Westport Main to Train Study

Recommendations Report

August 27, 2019

prepared by
NV5 - Connecticut, LLC

WESTCOG


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1. Introduction

a. Background & Purpose

The Western Connecticut Council of Governments (WestCOG) received funding from the Federal Highway Administration and Connecticut Department of Transportation (CTDOT) to identify improvements to vehicular, bicycle, and pedestrian safety and circulation along Post Road (Route 1) and Riverside Avenue (Route 33). The purpose of the plan is to create better connections between the commercial center of town and the Saugatuck train station, and promote non-motorized transportation choices.

The study will cover approximately 2 miles of the Post Road and Riverside Avenue corridors. Specifically, the study area includes Post Road between Riverside Avenue and East Main Street (approx. ¾ miles), and Riverside Avenue between Post Road West and Treadwell Avenue (approx. 1¼ miles). The map below highlights the extents of the study area (see Figure 1 on page 6).

b. Objectives

The following are the objectives of this planning process:

- Identify goals and objectives that will guide the development and implementation of the plan.
- Engage the public and provide opportunities for meaningful involvement throughout the study.
- Inventory existing conditions to understand existing mobility conditions in the station area, including access to, operations of, the functionality of, and the corridors that connect Main Street to the Saugatuck Train Station.
- Recommend potential physical and operational improvements that address existing deficiencies and meet the projected demand from future growth, including from proposed developments.
- Develop strategies that lead to sustainable mobility and parking conditions.
- Produce a final implementation strategy to guide recommended improvements.

c. Project Partners

This study is being led by the Western CT Council of Governments (WestCOG). WestCOG has hired the firm NV5, based in Fairfield, CT, to undertake this study in cooperation with WestCOG and Town of Westport staff. A Study Technical Committee (STC) will be convened that includes CTDOT, WestCOG, and various Town staff and officials. The study process includes a series of working and review meetings with the Study Technical Committee (STC) and with the public.

d. This Report

This report presents the recommendations developed for traffic, bicycle and pedestrian facilities for this study including downtown Westport (Post Road/US Route 1) and the Riverside Avenue (State Route 33) corridor between Post Road West and Treadwell Avenue/Saugatuck Avenue in the Town of

Westport, CT. This report summarizes the process and development of the recommendations, description of recommendations at each intersection and their benefits, a timeline for implementation of the recommendations, the results of the traffic analysis incorporating the recommendations, and permits anticipated to implement the recommendations.

Figure 1: Aerial Photograph of the Study Area and Surroundings

2. Recommendations

Based on findings from the Existing Conditions Report and Traffic Analysis Report, discussions with the STC, and public input from a working session conducted on March 25, 2019, recommended improvements related to traffic, pedestrian, bicycle, and transit operations and infrastructure were identified.

The recommended improvements were presented at a public workshop on May 20, 2019. Utilizing input from that meeting along with follow up discussions with the STC, the recommended improvements were refined and, subsequently, a presentation summarizing the list of recommendations was created and delivered at a public meeting on June 24, 2019. Appendix A includes the Public Outreach Findings Report, which is the summary of public outreach strategies and feedback received throughout the duration of the study, including meeting minutes from the STC and public information meetings.

The recommended improvements are organized into three categories and coded as shown below:

- **Vehicular/Traffic (V)**
- **Pedestrian and Bicycle (PB)**
- **Transit (T)**

This report includes a written description of each type of recommendation and an implementation table that organizes the improvements by intersection and highlights preliminary steps, benefits, implementation partners, how the projects are linked, and estimated costs. Major improvements at the study area intersections are shown on Concept Plans 1A through 6 (see Appendix B).

Based on input from the STC, a timeline for implementation of the strategies is included in the following three stages:

- **Short-Term** (should be implemented within 3 years)
- **Mid-Term** (should be implemented within the next 3 to 5 years)

- **Long-Term** (should be considered/implemented after 5 or more years)

a. Traffic Signal Timing Adjustments (V2, V3, V4, V5, V7)

Benefits:

✓ Provide required pedestrian crossing time at crosswalks.

✓ Improve traffic flow.

✓ Reduce traffic and pedestrian delay.

Based on the future anticipated traffic volumes and patterns at the study area intersections, adjustments to the traffic signal timing are proposed. The majority of adjustments are minor shifts of green time from one

Figure 2: Post Road East Traffic Signal Coordination

phase to another, without eliminating or adding additional phases.

The most significant adjustment of signal timing would be at Post Road East (US 1) and Compo Road (SR 136), which is recommended to be changed from a 137-second cycle length actuated uncoordinated operation to a 90-second cycle length actuated coordinated operation that would be coordinated with the signalized intersections to the east and west on Post Road East, improving traffic flow through the Post Road East corridor (see Figure 2). Signal timing adjustments also include increasing the minimum green time for each approach to meet the minimum required crossing time for pedestrians.

For the intersections of Post Road East and Imperial Avenue/Myrtle Avenue and Post Road East (US 1) and Compo Road (SR 136), concurrent pedestrian phasing, allowing pedestrians to cross in the crosswalks parallel to traffic, is recommended to reduce delay for traffic and pedestrians caused by the existing all stop exclusive phase for pedestrians. Implementation of concurrent phasing would also include the elimination of right turns on red and installation of corresponding signs for driver awareness. In addition, signs to raise driver awareness to yield to pedestrians in the crosswalk is recommended on all legs of both intersections, as described in the section E later in the report. Signal timing adjustments recommended at each

intersection as well as minimum pedestrian crossing times are shown in tables included in Appendix C.

Locations where signal-timing adjustments are recommended:

a. Post Road West (US 1) and Riverside Avenue/Wilton Road (SR-33)
b. Post Road East (US 1) and Parker Harding Plaza/Jesup Road
c. Post Road East (US 1) and Imperial Avenue/Myrtle Avenue
d. Post Road East (US 1) and Playhouse Square Driveway
e. Post Road East (US 1) and Compo Road (SR 136)
f. Post Road East (US 1) and Compo Shopping Center/Acres Driveway

g. Riverside Avenue (SR 33) and Saugatuck Avenue/Treadwell Avenue

b. Curb Alignment Modifications (V6, V8, PB9, PB19)

Benefits:

- ✓ Reduce pedestrian crossing distances at intersections.
- ✓ Traffic calming; reduce speeds of right turning vehicles.
- ✓ Improve pedestrian safety by providing pedestrian refuges within a median.

Several intersections in the study area have wide curb geometries and curve radii, which creates longer crossing distances for pedestrians and requires them to travel from curb to curb farther than necessary. In addition, large curve radii at intersections facilitate vehicles to make right turns at higher speeds than necessary.

Based on vehicular turning analyses using the appropriate design vehicle, curb geometry modifications were feasible at three intersections: Post Road East and Parker Harding Plaza/Jesup Road (Concept Plan 2), Post Road East and Compo Road (Concept Plan 4A & 4B), and Riverside Avenue (SR 33) and Saugatuck Avenue/Treadwell Avenue (Concept Plan 6). The revised curb alignment would benefit pedestrian accessibility and safety by reducing the crossing distance as well as tighten the curb radii as a traffic calming measure, likely to reduce speeds of right turning traffic at the modified corners. In regard to Riverside Avenue and Saugatuck Avenue/Treadwell Avenue, the revised curb alignment would widen the south corner of the intersection to upgrade the sub-standard sidewalk width between the proposed pedestrian ramp and existing back of sidewalk/pedestrian signal equipment. At the intersection of Post Road East (US 1) and Compo Road (SR 136), a pedestrian refuge is proposed within the south leg to provide a waiting area for pedestrians unable to complete crossing the south crosswalk before the end of the pedestrian crossing phase.

In addition, modifications to the driveway location on the southbound approach of Compo Shopping Center and Post Road East are recommended to eliminate the offset between the existing driveways, thus reducing the occurrence of conflicts and improve sight lines between NB and SB left turning traffic.

Locations where improvements are recommended:

a. Post Road East (US 1) and Parker Harding Plaza/Jesup Road [Concept Plan 2]
b. Post Road East (US 1) and Compo Road (SR 136) [Concept Plan 4A & 4B]
c. Post Road East (US 1) and Compo Shopping Center/Acres Driveway [Concept Plan 5]

d. Riverside Avenue (SR 33) and Saugatuck Avenue/Treadwell Avenue [Concept Plan 6]

c. Access Management (V6, V10)

Benefits:

- ✓ Reduce vehicular and pedestrian conflict points.
- ✓ Restrict turning movements at driveways to avoid unsafe maneuvers.

The general aim of access management is to reduce the number of decision, or vehicular conflicts within the functional area of an intersection, in order to reduce crashes and improve safety for drivers. There are numerous driveways located within the study area; however, various conditions may render the combination or elimination of driveways within the study area infeasible, such as cost, differences in elevation, limited frontage on the public right-of-way, etc.

Two feasible improvements were identified at Post Road East (US 1) and Compo Road (SR 136). As previously discussed in the curb alignment modifications section, the median on the south leg of the intersection would be modified to extend further south between the northbound and southbound lanes to prevent left turns into and out of the Compo Acres driveway, improving driver safety and eliminating potential back-ups into the intersection due to southbound left turning queuing vehicles. Secondly, exit only driveways from Compo Shopping Center and People's United Bank directly adjacent to one another could feasibly combined as one right turn exit only driveway, as both are at similar elevations and alignments. This combination of exit driveways would the removal of the planted area between the properties, which would include the removal of curb and three to four moderately sized trees.

Locations where improvements are recommended:

a. Post Road East (US 1) and Compo Road (SR 136) [Concept Plan 4A & 4B]

d. Pedestrian Signal Equipment Upgrades (PB1, PB2, PB7, PB12, PB13, PB18, PB21, PB27)

Benefits:

- ✓ Improve pedestrian safety by clarifying when and for how long pedestrians can cross the street.
- ✓ Improve pedestrian safety by enhancing effectiveness of clearing crosswalk of pedestrians before the end of signal phase.

Several signalized intersections in the study area were found to have outdated pedestrian signal equipment, or was not present to support existing crosswalks. In order to promote pedestrian safety and accessibility in the study area, upgrades and new installations of pedestrian signal equipment following the latest CTDOT standards is recommended to serve existing and proposed crosswalks at the study area intersections listed below, with further details shown on the Concept Plans located in Appendix B. Pedestrian signals are beneficial to make pedestrians aware of when to cross the street, and should include countdown timers to make pedestrians aware of the amount of crossing time remaining, enhancing the effectiveness of clearing crosswalks of pedestrian prior to the end of signal phase.

Locations where improvements are recommended:

a. Post Road West (US 1) and Riverside Avenue/Wilton Road (SR-33) [Concept Plan 1A]
b. Post Road East (US 1) and Parker Harding Plaza/Jesup Road [Concept Plan 2]
c. Post Road East (US 1) and Main Street/Taylor Place [Concept Plan 3]
d. Post Road East (US 1) and Playhouse Square Driveway
e. Post Road East (US 1) and Compo Shopping Center/Acres Driveway [Concept Plan 5]
f. Riverside Avenue (SR 33) and Saugatuck Avenue/Treadwell Avenue [Concept Plan 6]

e. New Crosswalk Pavement Markings (PB3, PB6, PB11, PB15, PB17, PB22, PB24 - PB26)

Benefits:

- ✓ Improve pedestrian mobility.
- ✓ Clearly define pedestrian crossing locations.
- ✓ Make drivers more aware of the presence of pedestrians.

Several intersections in the study area were found to have a crosswalk missing at one or more approach legs. To improve pedestrian mobility and accessibility in the study area, new crosswalks are proposed at the intersections listed below. New crosswalks would increase driver awareness of the presence of pedestrians. It is important to note that coupling marked crosswalks with pedestrian signals and pedestrian ramps can clarify crossing locations at an intersection, thereby reducing any confusion pedestrians might experience if a crosswalk is absent at an intersection.

It is important to note that all new crosswalks proposed at signalized intersections should be installed only after the corresponding pedestrian signal upgrades at that intersection have been completed.

Locations where improvements are recommended:

a. Post Road West (US 1) and Riverside Avenue/Wilton Road (SR-33) [Concept Plan 1A]
b. Post Road East (US 1) and Parker Harding Plaza/Jesup Road [Concept Plan 2]
c. Post Road East (US 1) and Main Street/Taylor Place [Concept Plan 3]. This will be installed as part of State Project No. 173-468.
d. Post Road East (US 1) and Playhouse Square Driveway
e. Post Road East (US 1) and Compo Shopping Center/Acres Driveway [Concept Plan 5]
f. Riverside Avenue (SR 33) and Saugatuck Elementary School Exit
g. Riverside Avenue (SR 33) and Sylvan Road
h. Riverside Avenue (SR 33) and Saugatuck Avenue/Treadwell Avenue [Concept Plan 6]

Concept Plans are located in Appendix B.

f. ADA Access Improvements (PB4, PB8, PB14, PB22, PB28)

Benefits:

✓ Improve pedestrian mobility and accessibility.

Pedestrian ramps are an essential element of intersection design that serve not only people with disabilities but also people who are less agile due to age or injury, parents with children in strollers, shoppers returning from the store with products in a cart. There are a number of locations at the study area intersections where new pedestrian ramps are required due modifications to the curb geometry, the addition of a new crosswalk, or where no existing pedestrian ramp was previously present, which would require the need for such infrastructure. New pedestrian ramps should be installed compliant with the latest ADA standards, including detectable warning surfaces and the appropriate grading.

