3	24		
12:30	0	30	2	30	0	0	0	0	0	0	0	0	0	0	1	30		
12:45	0	22	0	37	0	0	0	0	0	0	0	0	0	0	0	30		
1:00	3	27	0	30	0	0	0	0	0	0	0	0	0	0	2	29		
1:15	1	26	0	36	0	0	0	0	0	0	0	0	0	0	1	31		
1:30	2	33	1	35	0	0	0	0	0	0	0	0	0	0	2	34		
1:45	1	39	0	39	0	0	0	0	0	0	0	0	0	0	1	39		
2:00	1	25	0	35	0	0	0	0	0	0	0	0	0	0	1	30		
2:15	0	46	0	28	0	0	0	0	0	0	0	0	0	0	0	37		
2:30	2	52	0	49	0	0	0	0	0	0	0	0	0	0	1	51		
2:45	0	52	1	46	0	0	0	0	0	0	0	0	0	0	1	49		
3:00	0	58	1	52	0	0	0	0	0	0	0	0	0	0	1	55		
3:15	0	60	0	75	0	0	0	0	0	0	0	0	0	0	0	68		
3:30	1	70	2	76	0	0	0	0	0	0	0	0	0	0	2	73		
3:45	1	58	0	67	0	0	0	0	0	0	0	0	0	0	1	63		
4:00	0	72	0	67	0	0	0	0	0	0	0	0	0	0	0	70		
4:15	0	65	0	89	0	0	0	0	0	0	0	0	0	0	0	77		
4:30	0	59	0	72	0	0	0	0	0	0	0	0	0	0	0	66		
4:45	0	65	1	70	0	0	0	0	0	0	0	0	0	0	1	68		
5:00	0	74	0	82	0	0	0	0	0	0	0	0	0	0	0	78		
5:15	0	60	2	81	0	0	0	0	0	0	0	0	0	0	1	71		
5:30	1	60	3	64	0	0	0	0	0	0	0	0	0	0	2	62		
5:45	4	44	5	58	0	0	0	0	0	0	0	0	0	0	5	51		
6:00	7	59	2	49	0	0	0	0	0	0	0	0	0	0	5	54		
6:15	8	32	9	33	0	0	0	0	0	0	0	0	0	0	9	33		
6:30	13	31	10	32	0	0	0	0	0	0	0	0	0	0	12	32		
6:45	13	31	4	39	0	0	0	0	0	0	0	0	0	0	9	35		
7:00	5	32	10	25	0	0	0	0	0	0	0	0	0	0	8	29		
7:15	15	24	17	38	0	0	0	0	0	0	0	0	0	0	16	31		
7:30	21	33	17	26	0	0	0	0	0	0	0	0	0	0	19	30		
7:45	25	27	30	26	0	0	0	0	0	0	0	0	0	0	28	27		
8:00	35	27	25	32	0	0	0	0	0	0	0	0	0	0	30	30		
8:15	23	11	29	18	0	0	0	0	0	0	0	0	0	0	26	15		
8:30	24	12	28	22	0	0	0	0	0	0	0	0	0	0	26	17		
8:45	22	13	20	19	0	0	0	0	0	0	0	0	0	0	21	16		
9:00	28	19	22	15	0	0	0	0	0	0	0	0	0	0	25	17		
9:15	25	11	20	11	0	0	0	0	0	0	0	0	0	0	23	11		
9:30	22	11	21	17	0	0	0	0	0	0	0	0	0	0	22	14		
9:45	19	8	39	6	0	0	0	0	0	0	0	0	0	0	29	7		
10:00	23	4	25	6	0	0	0	0	0	0	0	0	0	0	24	5		
10:15	23	6	22	11	0	0	0	0	0	0	0	0	0	0	23	9		
10:30	28	7	22	0	0	0	0	0	0	0	0	0	0	0	25	4		
10:45	29	6	28	4	0	0	0	0	0	0	0	0	0	0	29	5		
11:00	24	2	27	4	0	0	0	0	0	0	0	0	0	0	26	3		
11:15	21	4	31	3	0	0	0	0	0	0	0	0	0	0	26	4		
11:30	17	3	30	3	0	0	0	0	0	0	0	0	0	0	24	3		
11:45	21	3	26	4	0	0	0	0	0	0	0	0	0	0	24	4		
Total	514	1563	535	1710	0	0	0	0	0	0	0	0	0	0	525	1637		
Day Total	2077		2245		0		0		0		0		0		2161			
Peak HR	7:45 AM	3:30 PM	10:45 AM	4:15 PM													7:45 AM	4:15 PM
Volume	107	265	116	313													110	288

## Appendix E. Road Safety Audit References

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## Road Safety Audit References

*FHWA Office of Safety - Proven Safety Countermeasures*, U.S. Department of Transportation, Federal Highway Administration <https://safety.fhwa.dot.gov/provencountermeasures/>.

*Road Safety Audits, A Synthesis of Highway Practice*. NCHRP Synthesis 336. Transportation Research Board, National Cooperative Highway Research Program, 2004.

*Road Safety Audits*. U.S. Department of Transportation, Federal Highway Administration, <https://safety.fhwa.dot.gov/rsa/>

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*Road Safety Audits*. ITE Technical Council Committee 4S-7. Institute of Transportation Engineers, February 1995.