Locations where improvements are recommended:

a. Post Road West (US 1) and Riverside Avenue/Wilton Road (SR-33) [Concept Plan 1A]
b. Post Road East (US 1) and Parker Harding Plaza/Jesup Road [Concept Plan 2]
c. Post Road East (US 1) and Main Street/Taylor Place [Concept Plan 3]
d. Post Road East (US 1) and Compo Shopping Center/Acres Driveway [Concept Plan 5]
e. Riverside Avenue (SR 33) and Saugatuck Avenue/Treadwell Avenue [Concept Plan 6]

Concept Plans are located in Appendix B.

g. Complete Gap in Sidewalk Infrastructure on Riverside Avenue (PB29)

Benefits:

- ✓ Improve pedestrian safety and mobility.

Within the study area, Riverside Avenue has a continuous sidewalk on the west side of the street. However, the sidewalk on the east side has a few missing sections, as discussed in the Existing Conditions Report. While it would be ideal to install new sidewalk along the missing segments on the east side of the street, there are a few obstacles to such a plan. Starting south of Cross Street, limited right-of-way exists south of Westport Art Center, as the edge of the existing roadway is offset from the existing right-of-way by approximately 3-4 feet. In addition, existing utility poles are located approximately 2-3 feet from the edge of roadway, which would pose a conflict with a sidewalk installed within the available width between the roadway edge and property line. These available space limitations east of the roadway and utility pole conflicts are present from Cross Street to the Saugatuck Elementary School exit. While further roadway modifications including reducing the existing roadway width to accommodate a sidewalk might be physically possible, there might not be sufficient justification for a sidewalk on the east side when existing pedestrian volumes on the west sidewalk are low (fewer than 15 pedestrians in any analyzed peak hour in the existing condition) and those volumes are not likely to increase significantly in the future.

While the segment of sidewalk missing adjacent to Riverside Park contains similar conditions including existing utility poles that would conflict with a standard width sidewalk, a new sidewalk could be feasibly be installed within the park property to avoid utility pole conflicts and connect the existing sidewalk segments to the north and south. This would complete a missing gap of sidewalks to create a continuous east side sidewalk from Treadwell Avenue in the south to Sylvan Lane in the north in the study area. This improvement would require coordination with the Westport Parks & Recreation Department, as this would likely require an easement on the Riverside Park property.

Locations where improvements are recommended:

a. East side of Riverside Avenue (SR-33) along Riverside Park, south of Raymond Place.

h. Coordinated Sign System (V9)

Benefits:

- ✓ Reduce congestion as motorists would be more confident about navigating Downtown.
- ✓ Help distribute parking more equally on both sides of Post Road East.

To help direct motorists to parking resources located off of Post Road East a coordinated sign system should be developed and installed. A series of attractive, coordinated, and clearly-visible parking direction signs and markers would guide motorists to specific lots (Parker Harding, Jessup Green, etc.) and inform them of the regulations of each lot.

The Town's Downtown Plan Implementation Committee is currently developing a Wayfinding Plan, and this recommendation should be coordinated with the results of that study.

i. Bicycle Marking and Sign Improvements (PB5, PB10, PB30, PB31)

Benefits:

- ✓ Improve bicycle safety and accessibility.
- ✓ Provide a continuous bicycle route through majority of the study area.

Bicycle Accommodations on Riverside Avenue

The connection between Post Road East (US 1) and the Saugatuck train station area along Riverside Avenue is an important corridor connecting Westport's two commercial districts. As one of three north/south routes to reach the train station and surrounding land uses from Route 1, Riverside Avenue serves as the primary western route to and from the station area and the areas to the north and west of the corridor. The corridor also includes a large school complex located along this stretch of Riverside Avenue, which brings with it extra travel demands throughout the day. With a goal of mode shift to alleviate vehicular congestion, Riverside Avenue provides a prime opportunity to integrate bicycle accommodations.

Riverside Avenue has an existing curb-to-curb width of approximately 36 feet, and three viable options to accommodate cyclists along this corridor have been identified. Each option maintains an 11-foot wide general purpose travel lane in each direction, leaving 14 feet to be designed as shoulders, bike lanes, or parking. Below is a discussion assessing each treatment. Typical cross-sections with dimensions for each option are also provided following the descriptions as shown on Figure 4.

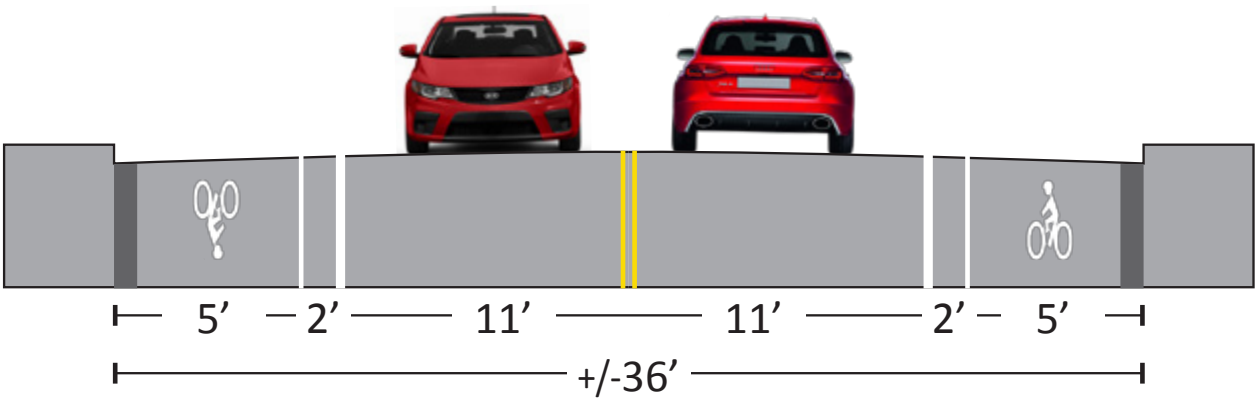
The existing roadway through the study area is classified as a minor arterial, with a speed limit of 30 mph, and mostly characterized as a 36-foot wide road curb-to-curb, with one lane in each direction separated by a double-yellow striped line. There is no shoulder striping, so lanes appear roughly 18-foot wide; however, there are some sections along both sides that allow parking, while other sections restrict curbside uses.

Parking utilization will be collected more formally, but through a review of existing aerial photography, a sample parking inventory was conducted during a typical weekday, during which time approximately 70 vehicles were parked.

- 35 cars were parked along the west curb between 329 Riverside Avenue ("Westport Center for Health") and 274 Riverside Avenue.
- 10 cars were parked along the west curb by the Saugatuck Elementary School.
- 25 cars were parked between Main Street and the Westport Arts Center (20 on the east curb and 5 on the west curb).

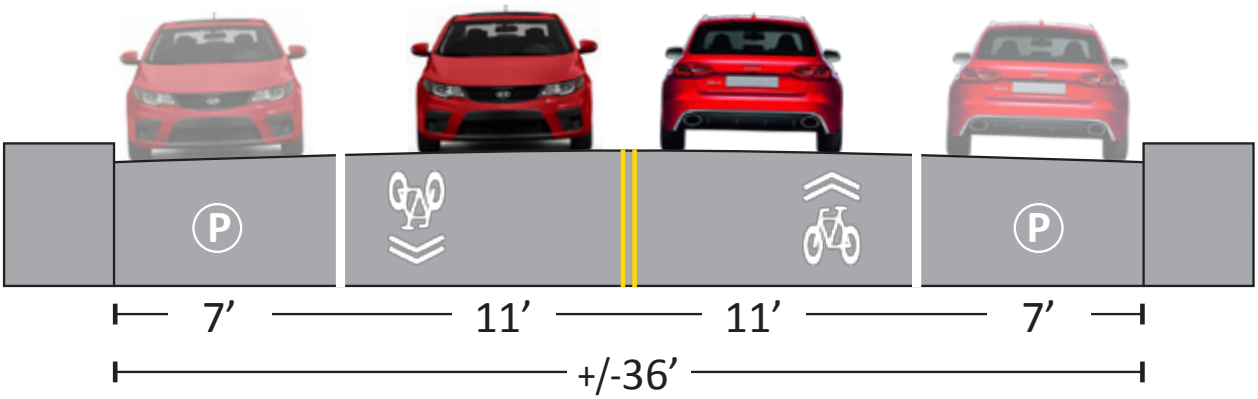
Figure 3: Typical Cross-Sections of Bicycle Pavement Marking Options for Riverside Avenue

Option 1: Buffered Bike Lanes



NOT TO SCALE

Option 2: Shared Lane Markings



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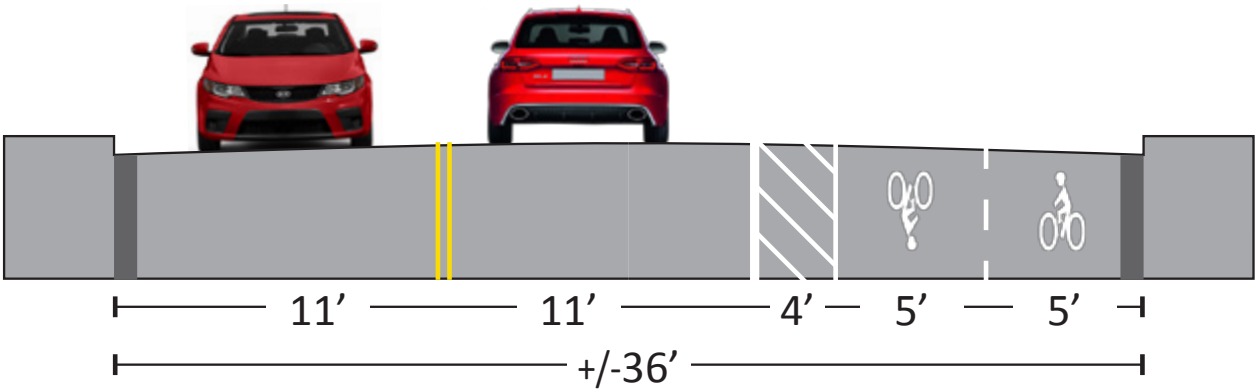
Option 3: Two-way Cycle Track



NOT TO SCALE

Option 1: Buffered Bike Lanes

Buffered bicycle lanes provide additional protection for cyclists when the roadway right-of-way allows for this space between the general purpose lane(s) and bike lane. A 5 feet bike lane along the curb/ roadway edge of Riverside Ave would leave space for a 2-foot wide buffer, which can be striped with a hatched buffer or double white line. The 1-foot-wide area adjacent to the curb is not a usable space for cyclists, as it is prone to pedal strikes, and a 5-foot wide bike lane with 2-foot wide buffer is well within the guidelines set forth by the NACTO Urban Bikeway Design Guide. Installing a bike lane for the entire Riverside Avenue study area would require full removal of parking on both sides of the street which would impact approximately 70 spaces based on observed demands. (Note: a formal parking study has not been conducted to determine if there are off-street options for these parking demands). The parking between Cross Street and Post Road, which serves active commercial uses, could remain with the use of a shared lane marking for that block. Although this block has high traffic volumes, a shared lane marking would provide a short connection to get cyclists to Post Road.

While the preferred option for Riverside Avenue would be buffered bicycle lanes, alternative on-street parking locations at the three locations listed would need to be determined prior to implementation.

Figure 4: Riverside Avenue at Burr Road (left) and at the Birchwood Country Club (right), looking south

Option 2: Shared Lane Markings

Shared lane markings are the least appealing types of accommodations for cyclists, but reinforce the cyclists' right and ability to share the lane with moving vehicles. Ideally, shared lane markings are located in lanes of 13-14 feet wide for a minor arterial, to allow a comfortable distance to share the space, so 11-foot wide moving lanes with 7-foot wide parking lanes are relatively tight for this treatment on Riverside Avenue but not uncommon.

Also, while there are some high parking locations, no parking is allowed on most of the corridor. Shared lane markings against unused curbside parking space often create an empty shoulder lane that cyclists tend to use when no parked cars are present. Once a parked car is encountered, cyclists tend to weave back into the shared lane to pass the parked car. Rather than designing a parking lane in locations where no parking is needed, we propose shared lane markings only be used where alternate arrangements for on-street parking cannot be found.

Option 3: Two-Way Cycle Track

Another option is to consolidate the shoulder lane space and create a two-way cycle track along one side of the street. This would provide two 5-foot wide bike lanes separated from moving vehicles with a 4-foot wide hatched buffer, to separate the contraflow movements of the northbound general purpose lane and the southbound bike lane of the cycle track. Unlike the other two options presented, the cycle track alternative would require the centerline to be offset to one side of the street to accommodate the cycle track on the other side. Roadway crowning and drainage would not be affected since this treatment is proposed as markings only.

Cycle tracks provide greater protection for cyclists and are often strategically located along the side of the street with the least intersection and/or curb cut conflicts, which would make the east side of Riverside Avenue most suitable. Although the east side of Riverside Avenue has less active uses, with more residential properties in addition to the elementary school on the west side of the street, the on-street parking would need to be removed in order to fit a cycle track on the roadbed as shown.

Option 3 provides the most aggressive separation, but is problematic due to the need to keep on-street parking between Cross Street and Post Road. The businesses along this section of Riverside Avenue do not have off-street parking, so their customers rely on this block for parking. If a cycle track were to carry cyclists in both directions on the east side of the street, southbound cyclists would have to cross over both moving lanes to get to the southbound cycle track lane on the east side of the street. Due to this unsafe crossing condition, Option 3 is not recommended.

Option 4: Shared-Use Path

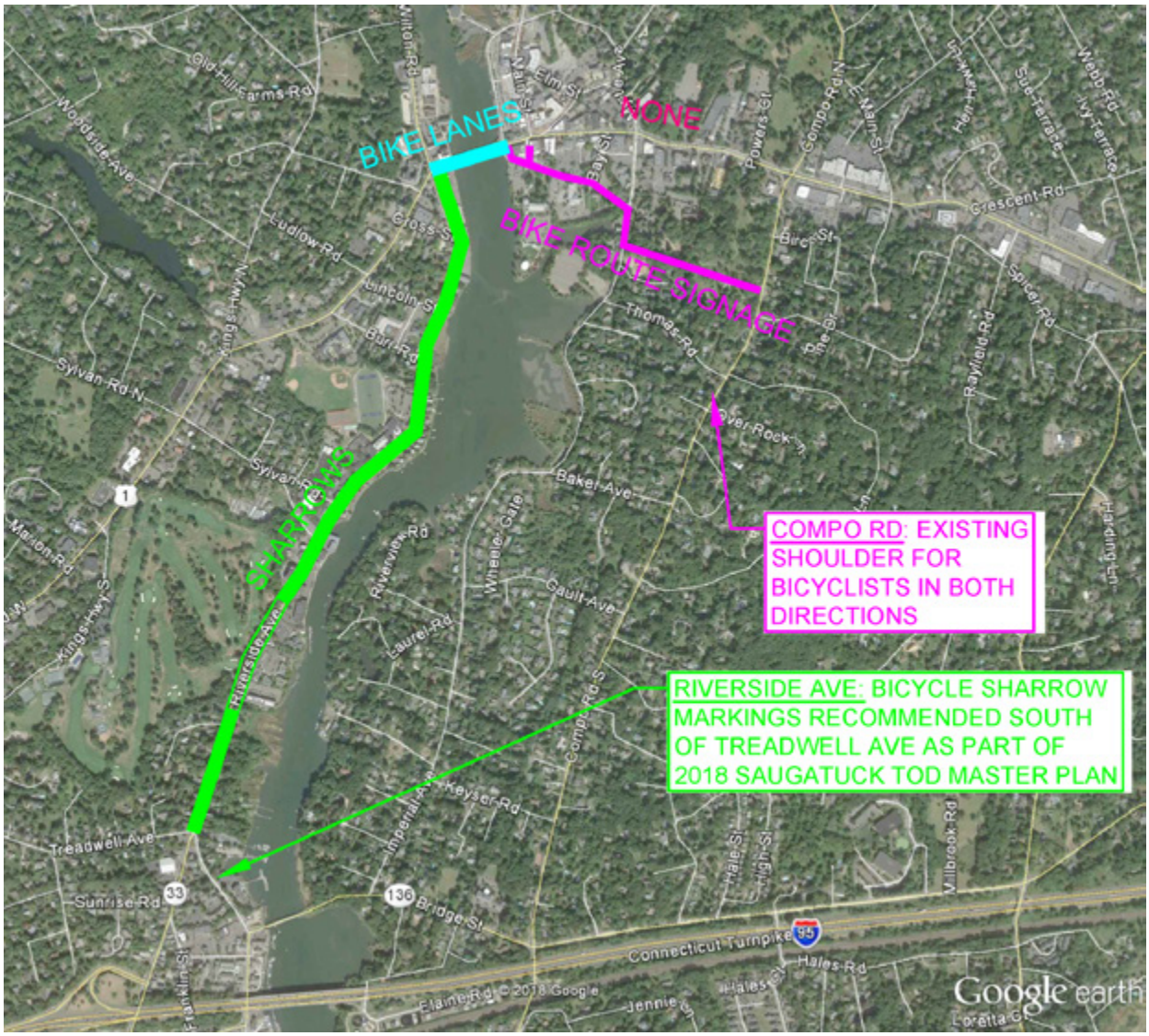
A fully separated, 8-12 foot wide sidewalk could replace the existing sidewalk to minimize parking impacts, effectively allowing parking on one side of the street. A shared use path would have to fit the entire length of Riverside from Treadwell to Post Road to be implemented at all. However, there are a few constraints that make this option infeasible. These constraints, taken together, create an imbalance with the potential usage a shared use path may be expected to get.

- The culvert just north of Sylvan Lane, which carries a small stream into the Saugatuck River, creates a pinch point for the roadway right-of-way. The bulkhead along the shore would need to be expanded to fit a sidewalk, which would disturb the edge of the river. Such disturbance for a short sidewalk connection would add to the cost and environmental impacts.
- Privately-owned parcels interfere with the alignment. It is not possible to fit a shared use path along these parcels, located between the Westport Arts Center and Lincoln Street. If a path were to

connect to the sidewalk between Lincoln Street and Burr Road, the path could continue between the sidewalk and property rights-of-way, partially on Town property, for some distance until the existing gap in the sidewalk near the school. This is a constraint for a shared-use path for the same reasons the gap in the sidewalk is not feasible to complete. Even if private property owners were willing to grant an easement along the front edge of their properties, utility poles are currently located along the east side of Riverside Avenue through out the study area. Relocating utility poles is costly and typically requires adjustments to many more poles than may be needed to move.

Option 4 is not feasible for the same crossover constraint as Option 3.

Figure 5: Typical Cross-Sections of Bicycle Pavement Marking Options for Riverside Avenue



Preferred Alternatives

- While **Option 1** provides more separation of vehicular traffic and bicycle traffic, it would also effect parking and drop-offs along Riverside Avenue south of Cross Street. The removal of parking and prohibition of drop-offs along Riverside Avenue would require coordination with stakeholders including the Saugatuck Elementary School, private businesses adjacent to existing parking locations, and the Town of Westport to provide alternative locations for parking and drop-offs, as these zones are moderately utilized in the existing condition.
- **Option 2** does not provide designated lane separation for the bicycles, but it does provide a striped shoulder without parked cars for the majority of the corridor in both directions. With the other constraints present, it would provide an accommodation for cyclists, which currently is not present.

East-West Bicycle Connections

While the implementation of bicycle pavement markings along Riverside Avenue would connect the Saugatuck area south of Treadwell Avenue to the Post Road corridor, limited locations for crossing the Saugatuck River inhibit east-west mobility for cyclists, as well as for traffic and pedestrians. As Post Road East has the greatest proximity to downtown Westport, a few alternative lane configurations for Post Road East between Riverside Ave and Parker Harding Plaza/Jesup Road were considered to potentially include bicycle lanes on this segment of the roadway while minimizing the impact on traffic operations. It was determined that by reducing the existing lane widths and converting the eastbound left turn lane into a left turn bay to reduce the overall width required to support traffic flow over bridge, 5 ft. wide bicycle lanes in both directions could be incorporated on Post Road East between Riverside Ave and Parker Harding Plaza/Jesup Road, as shown on Concept Plan 1B in Appendix B.

As Post Road East is a high traffic volume thoroughfare, bicyclists will be directed off of Post Road East after crossing the Saugatuck River in both directions using pavement markings and signs. In the eastbound direction, all cyclists would be directed to make a right onto Jesup Road with signs directing them to either Taylor Place to reach downtown Westport and other points north along Main Street, or continue straight along Jesup Road to Imperial Avenue. Additional bicycle route signs would be provided at Imperial Avenue and Jesup Road to direct cyclists to an existing paved path approximately 250 feet south of Jesup Road, which connects Imperial Avenue to Compo Road approximately 1,000 feet south of Post Road East. Effectively, this creates a parallel bicycle route to Post Road East west of the Saugatuck River on less trafficked roadways that are more suitable for bicyclists.

In the westbound direction, cyclist would be directed to make a left turn at Riverside Avenue to reach the proposed bicycle sharrows using both signs and bicycle “box” pavement markings. The bicycle “box” is a set of pavement markings to direct cyclists bound for Riverside Avenue to queue in front of the westbound exclusive left turn lane at Post Road East and Riverside Avenue, allowing cyclists to move through the intersection before westbound traffic without opposing through traffic during the exclusive left turn phase. Lastly, “Share the Road” signage should be installed on approaches to Post Road West and Riverside Avenue, as well as Post Road East and Parker Harding Plaza/Jesup Road in conjunction with the bicycle lane improvements.

Figure 5 on page 21 shows the locations where bicycle improvements are recommended, and how they are related to existing bicycle infrastructure or improvements proposed in previous studies. As shown, the proposed bicycle routes would connect facilities, which run north and south on Compo Road in the east to the intersection of Riverside Avenue and Treadwell Avenue in the west. As bicycle sharrows are also recommended to continue south of Treadwell Avenue on Riverside Avenue as part of the 2018 Saugatuck TOD Master Plan, both sets of improvements would effectively provide bicycle facilities from the Saugatuck Train Station to downtown Westport and points east of downtown.

It should be noted that beyond the study area, there are roadways that the public would like to see bicycle infrastructure implemented (such as Imperial Avenue south of the study area). Although such improvements are outside the scope of this report, alternative bicycle routes from downtown Westport to the Saugatuck Train Station area should be studied to provide a holistic approach to bicycle mobility and accessibility in the town of Westport.

Locations where improvements are recommended:

a. Post Road East from Riverside Avenue (SR-33) to Parker Harding Plaza/Jesup Road [Concept Plan 1B

b. Jesup Road between Post Road East and Imperial Avenue

c. Riverside Avenue (SR-33) from Post Road West to Treadwell Avenue

j. Implement Shuttle Services (T1, T2)

Benefits:

- ✓ Improve transit accessibility from Saugatuck Station to Downtown.
- ✓ Improve transit accessibility from Downtown to Surrounding Area.

The Westport Bus Operations and Needs Study completed in 2015 produced two recommendations that are designed to create better connections between the commercial center of town and Saugatuck Station, as well as promote non-motorized transportation choices, which are two of the overall goals of this study. These recommendations include the following:

Downtown Connector

Implementing a Downtown Connector would provide daytime transit service between the downtown area and Saugatuck Station for residents and visitors. The annual operating cost for this service is estimated to be between $188,336 and $223,649, while the cost for six shelters is estimated to be $90,000. In addition to the benefits listed above, this recommendation would also reduce parking demand at the station lots and create a quick connection between the Imperial Lot and the train station for commuters. This also could potentially reduce traffic congestion along Route 33, and generate economic benefits.

Downtown Circulator

Implementing a Downtown Circulator would provide daytime service for trips within Westport, and provides a transit option for shopping, work, medical, after-school and other trips. The annual operating cost for the service is estimated to be between $188,336 and $235,420. In addition, to the benefits listed above, the recommendation could potentially reduce traffic congestion along Route 1, and generate economic benefits.

Before advancing each of these recommendations, detailed operating plans (including vehicle requirements) and funding plans would need to be developed, in addition to the procurement and siting of of bus shelters for the Downtown Circulator service.

k. Coastal Link Improvements (T3, V1)

Benefits:

- ✓ Generate additional ridership
- ✓ Speed bus service and improve reliability
- ✓ Reduce congestion along Post Road

The Route 1 Bus Rapid Transit Feasibility Study completed in June 2017 identified a number of improvements that would improve transit service in the study area. These recommendations include the following:

Real Time Information Display and Bus Stop Sign

A real time transit information display and bus stop sign should be installed at Post Road East opposite Main Street. The display and sign would clearly delineate where riders will be picked up and provide information on the expected arrival time of each bus. The cost of the display is estimated at $4,000, while the cost of the bus stop sign is approximately $1,000

Real Time Information Display and Bench

A real time transit information display and bench should be installed at 400 Post Road East. The bench would provide riders with a comfortable place to wait for the bus while the display would provide information on the expected arrival time of each bus. The installation of the display and bench is expected to generate an additional 38 boarding's per day. The cost of the display is estimated at $4,000 while the cost of the bench is approximately $1,500.

Transit Signal Priority

Transit signal priority should be implemented for the eastbound and westbound approaches at Post Road West and Route 33 to improve the speed and reliability of Coastal Link buses. As indicated in the report, buses would be given priority at the intersection when they are behind on their schedule. The estimated cost for installing transit signal priority at this intersection is $9,600. In addition, the installation of transit signal priority at this location would require the existing near side bus stop to be relocated to the far side, which would also require removal of on street parking on the approach to the bridge and town approval.

While the above recommendations are longer term as they require further investment and coordination between CTDOT and each of the bus operators involved in the Coastal Link service, the Town should still consider relocating the Westbound Coastal Link bus stop to the west side of intersection (V1) to reduce bus blockages on the Westbound approach. Our analysis indicates that there would be no significant change from LOS F in the AM, MD, and SAT MD, or LOS D in the PM, if this change was implemented. However, it is anticipated that through and right turning traffic would experience fewer disruptions travelling through the intersection due to the bus stop relocation.

3. Future Build Traffic (Level of Service) Analysis

As discussed in the Traffic Analysis Report, a future no-build condition was developed including planned developments and other roadway improvements to serve as a baseline to evaluate and compare traffic conditions with and without the recommendations discussed above and shown in Table 1. Thus, these recommendations were incorporated into the previously developed no-build condition to create the 2040 Build Condition. Future Build conditions traffic analyses were performed for the weekday AM, midday, PM and Saturday midday peak hours. Results of the capacity analyses during these peak hours for the twelve study area intersections, as well as a comparison back to the no-build conditions, are summarized in Table 1 on page 27 and Table 2 on page 28 (see Appendix D for corresponding detailed Synchro reports).
The results indicate an improvement of traffic operations at the majority of intersections compared to no-build conditions. While the number of congested lane groups would decrease from 14, 18, 17, and 15 congested lane groups in the weekday AM, midday, PM, and Saturday midday peak hours in the no-build condition, respectively, to 12, 12, 14, and 13 congested lane groups in the same peak hours in the build condition, overall intersection LOS would improve at the majority of intersections.

Table 1: Year 2040 No-Build Traffic Conditions

Intersection	Approach	Lane Group	Weekday AM Peak Hour (7:45 to 8:45 AM)						Weekday MD Peak Hour (12:00 to 1:00 PM)					
			No-Build			Build			No-Build			Build		
			v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS
SIGNALIZED INTERSECTIONS														
1. Post Rd West / US 1 (EB-WB) & Riverside Ave / Wilton Rd / SR 33 (NB-SB)	EB	L	0.41	17.9	B	0.60	35.2	D	0.52	20.9	C	0.72	40.5	D
		TR	0.72	37.1	D	**0.98**	**81.4**	**F**	0.94	56.0	**E**	**1.04**	**81.9**	**F**
	WB	L	**1.38**	**203.9**	**F**	**1.14**	**109.5**	**F**	**1.05**	**89.0**	**F**	**1.20**	**141.2**	**F**
		TR	**1.39**	**208.7**	**F**	**1.18**	**122.2**	**F**	**0.95**	51.6	D	**0.99**	61.2	**E**
	NB	LTR	**1.07**	**90.9**	**F**	**1.13**	**113.8**	**F**	**1.31**	**186.2**	**F**	**1.12**	**104.6**	**F**
	SB	LTR	**1.02**	75.6	**E**	**1.11**	**106.5**	**F**	**1.27**	**171.0**	**F**	**1.00**	73.9	**E**
	Overall		*	**142.6**	**F**	*	**108.7**	**F**	*	**101.5**	**F**	*	**85.9**	**F**
2. Post Rd East / US 1 (EB-WB) & Jesup Rd / Parker Harding Plaza (NB-SB)	EB	L	0.37	9.1	A	0.39	11.9	B	0.36	7.4	A	0.40	11.1	B
		TR	0.47	7.6	A	0.49	10.0	A	0.64	11.4	B	0.70	16.9	B
	WB	LTR	0.70	12.4	B	0.74	14.0	B	0.56	18.4	B	0.68	25.8	C
	NB	LTR	0.94	**83.5**	**F**	0.82	54.6	D	**1.36**	**224.3**	**F**	0.91	67.0	**E**
	SB	LT	0.56	39.2	D	0.51	33.6	C	0.92	73.0	**E**	0.74	42.0	D
		R	0.46	8.1	A	0.43	5.6	A	0.42	7.2	A	0.37	5.3	A
	Overall		*	**18.3**	**B**	*	**16.8**	**B**	*	**39.5**	**D**	*	**25.9**	**C**
3. Post Rd East / US 1 (EB-WB) & Taylor Pl / Main St (NB-SB)	EB	L	0.25	8.4	A	0.25	6.8	A	0.28	10.0	A	0.27	7.5	A
		TR	0.39	8.7	A	0.39	7.2	A	0.69	19.9	B	0.69	16.5	B
	WB	LT	0.60	12.5	B	0.60	13.7	B	0.43	27.3	C	0.43	25.4	C
		R	0.08	2.8	A	0.08	3.6	A	0.20	13.5	B	0.25	12.5	B
	NB	LTR	0.55	43.5	D	0.55	44.9	D	0.50	33.6	C	0.50	34.5	C
	Overall		*	**12.9**	**B**	*	**13.4**	**B**	*	**22.8**	**C**	*	**20.5**	**C**
4. Post Rd East / US 1 (EB-WB) & Imperial Ave / Myrtle Ave (NB-SB)	EB	LTR	0.45	20.2	C	0.40	14.0	B	0.92	40.3	D	0.61	20.0	B
	WB	LT	**1.07**	69.3	**E**	**1.00**	45.6	D	**1.36**	**193.0**	**F**	0.91	20.3	C
		R	0.31	20.2	C	0.29	18.6	B	0.47	27.9	C	0.29	8.4	A
	NB	LTR	0.85	63.3	**E**	0.77	50.2	D	**0.96**	67.4	**E**	**1.01**	79.0	**E**
	SB	L	0.54	32.5	C	0.49	27.6	C	0.54	23.7	C	0.64	31.3	C
		TR	0.27	18.3	B	0.26	23.1	C	0.24	12.2	B	0.27	20.9	C
	Overall		*	**50.4**	**D**	*	**35.5**	**D**	*	**94.9**	**F**	*	**29.2**	**C**
5. Post Rd East / US 1 (EB-WB) & Playhouse Sq Drwy / Bus Exit (NB-SB)	EB	LTR	0.28	1.8	A	0.29	2.0	A	0.71	10.7	B	0.72	7.2	A
	WB	LTR	0.69	7.1	A	0.70	8.1	A	0.58	7.9	A	0.59	19.5	B
	NB	LTR	0.03	0.1	A	0.04	0.1	A	0.04	0.2	A	0.04	0.2	A
	SB	LTR	0.26	19.3	B	0.24	18.0	B	0.83	49.2	D	0.81	46.6	D
	Overall		*	**6.2**	**A**	*	**7.0**	**A**	*	**13.2**	**B**	*	**17.0**	**B**
6. Post Rd East / US 1 (EB-WB) & Compo Rd N/S (NB-SB)	EB	L	0.46	27.8	C	0.56	45.0	D	0.57	32.9	C	0.64	30.1	C
		TR	0.36	27.4	C	0.34	29.8	C	0.91	45.4	D	**0.98**	44.1	D
	WB	L	0.27	17.9	B	0.30	14.4	B	0.69	38.8	D	0.78	52.6	D
		TR	**1.23**	**139.2**	**F**	**1.23**	**135.2**	**F**	0.87	69.0	**E**	**0.95**	39.8	D
	NB	L	0.54	41.4	D	0.47	26.1	C	0.81	58.0	**E**	0.75	39.8	D
		TR	0.67	48.4	D	0.55	33.5	C	**1.05**	**104.7**	**F**	0.79	43.9	D
	SB	L	0.40	34.3	C	0.34	19.9	B	0.86	64.4	**E**	0.69	33.5	C
		TR	**1.16**	**138.4**	**F**	0.90	60.4	**E**	**1.18**	**144.7**	**F**	0.89	54.0	D
	Overall		*	**103.0**	**F**	*	**89.3**	**F**	*	**70.3**	**E**	*	**43.0**	**D**
7. Post Rd East / US 1 (EB-WB) & Compo Acres Drwy / Shopping Center (NB-SB)	EB	L	0.15	3.6	A	0.15	3.1	A	0.29	4.4	A	0.31	3.3	A
		TR	0.27	5.0	A	0.27	3.3	A	0.49	8.4	A	0.51	4.9	A
	WB	L	0.11	2.6	A	0.11	2.9	A	0.26	4.3	A	0.27	5.4	A
		TR	0.61	8.0	A	0.62	18.3	B	0.46	7.7	A	0.48	9.1	A
	NB	LTR	0.33	15.2	B	0.30	14.1	B	0.54	36.2	D	0.43	29.3	C
	SB	LTR	0.17	10.2	B	0.26	11.8	B	0.45	27.0	C	0.68	42.8	D
	Overall		*	**7.2**	**A**	*	**13.4**	**B**	*	**10.1**	**B**	*	**10.0**	**A**
12. Riverside Ave / Saugatuck Ave / SR-33 (NB-SB) & Treadwell Ave / Riverside Ave (EB-WB)	EB	LTR	0.69	58.9	**E**	0.68	58.0	**E**	0.84	67.5	**E**	0.83	65.7	**E**
	WB	LT	**1.09**	**128.4**	**F**	**1.07**	**124.7**	**F**	**1.11**	**138.7**	**F**	**1.09**	**134.9**	**F**
		R	0.33	28.6	C	0.32	28.0	C	0.54	36.0	D	0.53	35.4	D
	NB	LTR	**1.06**	**86.2**	**F**	**1.08**	**92.9**	**F**	**1.10**	**100.6**	**F**	**1.12**	**108.0**	**F**
	SB	L	**1.09**	**122.2**	**F**	**1.08**	**117.8**	**F**	**0.96**	**93.4**	**F**	**0.96**	**91.3**	**F**
		TR	0.79	26.0	C	0.80	26.4	C	0.63	21.4	C	0.63	21.7	C
	Overall		*	**68.2**	**E**	*	**69.1**	**E**	*	**71.6**	**E**	*	**73.0**	**E**
UNSIGNALIZED INTERSECTIONS														
Intersection	**Approach**	**Lane Group**	**Weekday AM Peak Hour (7:30 to 8:30 AM)**						**Weekday MD Peak Hour (1:00 to 2:00 PM)**					
			No-Build			**Build**			**No-Build**			**Build**		
			v/c	**Delay (sec/veh)**	**LOS**	**v/c**	**Delay (sec/veh)**	**LOS**	**v/c**	**Delay (sec/veh)**	**LOS**	**v/c**	**Delay (sec/veh)**	**LOS**
8. Post Rd East / US 1 (EB-WB) & E. Main St / The Mews (NB-SB)	EB	L	0.05	1.6	A	0.05	1.6	A	0.09	2.4	A	0.09	2.4	A
	WB	L	0.03	0.8	A	0.03	0.8	A	0.02	0.5	A	0.02	0.5	A
	NB	LTR	0.04	10.0	A	0.04	10.0	A	0.25	**56.7**	**F**	0.24	**54.9**	**F**
9. Riverside Ave / SR-33 (NB-SB) & Burr Rd (EB)	EB	LR	**1.24**	**209.8**	**F**	**1.24**	**209.8**	**F**	0.33	24.0	C	0.33	24.0	C
	NB	LT	0.18	4.7	A	0.18	4.7	A	0.08	2.1	A	0.08	2.1	A
10. Riverside Ave/ SR-33 (NB-SB) & Saugatuck Elem. School Exit (EB)	EB	LR	0.57	**53.2**	**F**	0.57	**53.2**	**F**	0.03	12.9	B	0.03	12.9	B
11. Riverside Ave / SR-33 (NB-SB) & Sylvan Rd (EB)	NB	L	0.28	13.9	B	0.28	13.9	B	0.26	10.3	B	0.26	10.3	B

Notes:

* Synchro does not provide overall v/c ratio for signalized intersections.

v/c = volume-to-capacity ratio; LOS = Level-of-Service; NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

L = left-turn, R = right-turn, T = through movement, LTR = left/through/right, TR = through/right-turn, LT = left-turn/through, LR = left-turn/right-turn

Synchro does not provide overall delay or v/c ratios for unsignalized intersections.

Queue Notes: ~ and # symbols indicates queue length exceeds capacity, "m" indicates 95th %ile queue is metered by upstream signal

Table 2: Year 2040 No-Build Traffic Conditions

Intersection	Approach	Lane Group	Weekday PM Peak Hour (4:30 to 5:30 PM)						Saturday MD Peak Hour (12:15 to 1:15 PM)					
			No-Build			Build			No-Build			Build		
			v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS
SIGNALIZED INTERSECTIONS														
1. Post Rd West / US 1 (EB-WB) & Riverside Ave / Wilton Rd / SR 33 (NB-SB)	EB	L	**1.21**	**147.2**	**F**	**1.06**	**89.5**	**F**	0.45	18.3	B	0.59	30.0	C
		TR	**1.12**	**104.7**	**F**	**1.09**	**90.1**	**F**	0.94	54.9	D	**1.01**	74.8	**E**
	WB	L	0.85	46.5	D	**1.21**	**152.6**	**F**	**1.05**	**87.4**	**F**	**1.14**	**119.4**	**F**
		TR	**0.97**	61.1	**E**	**1.21**	**142.4**	**F**	**1.07**	79.3	**E**	**1.10**	**91.4**	**F**
	NB	LTR	**1.28**	**169.5**	**F**	**1.15**	**114.4**	**F**	**1.04**	**83.5**	**F**	0.93	52.6	D
	SB	LTR	**1.38**	**217.8**	**F**	**1.12**	**115.3**	**F**	**1.36**	**205.6**	**F**	**1.14**	**115.8**	**F**
	Overall		*	**124.1**	**F**	*	**114.4**	**F**	*	**96.4**	**F**	*	**87.2**	**F**
2. Post Rd East / US 1 (EB-WB) & Jesup Rd / Parker Harding Plaza (NB-SB)	EB	L	0.23	5.7	A	0.24	7.3	A	0.42	8.6	A	0.44	10.2	B
		TR	0.75	14.7	B	0.77	18.0	B	0.55	8.6	A	0.57	10.5	B
	WB	LTR	0.49	23.2	C	0.52	27.7	C	0.65	19.0	B	0.68	21.6	C
	NB	LTR	0.87	70.6	**E**	0.78	53.1	D	0.69	47.8	D	0.57	36.2	D
	SB	LT	0.57	39.9	D	0.53	35.4	D	0.77	55.0	D	0.69	44.7	D
		R	0.43	7.2	A	0.41	6.0	A	0.47	7.5	A	0.44	6.3	A
	Overall		*	**22.1**	**C**	*	**23.1**	**C**	*	**18.4**	**B**	*	**18.7**	**B**
3. Post Rd East / US 1 (EB-WB) & Taylor Pl / Main St (NB-SB)	EB	L	0.31	7.2	A	0.31	5.5	A	0.35	10.3	B	0.35	8.7	A
		TR	0.69	17.6	B	0.69	16.2	B	0.59	15.3	B	0.59	14.0	B
	WB	LT	0.34	22.9	C	0.34	17.8	B	0.53	29.8	C	0.53	31.0	C
		R	0.21	13.1	B	0.24	8.4	A	0.24	13.2	B	0.30	15.0	B
	NB	LTR	0.46	34.1	C	0.46	34.1	C	0.59	38.6	D	0.59	40.1	D
	Overall		*	**19.0**	**B**	*	**16.1**	**B**	*	**23.3**	**C**	*	**23.6**	**C**
4. Post Rd East / US 1 (EB-WB) & Imperial Ave / Myrtle Ave (NB-SB)	EB	LTR	**1.28**	**162.5**	**F**	0.85	28.9	C	0.88	35.0	C	0.64	19.6	B
	WB	LT	**1.22**	**140.1**	**F**	0.81	15.8	B	**1.31**	**171.5**	**F**	**1.06**	61.6	**E**
		R	0.48	31.4	C	0.35	7.9	A	0.53	27.8	C	0.45	13.2	B
	NB	LTR	0.93	63.1	**E**	**0.95**	67.8	**E**	0.85	51.9	D	0.86	54.1	D
	SB	L	0.71	28.7	C	**0.97**	74.3	**E**	0.92	57.0	**E**	**1.06**	**96.3**	**F**
		TR	0.20	11.5	B	0.24	20.5	C	0.34	17.6	B	0.37	23.3	C
	Overall		*	**110.2**	**F**	*	**32.4**	**C**	*	**89.1**	**F**	*	**46.2**	**D**
5. Post Rd East / US 1 (EB-WB) & Playhouse Sq Drwy / Bus Exit (NB-SB)	EB	LTR	0.63	9.8	A	0.63	5.5	A	0.69	9.5	A	0.69	6.5	A
	WB	LTR	0.45	6.4	A	0.45	16.3	B	0.59	7.7	A	0.60	19.2	B
	NB	LTR	0.10	32.1	C	0.10	31.4	C	0.00	0.0	A	0.00	0.0	A
	SB	LTR	0.80	49.5	D	0.79	47.6	D	0.78	42.0	D	0.76	39.8	D
	Overall		*	**12.5**	**B**	*	**14.0**	**B**	*	**11.5**	**B**	*	**16.1**	**B**
6. Post Rd East / US 1 (EB-WB) & Compo Rd N/S (NB-SB)	EB	L	0.51	25.3	C	0.76	38.1	D	0.58	33.0	C	0.57	21.9	C
		TR	**1.01**	65.1	**E**	**1.10**	**80.9**	**F**	**1.00**	63.7	**E**	**1.04**	61.7	**E**
	WB	L	0.69	37.9	D	**1.03**	**104.5**	**F**	0.83	51.4	D	**1.06**	**104.0**	**F**
		TR	0.71	35.2	D	0.81	30.4	C	**0.96**	**93.2**	**F**	**1.03**	57.1	**E**
	NB	L	0.65	44.8	D	0.44	20.4	C	0.77	53.8	D	0.72	37.0	D
		TR	**1.15**	**132.9**	**F**	0.78	41.3	D	**1.16**	**138.5**	**F**	0.88	53.2	D
	SB	L	0.85	62.1	**E**	0.66	29.2	C	**0.96**	**84.3**	**F**	0.89	58.0	**E**
		TR	**1.01**	**90.1**	**F**	0.74	38.3	D	**1.19**	**148.2**	**F**	0.88	53.1	D
	Overall		*	**64.4**	**E**	*	**53.3**	**D**	*	**88.2**	**F**	*	**58.7**	**E**
7. Post Rd East / US 1 (EB-WB) & Compo Acres Drwy / Shopping Center (NB-SB)	EB	L	0.23	3.8	A	0.23	1.4	A	0.39	6.7	A	0.39	6.7	A
		TR	0.54	9.3	A	0.54	5.4	A	0.50	9.6	A	0.50	9.6	A
	WB	L	0.23	4.5	A	0.23	4.8	A	0.34	5.5	A	0.34	5.5	A
		TR	0.38	7.1	A	0.38	7.1	A	0.58	10.0	A	0.58	10.0	A
	NB	LTR	0.55	38.2	D	0.58	39.7	D	0.70	43.1	D	0.70	43.1	D
	SB	LTR	0.34	20.8	C	0.59	33.5	C	0.51	23.9	C	0.51	23.9	C
	Overall		*	**10.1**	**B**	*	**8.9**	**A**	*	**12.2**	**B**	*	**12.2**	**B**
12. Riverside Ave / Saugatuck Ave / SR-33 (NB-SB) & Treadwell Ave / Riverside Ave (EB-WB)	EB	LTR	0.91	75.6	**E**	0.90	73.3	**E**	0.83	65.6	**E**	0.83	65.6	**E**
	WB	LT	0.78	72.2	**E**	0.78	71.0	**E**	0.92	**92.2**	**F**	0.92	92.2	**F**
		R	0.45	33.6	C	0.45	33.0	C	0.43	32.9	C	0.43	32.9	C
	NB	LTR	**1.27**	**164.3**	**F**	**1.29**	174.1	**F**	**0.99**	70.3	**E**	**0.99**	70.3	**E**
	SB	L	**1.15**	**144.3**	**F**	**1.14**	139.8	**F**	**1.07**	**119.8**	**F**	**1.07**	119.8	**F**
		TR	0.62	21.1	C	0.63	21.4	C	0.75	25.7	C	0.75	25.7	C
	Overall		*	**96.5**	**F**	*	**99.0**	**F**	*	**59.5**	**E**	*	**59.5**	**E**

UNSIGNALIZED INTERSECTIONS														
Intersection	Approach	Lane Group	Weekday PM Peak Hour (5:00 to 6:00 PM)						Saturday MD Peak Hour (12:30 to 1:30 PM)					
			No-Build			Build			No-Build			Build		
			v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS
8. Post Rd East / US 1 (EB-WB) & E. Main St / The Mews (NB-SB)	EB	L	0.05	1.5	A	0.05	1.5	A	0.11	3.6	A	0.11	3.6	A
	WB	L	0.04	1.0	A	0.04	1.0	A	0.06	1.6	A	0.06	1.6	A
	NB	LTR	**1.99**	**680.1**	**F**	**1.99**	**680.0**	**F**	0.04	10.8	B	0.04	10.8	B
9. Riverside Ave / SR-33 (NB-SB) & Burr Rd (EB)	EB	LR	0.77	**65.3**	**F**	0.77	**65.3**	**F**	0.17	15.9	C	0.17	15.9	C
	NB	LT	0.09	2.3	A	0.09	2.3	A	0.07	1.8	A	0.07	1.8	A
10. Riverside Ave/ SR-33 (NB-SB) & Saugatuck Elem. School Exit (EB)	EB	LR	0.05	12.8	B	0.05	12.8	B	0.00	0.0	A	0.00	0.0	A
11. Riverside Ave / SR-33 (NB-SB) & Sylvan Rd (EB)	NB	L	0.27	10.2	B	0.27	10.2	B	0.21	10.4	B	0.21	10.4	B

Notes:

* Synchro does not provide overall v/c ratio for signalized intersections.

v/c = volume-to-capacity ratio; LOS = Level-of-Service; NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

L = left-turn, R = right-turn, T = through movement, LTR = left/through/right, TR = through/right-turn, LT = left-turn/through, LR = left-turn/right-turn

Synchro does not provide overall delay or v/c ratios for unsignalized intersections.

Queue Notes: ~ and # symbols indicates queue length exceeds capacity, "m" indicates 95th %ile queue is metered by upstream signal

4. Other Considerations

a. Parking Considerations

As discussed previously in this report, there are two recommended improvements that would impact parking conditions. Due to the modification of pavement markings on Post Road to incorporate bicycle lanes (PB5, PB10), approximately two parking spaces would be lost along the south curb. All 33 on-street parking spaces along Riverside Ave between Post Road East and Cross Street would remain with the recommended improvements. As the existing parking utilization for this segment of Riverside Avenue had excess capacity of 20 and 25 spaces in the weekday midday and evening peak periods and parking conditions are not anticipated to change significantly between the existing and no-build conditions, it is anticipated that parking demand displaced by the loss of two parking spaces on Post Road East would be absorbed by the excess capacity on Riverside Avenue just south of Post Road East.

In addition, curbside bicycle lanes recommended along Riverside Avenue (PB31) between Cross Street and Treadwell Avenue would impact parking along the Birchwood Country Club and curbside drop-off conditions near the Saugatuck Elementary School. The removal of parking and prohibition of drop-offs along Riverside Avenue would require coordination with stakeholders including the Saugatuck Elementary School, private businesses adjacent to existing parking locations, and the Town of Westport to provide alternative locations for parking and drop-offs, as these zones are moderately utilized in the existing condition.

b. Safety Considerations

As traffic and pedestrian volumes increase in the future, it is possible that crash frequency could increase in the vicinity of the study area, although no significant changes to crash frequency are projected in the future Build condition.

c. Permits

A number of permits may be required as the recommendations detailed above are advanced into preliminary and final design. These include:

CTDOT Encroachment Permit

A CTDOT Encroachment Permit is required for any change to the structure, layout, drainage or topography of a State highway and its appurtenances. A standard form of application (PMT-1) must be filed with the appropriate CTDOT District Maintenance Director before an encroachment permit is issued.

In addition, when a permit is issued to the applicant to perform a specified activity within the highway right of way, it is granted on the premise that the work will be performed in accordance with the special provisions inserted on the permit form in the manner detailed in CTDOT's Permit Manual, and

in conformance with the current issue of the CTDOT's Standard Specifications for Roads, Bridges and Incidental Construction, (Form 817), other State regulations, and local town ordinances and as detailed in the Standard Permit Attachments.

CTDECD Flood Management Certification for Minor Activities.

A CTDECD Flood Management Certification is required for minor activities that will impact the AE and X Flood Zones in the study area (see Figure 4 in the Existing Conditions Report). The activities that are relevant to the recommendations presented in this chapter include:

- **Streetscape Projects**. Projects that include minor grading and minor safety improvements including but not limited to sidewalks, crosswalks, landscaping, signs, traffic signals, and light poles).
- **Minor Stormwater Drainage Installation and Improvements**. Projects that include installation or replacements of catch basins, drainage systems, drainage outfalls with an equivalent diameter pipes, replacement or placement of in-kind riprap splash pads or plunge pools set no higher than existing grade at existing outfalls).
- **Minor Roadway Re-alignment or Intersection improvements**. Roadway reconstruction projects involving the milling and/or resurfacing or paving of the existing travel lanes with no net change to impervious area that would increase peak flows leaving the site).

The permit application shall include general information on the project, a project description, maps, plans, and photographs, the minor activity category the project falls under, a project budget, compliance with general permit conditions, a flood contingency plan, a copy of CTDECD's general certification letter from CTDEEP, and a professional certification signed by a licensed CT Engineer.

Coastal Area Management (CAM)

Westport's Department of Public Works (DPW) shall review the zoning regulations related to coastal areas and determine if site plan review (to be submitted to Westport Planning and Zoning) is necessary for any of the recommendations that fall within the Town's Coastal Area Boundary.

Inland Wetlands

Westport DPW shall meet with the Westport Conservation Commission to determine if a permit (see Town of Westport Inland Wetland and Watercourse Regulations) is required for any of the recommendations detailed above.

CTDEEP Listed Species & Critical Habitats

Finally, as indicated in the Existing Conditions Report, there are a number of listed species or critical habitats that fall within the study area. As recommendations are advanced to preliminary and final design, a more detailed review including field surveys of the site performed by a qualified biologist will be necessary to move forward with any subsequent environmental permit applications submitted to CTDEEP. If detailed surveys are not conducted to determine the presence or absence of state-listed species, a description will need to be provided that indicates how the state-listed species will be not impacted by the project.

d. Funding Sources

The Town of Westport should work with WestCOG to identify potential funding sources for the above recommendations. The two primary sources of funding are the Surface Transportation Program (now known as the Surface Transportation Block Grant Program (STBG) through the FAST act) and the Local Transportation Capital Improvement Program (LOTCIP).

Surface Transportation Block Grant Program

The STBG promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs. The federal share for funding under this program is 80% or 90% (projects on the Interstate System) with the remaining coming from a combination of state and local match. STBG funded projects need to be included on Connecticut's Statewide Transportation Improvement Program (STIP).

Local Transportation Capital Improvement Program

The LOTCIP provides State funds to urbanized area municipal governments in lieu of Federal funds otherwise available through Federal transportation legislation. Projects that are eligible for LOTCIP funding include: bridge rehabilitation and replacement; road reconstruction; intersection improvements; traffic signals; streetscapes; sidewalks; multi-use trails; and pedestrian bridges. In addition, projects must be located on roads classified as collector or arterial, however bridge projects with spans over 20 feet and transportation alternatives projects (typically bicycle and pedestrian improvements, such as multi-use trails) are exceptions.

5. Implementation Tables

a. Implementation Matrix

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost[1]
VEHICULAR IMPROVEMENTS						
Post Road West (US 1) & Riverside Avenue/Wilton Road (SR 33) [Concept Plan 1]						
V1	Relocate WB Coastal Link bus stop to west side of intersection	• Coordinate with CTDOT, Town of Westport, and bus operators	• Reduce bus blockages on WB approach • No significant change from LOS F in AM, MD, and SAT MD, or LOS D in PM	• CTDOT • Norwalk Transit District • Greater Bridgeport Transit District • Milford Transit District • Town of Westport		• TBD
V2	Signal Timing Adjustments	• Coordinate with CTDOT	• Reduce traffic delay • Provide Minimum Crossing Time for Pedestrians • Overall LOS Change: LOS F remains LOS F with less overall delay for all analyzed peak hours (see LOS Table for comparison of lane groups)	• CTDOT • Town of Westport		• $2,500
Post Road East (US 1) & Parker Harding Plaza/Jesup Rd [Concept Plan 2]						
V3	Signal Timing Adjustments	• Coordinate with CTDOT	• Reduce traffic delay • Provide more green time to NB-SB Movements • Provide Minimum Crossing Time for Pedestrians • Overall LOS Change: LOS D to LOS C in MD, LOS B, C, and B remains unchanged in AM, PM, and SAT MD (see LOS Table for comparison of lane groups)	• CTDOT • Town of Westport		• $2,500

[1] Unless otherwise noted, all cost estimates are based on "Costs for Pedestrian and Bicyclist Infrastructure Improvements: A Resource of Researchers, Engineers, Planners, and the General Public," UNC Highway Safety Research Center. 2013

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost[1]
Post Road East (US 1) & Imperial Avenue/Myrtle Avenue						
V4	Signal Timing Adjustments	• Coordinate with CTDOT	• Reduce traffic delay • Provide Minimum Crossing Time for Pedestrians • Eliminate Exclusive Ped Phase, Utilize Concurrent Ped Phasing to reduce traffic and ped delay • Overall LOS Change: LOS F to LOS D in MD, PM, and SAT MD, LOS D remains in AM (see LOS Table for comparison of lane groups)	• CTDOT • Town of Westport	PB16	• $2,500
Post Road East (US 1) & Compo Road (SR 136) [Concept Plans 4A & 4B]						
V5	Signal Timing Adjustments	• Coordinate with CTDOT	• Reduce traffic delay • Allows coordination with adjacent intersections and corridor • Eliminate Exclusive Ped Phase, Utilize Concurrent Ped Phasing to reduce traffic and ped delay • Overall LOS Change: LOS E to LOS D in MD and PM, LOS F to E in SAT MD, LOS F remains in AM (see LOS Table for comparison of lane groups)	• CTDOT • Town of Westport	V7, PB20	• $2,500
V6	Curb alignment modifications to median in the south leg of the intersection	• Survey • Preliminary Design • Explore potential impacts to utility infrastructure, grading and drainage patterns.	• Improve safety for traffic on NB approach by eliminating left turns in and out of the Compo Acres driveway using a median extension • LOS unchanged by improvement	• CTDOT • Town of Westport		• Total Reconfiguration - $16,000

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost[1]
Post Road East (US 1) & Compo Shopping Center/Compo Acres Driveway [Concept Plan 5]						
V7	Signal Timing Adjustments	• Coordinate with CTDOT	• Intersection previously uncoordinated can now be coordinated with Post Road East Corridor due to Signal Timing Adjustments at Compo Road. • Provide Minimum Crossing Time for Pedestrians • Overall LOS Change: LOS A to LOS B in AM, LOS B to LOS A in MD and PM, LOS B unchanged in SAT MD (see LOS Table for comparison of lane groups)	• CTDOT • Town of Westport	V5	• $2,500
V8	Align Driveway Access of Compo Shopping Center with Compo Acres	• Meet with Compo Shopping Center owner • Confirm truck access and typical size of trucks	• Improve sight lines for minor street driveway left turns • LOS unchanged by improvement	• Owner of Compo Shopping Center • CTDOT • Town of Westport	PB21, PB22	• Total Reconfiguration - $48,000 • Traffic Signal Equipment Upgrade - $200,000
Other						
V9	Install coordinated signage system to direct motorists to parking resources located off Post Road East (Parking Harding, Jessup Green, etc.)	• Coordinate with Downtown Plan Implementation Committee's on-going Wayfinding Plan	• An improved signage system could help reduce traffic congestion by making motorists more confident about navigating Downtown. Clearer signs at parking areas might help distribute parking more equally across either side of Post Road.	• Town of Westport CTDOT		• TBD
V10	Consolidate adjacent exits at Compo Shopping Center and Peoples United Bank	• Discuss with property owners	• Improved traffic safety as it reduces the number of curb cuts • Design should continue to restrict driveway exit to right turns only.	• CTDOT • Town of Westport • Property Owners		• TBD

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost
PEDESTRIAN & BICYCLE IMPROVEMENTS						
Post Road West (US 1) & Riverside Avenue/Wilton Road (SR 33) [Concept Plans 1A & 1B]						
PB1	Upgrade existing pedestrian equipment to latest standard pedestrian signals with countdown timers, and add new faces facing west at NE corner	• Coordinate with CTDOT and Town of Westport	• Clarify crossing indication and duration for pedestrians	• CTDOT • Town of Westport		• 2 New Pedestrian Signals using Existing Poles - $4,500
PB2	Install new pedestrian signal heads with countdown timers and poles at NW and SW corners (2 signal heads and 2 poles per corner)	• Coordinate with CTDOT and Town of Westport	• Clarify when and how long to cross for pedestrians, and serve new crosswalk proposed in PB3	• CTDOT • Town of Westport	PB3	• 5 New Pedestrian Signals with 4 new poles - $17,000
PB3	New crosswalk pavement marking on east leg of intersection, aligned perpendicular to roadway.	• Survey • Preliminary Design	• Define Pedestrian Crossing Location • Increase Driver Awareness of Pedestrian Crossing	• CTDOT • Town of Westport	PB2	• High Visibility Crosswalk - $1,000
PB4	Install 2 New ADA-compliant pedestrian ramps serving new crosswalk on west leg	• Survey • Preliminary Design	• Improve Pedestrian Mobility and Accessibility	• CTDOT • Town of Westport	PB3	• ADA Pedestrian Ramps - $3,000
PB5	Restripe Post Road East between Riverside Ave and Parker Harding Plaza to include curb side bicycle lanes in both directions	• Survey • Preliminary Design	• Create East-west bicycle facility across river to connect Riverside Ave and downtown Westport	• CTDOT • Town of Westport	PB10	• TBD
Post Road East (US 1) & Parker Harding Plaza/Jesup Rd [Concept Plans 2 & 1B]						
PB6	Install new crosswalk pavement marking on north and west leg of Intersection	• Survey • Preliminary Design	• Define Pedestrian Crossing Location Increase Driver Awareness of Pedestrian Crossing	• CTDOT • Town of Westport	PB7	• High Visibility Crosswalk - $2,000
PB7	Install new standard pedestrian signal heads with countdown timers at all four corners.	• Coordinate with CTDOT and Town of Westport	• Clarify crossing indication and duration for pedestrians, and serve new crosswalk proposed on east leg	• CTDOT • Town of Westport	PB6	• 8 New Pedestrian Signals and 4 New Poles - $20,000
PB8	Install new ADA-compliant pedestrian ramps to support new crosswalks	• Coordinate with CTDOT and Town of Westport	• Improve Pedestrian Mobility and Accessibility	• CTDOT • Town of Westport	PB6, PB9	• ADA Pedestrian Ramps (4) - $6,000
PB9	Curb Alignment Modifications to NW and SW corners	• Survey, Preliminary Design • Explore potential impacts to utility infrastructure, grading and drainage patterns.	• Reduce pedestrian crossing distance for north and south crosswalks • Reduce speeds of SB and EB right turning vehicles	• CTDOT • Town of Westport	PB8	• Curb Modification - $30,000

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost
PB10	Restripe Post Road East between Riverside Ave and Parker Harding Plaza to include curb side bicycle lanes in both directions	• Survey • Preliminary Design	• Create East-west bicycle facility across river to connect Riverside Ave and downtown Westport	• CTDOT • Town of Westport	PB5	• TBD
Post Road East (US 1) & Main Street/Taylor Place [Concept Plan 3]						
PB11	Install new crosswalk pavement marking on east leg of intersection	• Survey • Preliminary Design	• Define Pedestrian Crossing Location • Increase Driver Awareness of Pedestrian Crossing	• CTDOT • Town of Westport	PB13	• High Visibility Crosswalk - $1,000
PB12	Upgrade existing pedestrian equipment to latest standard pedestrian signals with countdown timers on two existing poles (4 total)	• Coordinate with CTDOT and Town of Westport	• Clarify crossing indication and duration for pedestrians	• CTDOT • Town of Westport		• 4 New Pedestrian Signals Using Existing Poles - $9,000
PB13	Install new standard pedestrian signal heads with countdown timers (5 total) and poles (5 total)	• Coordinate with CTDOT and Town of Westport	• Clarify crossing indication and duration for pedestrians, and serve new crosswalk proposed on east leg	• CTDOT • Town of Westport	PB11	• 5 New Pedestrian Signals each on new poles - $15,000
PB14	Install new ADA-compliant pedestrian ramp at NE corner to support new crosswalk	• Survey • Preliminary Design	• Improve Pedestrian Mobility and Accessibility	• CTDOT • Town of Westport	PB11	• ADA Pedestrian Ramps - $1,500
PB15	Install New Cross Hatching Pavement Marking to Discourage Parking within Pedestrian Crossing Area	• Survey, • Preliminary Design	• Provide unobstructed pedestrian access from new east crosswalk to existing pedestrian ramp on south curb	• CTDOT • Town of Westport	PB11	• Pavement Markings - $1,000
Post Road East (US 1) & Imperial Avenue/Myrtle Avenue						
PB16	Install turning vehicles yield to pedestrians and no RTOR signage at all approaches	• Coordinate with CTDOT and Town of Westport	• Increase driver awareness of traffic/pedestrian conditions at Intersection.	• CTDOT • Town of Westport	V4	• Signage - $2,400
Post Road East (US 1) & Playhouse Square Driveway/Bus Depot						
PB17	Install new crosswalk pavement marking on east leg of intersection, aligned with existing pedestrian ramps	• Survey • Preliminary Design	• Define Pedestrian Crossing Location • Increase Driver Awareness of Pedestrian Crossing Increase driver awareness of pedestrian crossing	• CTDOT • Town of Westport	PB18	• High Visibility Crosswalk - $1,000
PB18	Upgrade existing pedestrian equipment to latest standard pedestrian signals with countdown timers (2 total)	• Coordinate with CTDOT and Town of Westport	• Clarify crossing indication and duration for pedestrians	• CTDOT • Town of Westport	PB17	• 2 New Pedestrian Signals Using Existing Poles - $4,500

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost
Post Road East (US 1) & Compo Road (SR 136) [Concept Plans 4A & 4B]						
PB19	Curb alignment modifications to the median on the south leg of the intersection	• Survey • Preliminary Design	• Create pedestrian refuge in median in NB approach	• CTDOT • Town of Westport	V6	• See V6
PB20	Install turning vehicles yield to pedestrians and no RTOR signage at all approaches	• Coordinate with CTDOT and Town of Westport	• Increase driver awareness of traffic/pedestrian conditions at Intersection.	• CTDOT • Town of Westport	V5	• Signage - $2,400
Post Road East (US 1) & Compo Shopping Center/Compo Acres Driveway [Concept Plan 5]						
PB21	Upgrade existing pedestrian equipment to latest Standard pedestrian signals with countdown timers (2 total)	• Coordinate with CTDOT and Town of Westport	• Clarify crossing indication and duration for pedestrians	• CTDOT • Town of Westport	V8	• See V8
PB22	Install new crosswalk pavement marking on east leg of intersection with latest standard pedestrian signals with countdown timers and ADA-compliant pedestrian ramps	• Survey • Preliminary Design	• Define Pedestrian Crossing Location • Increase Driver Awareness of Pedestrian Crossing	• CTDOT • Town of Westport	V8	• See V8
Riverside Avenue (SR-33) & Burr Road						
PB23	Install yield here to pedestrian signage for the existing north crosswalk	• Survey • Preliminary Design	• Increase driver awareness of pedestrian crossing	CTDOT Town of Westport		• Signage - $600 •
Riverside Avenue (SR-33) & Saugatuck Elementary School Exit						
PB24	Install new crosswalk pavement marking on west leg of intersection	• Survey • Preliminary Design	• Increase driver awareness of pedestrian crossing	• CTDOT • Town of Westport		• High Visibility Crosswalks - $2,000
Riverside Avenue (SR-33) & Sylvan Road						
PB25	Install new crosswalk pavement marking on west leg of intersection	• Survey • Preliminary Design	• Define Pedestrian Crossing Location • Increase Driver Awareness of Pedestrian Crossing Increase driver awareness of pedestrian crossing	• CTDOT • Town of Westport		• High Visibility Crosswalks - $2,000
Riverside Avenue (SR-33) & Saugatuck Avenue/Treadwell Avenue [Concept Plan 6]						
PB26	Upgrade existing crosswalk pavement markings to standard Hi-Visibility crosswalks on all four legs of intersection	• Survey • Preliminary Design	• Define Pedestrian Crossing Location • Increase Driver Awareness of Pedestrian Crossing	• CTDOT • Town of Westport	PB27	• High Visibility Crosswalks – $4,000

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost
PB27	Install new standard pedestrian signal heads with countdown timers (8 total) on 4 existing poles and 1 new pole	• Coordinate with CTDOT • Town of Westport	• Clarify crossing indication and duration for pedestrians, and serve new crosswalks proposed	• CTDOT	PB26	• 8 Pedestrian signal heads with countdown timers and one new pole - $19,000
PB28	Install new ADA-compliant pedestrian ramps to support new crosswalks	• Survey • Preliminary Design	• Improve Pedestrian Mobility and Accessibility	• CTDOT • Town of Westport	PB26	• ADA Pedestrian Ramps (8) - $12,000 • Sidewalk at Corners - $7,000
Other						
PB29	Install sidewalk on east side of Riverside Avenue along Riverside Park	• Survey • Preliminary Design	• Increase pedestrian safety	• CTDOT • Town of Westport		• Sidewalk with Curb - $25,000
PB30	Install shared lane markings every 200’ along Riverside Avenue (SR-33) from Post Road West (US 1) to Treadwell Avenue	• Preliminary Design	• Increase driver awareness of cyclists	• Town of Westport	PB31	• Shared Lane Markings – $6,400
PB31	Install buffered bike lanes south of Cross Street (shared lane markings proposed between Cross Street and Post Road West (US 1))	• Survey • Preliminary Design • Identify locations where existing parking regulations are to remain. Modifications to parking regulations to be coordinated with Town of Westport and CTDOT.	• Provide dedicated space for cyclists	• Town of Westport • CTDOT	PB30	• TBD
PB32	Install Bicycle Route Signage along Jesup Road and Imperial Avenue to connect to proposed bicycle lanes on Post Road East and existing shared use path	• Survey • Preliminary Design	• Provide alternative east-west bicycle route away from Post Road East	• Town of Westport	PB5, PB10	• TBD

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost
TRANSIT IMPROVEMENTS						
T1	Implement Downtown Connector which was recommended in the Westport Bus Operations and Needs Study (June 2015)[2]	• Develop detailed operating plan including vehicle requirements • Develop funding plan • After service is implemented, install shelters at key locations	• Addresses the need for daytime transit service providing a link between the downtown area and Saugatuck Station for residents and visitors. • Reduces parking demand at station lots and creates a quick connection between Imperial Lot and the train station for commuters. • Potentially reduces traffic along Route 33. • The potential for economic benefits. For every $1 a community invests in transit, $4 is generated in economic returns.[3]	• Town of Westport • WTD • CTDOT • Norwalk Transit District	T2	• Annual Operating Costs - $188,336 - $223,649[4] • Shelters (est 6) - $90,000[5]
T2	Implement Downtown Circulator which was recommended in Westport Bus Operations and Needs Study (June 2015)[6]	• Should be phased in based on success of Downtown Connector • Develop detailed operating plan including vehicle requirements • Develop funding plan	• Addresses the need for daytime service for trips within Westport, and provides a transit option for shopping, work, medical, after-school and other trips. • Potentially reduces traffic along Route 1. The potential for economic benefits. For every $1 a community invests in transit, $4 is generated in economic returns.[7]	• Town of Westport • WTD • CTDOT • Norwalk Transit District	T1	• Annual Operating Costs - $188,336 - $235,420[8]

[2] Source: Westport Bus Operations and Needs Study (June 2015)
[3] Source: https://www.publictransportation.org
[4] Source: Westport Bus Operations and Needs Study (June 2015)
[5] Source: Westport Bus Operations and Needs Study (June 2015)
[6] Source: Westport Bus Operations and Needs Study (June 2015)
[7] Source: https://www.publictransportation.org
[8] Source: Westport Bus Operations and Needs Study (June 2015)

#	Project	Preliminary Steps	Benefits	Implementers (+ Partners)	Linked Projects	Est. Cost
T3	Implement Coast Link Improvements.[9] If CTDOT moves forward with the improvements recommended in the Route 1 BRT Study, the following improvements should be considered for Post Road in the study area: • Install real time information display (and bus stop sign) at Post Road East opposite Main Street[10] • Install bench and real time information display (and bus stop sign) at 400 Post Road East • Implement Transit Signal Priority for the eastbound and westbound approaches at Post Road West and Route 33	• Coordinate with CTDOT & three bus operators • For the Traffic Signal Priority improvement, the existing near-side bus stop would have to be relocated to the far-side. However, this would require removal of on street parking on the approach to the bridge and town approval would be needed.	• Installing the real time information displays and bench (at 400 Post Road East) would generate 38 potential daily boardings. The Transit Signal Priority improvement would speed bus service, improve reliability, and potentially increase ridership, which could improve congestion along Post Road.	• Town of Westport • CTDOT • Norwalk Transit District • Greater Bridgeport Transit District • Milford Transit District		• Bench - $1,500[11] • Real Time Information Display - $4,000[12] • Bus Stop Sign $1,000[13] Traffic Signal Priority - $9,600[14]

[9] Source: Route 1 Bus Rapid Transit Feasibility Study (June 2017)
[10] The Bus Rapid Transit Study called for a standard station (shelter, real time information display, boarding area, sidewalk replacement) at Post Road East opposite Main Street and a minor station (bench, real time information display, boarding area, and sidewalk replacement) at 400 Post Road East. After reviewing each of these locations as part of this study it was determined that, there was not enough public right of way to accommodate these type of stations. However, there should be enough space for signage and the proposed bench at 400 Post Road East.
[11] Source: Route 1 Bus Rapid Transit Feasibility Study (June 2017) – Cost does not include the cost for installation.
[12] Source: Route 1 Bus Rapid Transit Feasibility Study (June 2017) – Cost does not include the cost for installation.
[13] Source: Route 1 Bus Rapid Transit Feasibility Study (June 2017) – Cost does not include the cost for installation.
[14] Source: Route 1 Bus Rapid Transit Feasibility Study (June 2017)

b. Implementation Timeline

#	Project	Implementation Phasing		
		SHORT (0-3 yrs.)	MID (3 -5 yrs.)	LONG (5+ yrs.)
VEHICULAR IMPROVEMENTS				
Post Road West (US 1) & Riverside Avenue/Wilton Road (SR 33) [Concept Plan 1]				
V1	Relocate WB Coastal Link bus stop to west side of intersection	■		
V2	Signal Timing Adjustments	■		
Post Road East (US 1) & Parker Harding Plaza/Jesup Rd [Concept Plan 2]				
V3	Signal Timing Adjustments	■		
Post Road East (US 1) & Imperial Avenue/Myrtle Avenue				
V4	Signal Timing Adjustments	■		
Post Road East (US 1) & Compo Road (SR 136) [Concept Plans 4A & 4B]				
V5	Signal Timing Adjustments	■		
V6	Curb alignment modifications to median in the south leg of the intersection			■
Post Road East (US 1) & Compo Shopping Center/Compo Acres Driveway [Concept Plan 5]				
V7	Signal Timing Adjustments	■		
V8	Align Driveway Access of Compo Shopping Center with Compo Acres			■
Other				
V9	Install coordinated signage system to direct motorists to parking resources located off Post Road East (Parking Harding, Jessup Green, etc.)	■		
V10	Consolidate adjacent exits at Compo Shopping Center and Peoples United Bank			■
PEDESTRIAN & BICYCLE IMPROVEMENTS				
Post Road West (US 1) & Riverside Avenue/Wilton Road (SR 33) [Concept Plan 1A & 1B]				
PB1	Upgrade existing pedestrian equipment to latest standard pedestrian signals with countdown timers, and add new faces facing west at NE corner		■	
PB2	Install new pedestrian signal heads with countdown timers and poles at NW and SW corners (2 signal heads and 2 poles per corner)		■	
PB3	New crosswalk pavement marking on east leg of intersection, aligned perpendicular to roadway.		■	
PB4	Install 2 New ADA-compliant pedestrian ramps serving new crosswalk on west leg	■		
PB5	Restripe Post Road East between Riverside Ave and Parker Harding Plaza to include curb side bicycle lanes in both directions	■		
Post Road East (US 1) & Parker Harding Plaza/Jesup Rd [Concept Plan 2 & 1B]				
PB6	Install new crosswalk pavement marking on north and west leg of Intersection		■	■
PB7	Install new standard pedestrian signal heads with countdown timers at all four corners.		■	■
PB8	Install new ADA-compliant pedestrian ramps to support new crosswalks	■		
PB9	Curb Alignment Modifications to NW and SW corners			■
PB10	Restripe Post Road East between Riverside Ave and Parker Harding Plaza to include curb side bicycle lanes in both directions	■		
Post Road East (US 1) & Main Street/Taylor Place [Concept Plan 3]				
PB11	Install new crosswalk pavement marking on east leg of intersection		■	
PB12	Upgrade existing pedestrian equipment to latest standard pedestrian signals with countdown timers on two existing poles (4 total)		■	
PB13	Install new standard pedestrian signal heads with countdown timers (5 total) and poles (5 total)		■	
PB14	Install new ADA-compliant pedestrian ramp at NE corner to support new crosswalk	■		
PB15	Install New Cross Hatching Pavement Marking to Discourage Parking within Pedestrian Crossing Area	■		

Post Road East (US 1) & Imperial Avenue/Myrtle Avenue				
PB16	Install turning vehicles yield to pedestrians signage at all approaches			
Post Road East (US 1) & Playhouse Square Driveway/Bus Depot				
PB17	Install new crosswalk pavement marking on east leg of intersection, aligned with existing pedestrian ramps			
PB18	Upgrade existing pedestrian equipment to latest standard pedestrian signals with countdown timers (2 total)			
Post Road East (US 1) & Compo Road (SR 136) [Concept Plans 4A & 4B]				
PB19	Curb alignment modifications to the median on the south leg of the intersection			
PB20	Install turning vehicles yield to pedestrians signage at all approaches			
Post Road East (US 1) & Compo Shopping Center/Compo Acres Driveway [Concept Plan 5]				
PB21	Upgrade existing pedestrian equipment to latest Standard pedestrian signals with countdown timers (2 total)			
PB22	Install new crosswalk pavement marking on east leg of intersection with latest standard pedestrian signals with countdown timers and ADA-compliant pedestrian ramps			
Riverside Avenue (SR-33) & Burr Road				
PB23	Install yield here to pedestrian signage and yield triangle pavement marking for the existing north crosswalk			
Riverside Avenue (SR-33) & Saugatuck Elementary School Exit				
PB24	Install new crosswalk pavement marking on west leg of intersection			
Riverside Avenue (SR-33) & Sylvan Road				
PB25	Install new crosswalk pavement marking on west leg of intersection			
Riverside Avenue (SR-33) & Saugatuck Avenue/Treadwell Avenue [Concept Plan 6]				
PB26	Upgrade existing crosswalk pavement markings to standard Hi-Visibility crosswalks on all four legs of intersection			
PB27	Install new standard pedestrian signal heads with countdown timers (8 total) on 4 existing poles and 1 new pole			
PB28	Install new ADA-compliant pedestrian ramps to support new crosswalks			
Other				
PB29	Install sidewalk on east side of Riverside Avenue along Riverside Park			
PB30	Install shared lane markings every 200’ along Riverside Avenue (SR-33) from Post Road West (US 1) to Treadwell Avenue			
PB31	Install buffered bike lanes south of Cross Street (shared lane markings proposed between Cross Street and Post Road West (US 1))			
TRANSIT IMPROVEMENTS				
T1	Implement Downtown Connector which was recommended in the Westport Bus Operations and Needs Study			
T2	Implement Downtown Circulator which was recommended in Westport Bus Operations and Needs Study			
T3	Implement Coast Link Improvements			

Appendices

A. Public Outreach Findings Report

B. Concept Plans

C. Traffic Signal Modification Tables

D. Synchro Reports

A. Public Outreach Findings Report

Westport Main to Train Study

Public Outreach Findings Report

August 27, 2019

prepared by
NV5 - Connecticut, LLC

Table of Contents


STARBUCKS COFFEE
HSBC

1. Introduction

a. Background & Purpose

The Western Connecticut Council of Governments (WestCOG) received funding from the Federal Highway Administration and Connecticut Department of Transportation (CTDOT) to identify improvements to vehicular, bicycle, and pedestrian safety and circulation along Post Road (Route 1) and Riverside Avenue (Route 33). The purpose of the plan is to create better connections between the commercial center of town and the Saugatuck train station, and promote non-motorized transportation choices.

The study will cover approximately 2 miles of the Post Road and Riverside Avenue corridors. Specifically, the study area includes Post Road between Riverside Avenue and East Main Street (approx. ¾ miles), and Riverside Avenue between Post Road West and Treadwell Avenue (approx. 1¼ miles). The map below highlights the extents of the study area (see Figure 1 on page 6).

b. Objectives

The following are the objectives of this planning process:

- Identify goals and objectives that will guide the development and implementation of the plan.
- Engage the public and provide opportunities for meaningful involvement throughout the study.
- Inventory existing conditions to understand existing mobility conditions in the station area, including access to, operations of, the functionality of, and the corridors that connect Main Street to the Saugatuck Train Station.
- Recommend potential physical and operational improvements that address existing deficiencies and meet the projected demand from future growth, including from proposed developments.
- Develop strategies that lead to sustainable mobility and parking conditions.
- Produce a final implementation strategy to guide recommended improvements.

c. Project Partners

This study is being led by the Western CT Council of Governments (WestCOG). WestCOG has hired the firm NV5, based in Fairfield, CT, to undertake this study in cooperation with WestCOG and Town of Westport staff. A Study Technical Committee (STC) was convened that included CTDOT, WestCOG, and various Town staff and officials. The study process included a series of working and review meetings with the Study Technical Committee (STC) and with the public.

d. This Report

This report summarizes the methods utilized to conduct public outreach during the course of the study, as well as document the pubic outreach findings.

Figure 1: Aerial Photograph of the Study Area and Surroundings

2. Public Outreach Methodology & Findings

An extensive public outreach effort was conducted for the study consisting of the following elements:

a. Public Information Meetings

Five public information meetings were held during the course of the study to inform the public about the study, present its findings and results, and gain input. Each of these meetings were advertised on the project web site for the study (see below) as well on flyers that were posted at Westport Town Hall, Saugatuck Train Station, the Westport Post Office, and other locations such as Starbucks on Post Road East. The purpose of each meeting and the date, time, and location they were held are documented below:

Public Meeting #1 (October 1, 2018 at 7:00 p.m. at Westport Town Hall)

The purpose of the meeting was to introduce the project, which involves identifying improvements to safety and circulation along Post Road East (Route 1) and Riverside Ave (Route 33), to Town residents and other interested parties. A presentation highlighted the study's purpose, schedule, and scope. Meeting participants shared initial observations, concerns, and ideas with the project team.

Public Meeting #2 (January 7, 2019 at 7:00 p.m. at Westport Town Hall)

The purpose of this meeting was to provide residents and other interested stakeholders with an opportunity to learn about the project team's review of existing conditions in the study area and results from their data collection and analysis. Following a presentation by the project team, meeting participants provided comments and questions.

Public Meeting #3 (March 25, 2019 at 7:30 p.m. at Westport Town Hall)

The purpose of this meeting was to provide participants with an opportunity to learn about and discuss with the project team the preliminary concepts that have emerged from the study, in addition to sharing observations, concerns, and ideas. The format for the meeting was an open house, which allowed

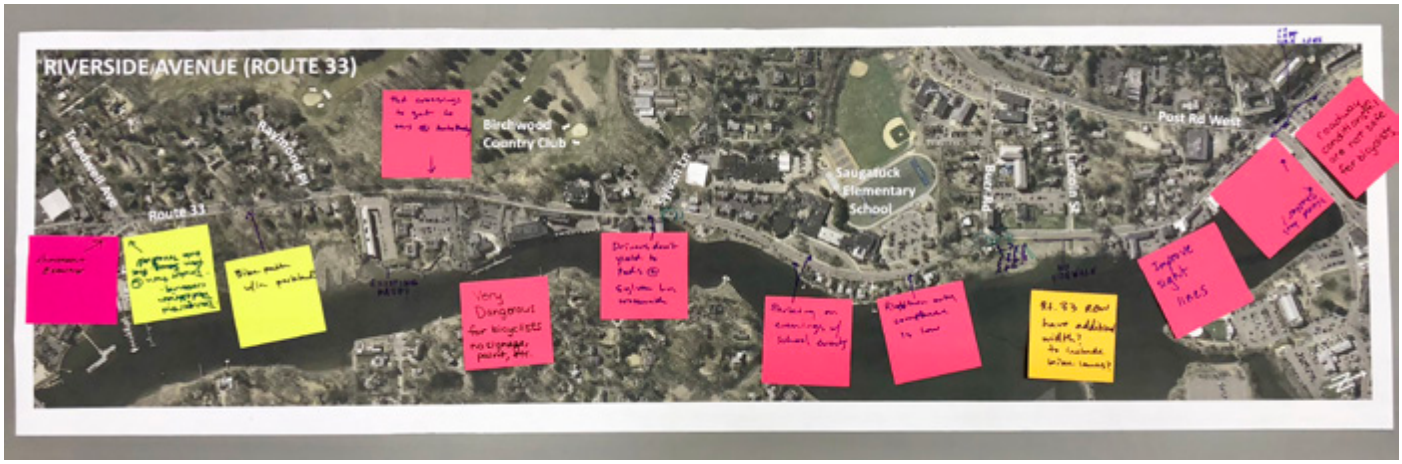
Figure 2: Participants at Public Meeting #3

participants to provide comments/questions to the project team in a number of ways including sticky notes attached to aerials of the study area, direct interaction with project team members, and the use of comment cards.

Public Meeting #4 (May 20, 2019 at 7:00 p.m. at Westport Town Hall)

The purpose of this meeting was to provide participants with an opportunity to discuss the study's draft recommendations and alternatives with the project team and to share observations, concerns, and ideas. The format for the meeting was a workshop where the project team presented the draft recommendations and alternatives on a series of boards then elicited feedback from meeting participants.

Figure 3: Participants placed comments on aerial photographs of the study area



Public Meeting #5 (June 24, 2019 at 7:00 p.m. at Westport Town Hall)

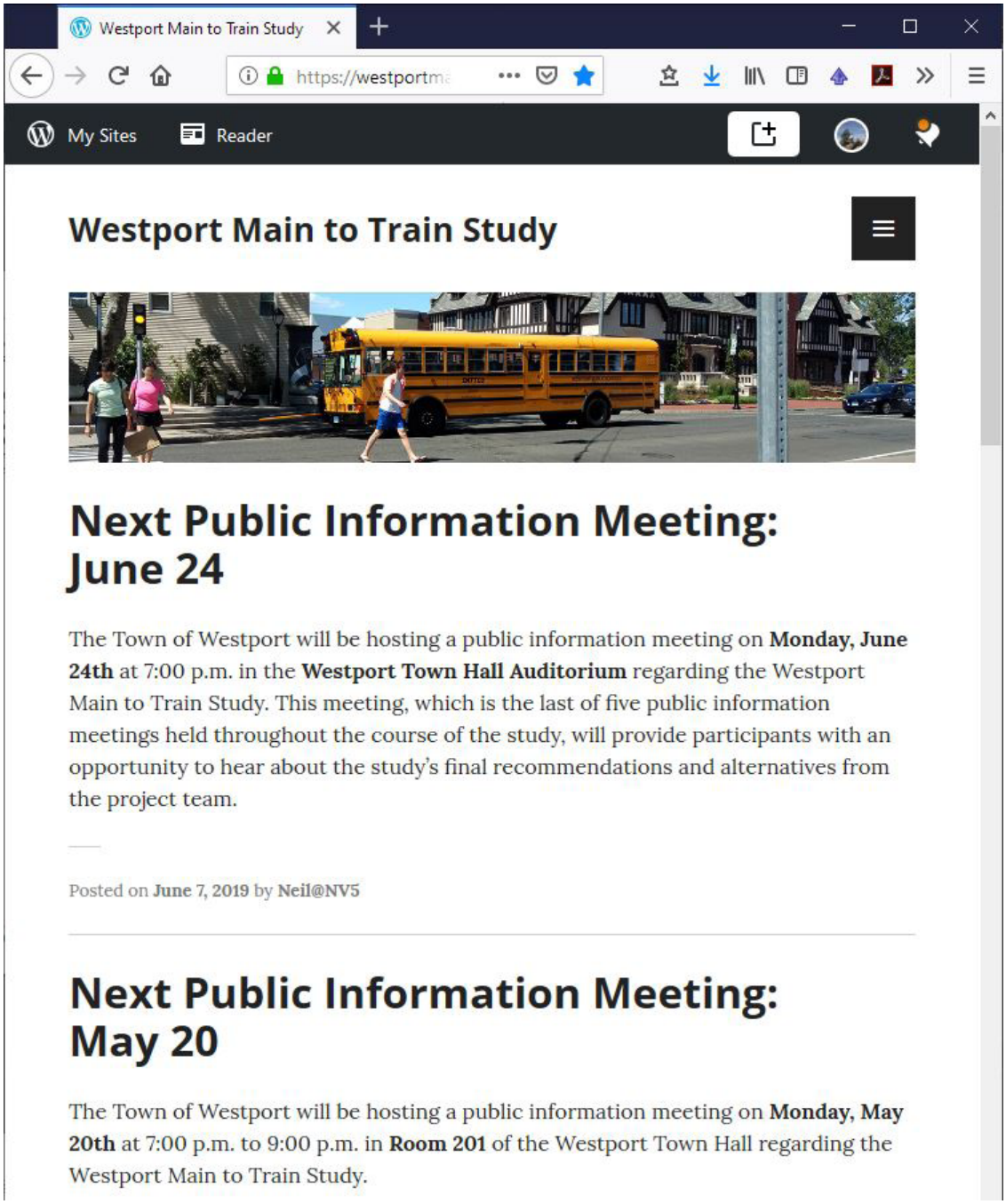
The purpose of this meeting was to provide participants with an opportunity to hear about the study's final recommendations and alternatives. Following a presentation by the project team, meeting participants provided comments and questions.

Summaries that detailed public comments and questions, as well as the responses by the project team were produced for each public information meeting. These summaries were posted to the project website and are included in this report. In addition to the meeting summaries, the Town of Westport recorded the public information meetings. These recordings were televised live on the local town TV channel and are available on the Town's website (www.westportct.gov), as well as through links on the project website.

b. Project Website

A project website (www.westportmaintotrain.com) was developed for the study that contained general project information, a frequently asked questions page (FAQ), project deliverables, presentations, and technical committee meeting minutes. The website also included a comment section where the public could make direct inquires about the project. This was handled by WestCOG. It also allowed interested participants to sign up for e-mail updates when there were additions to the website.

Figure 4: An image of the front page of the project website



Several comments related to the technical aspects of the study were submitted through the website. These are aggregated and summarized below. Responses to these comments were sent by WestCOG and/or were discussed in reports and public information meetings for this study.

- Pedestrian signal equipment and crosswalks need improvements in downtown Westport.
- Crosswalks missing at Post Road East and Parker Harding Plaza, prevent continuous pedestrian facilities along east side of Saugatuck River.
- Would like to see audible devices installed at signals in downtown to accommodate the blind/visually impaired.
- Would like to see more crosswalks to have the ability to cross Riverside Avenue in a few more locations.
- Some pedestrians have difficulty travelling through downtown by wheel chair due to narrow sidewalks and poor pedestrian ramps.
- Pedestrian mobility should be a priority over traffic flow.
- Public supports improvements to facilities for modes other than automobile/traffic.
- Bus stops should be located on level parts of the roadway and where they do not block through traffic at Post Road West and Riverside Avenue.
- Consider bus shelters at Compo Road.
- It was recommended that further modifications be proposed for the southbound approach to Post Road West and Riverside Avenue/Wilton Road, as excessive queuing is present during peak hours.
- Supports bicycle lanes over bicycle sharrow markings proposed on Riverside Avenue.

c. Stakeholder Interviews

To gain additional insight into issues and opportunities related to the study, stakeholder interviews were held with the Downtown Merchants Association, Sound Cyclists, and the Chamber of Commerce. Questions that were asked included:

- What issues have you observed while traveling through or getting to places along Post Road and Riverside Ave?
- Do the people you represent use public transportation?
- Do the people you represent walk and bike?
- What specific transportation and mobility improvements that would be beneficial?
- Is there a need for wayfinding signs?
- Would smart cities technology be useful?
- Where are the most popular routes for cyclists in and around Westport?
- Do conditions along the Post Road and Riverside Avenue corridors impact the downtown area?

Some of the key comments made by the stakeholder groups include the following:

- It is difficult for pedestrians to cross between the north and south side of Post Road because of heavy traffic.
- Wayfinding signs would be helpful for downtown visitors to see how close parking is to shopping.
- Wayfinding should address drivers as well as pedestrians and cyclists.
- Merchants express that there is not enough signage.
- The Chamber of Commerce has just started a Wayfinding Sign Program.
- Drivers and (bicyclists) become pedestrians so the connections between parking lots and retail need to be stronger.
- Pedestrians cross on Post Road East just east of the bridge over the Saugatuck River (near Starbucks), but there is no crosswalk.
- There is a lack of bicycle parking in the Downtown area.
- The connection between Downtown and the Saugatuck Station is important, but not sure if there is enough demand to justify increase in transit service.
- Bike lanes on Riverside Avenue and Post Road would be helpful.

d. Study Technical Committee

A Study Technical Committee (STC) was formed prior to the start of the study to guide the overall study process and review project deliverables. The STC members consisted of WestCOG, Westport DPW, Westport P&Z, the Westport First Selectman's Office, the Westport Police Department, and CTDOT. Five STC meetings were held during the course of the study on the following dates:

- **Kick-Off Meeting** (August 2, 2018 at 1:00pm at Westport Town Hall)
- **STC Meeting #2** (December 11, 2018 at 2:00pm at Westport Town Hall)
- **STC Meeting #3** (February 19, 2019 at 2:00pm at Westport Town Hall)
- **STC Meeting #4** (May 1, 2019 at 2:00pm at Westport Town Hall)
- **STC Meeting #5** (June 12, 2019 at 2:00pm at Westport Town Hall)

Meeting minutes for each of these meetings are provided in this report and on the project website. STC meetings were open to the public. However, because they were working group meetings, public comments were made after the meeting by submitting comments in writing to the project team via the project website or e-mail.

3. Meeting Summaries

Public Information Meetings Summaries

STC Meeting Summaries

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

Public Information Meeting #1

October 1, 2018 at 7:00pm

at Westport Town Hall

Attendees:

First Selectman Jim Marpe	Town of Westport
Peter Ratkiewich	Town of Westport
Sara Harris	Town of Westport
Keith Wilberg	Town of Westport
Victor Minerva	NV5
Nicole Sullivan	WestCOG
Kristin Hadjstylianos	WestCOG
Peter Gold	RTM Transit
Jennifer Johnson	
Bill Ryan	
Curtis Sullivan	

Purpose:

The purpose of Public Information Meeting #1 was to introduce the "Main to Train" study to the public and present the following information:

- Study Background and Purpose
- Early Objectives
- Scope and Schedule including Project Management and Outreach
- Data Collection and Review
- Historical Context
- Early Action Item – Bicycle facilities on Route 33

Topics/Points Raised:

➔ **Introductory Remarks & Presentation.** Following introductory remarks by First Selectman Jim Marpe about the importance of the study and a presentation by NV5 which addressed each of the items listed above, the public provided questions and comments.

The following is a summary of the public input:

- The question was asked; why is the study area truncated at Treadwell Avenue & Route 33? The response was that the area below Treadwell was already examined in the TOD Study. However, traffic data from the Cribari Bridge project will be incorporated in the traffic analysis for this project.

WESTPORT MAIN TO TRAIN STUDY

- The question was asked; will the Study Technical Committee (STC) meetings be open to the public and advertised? As part of the question it was pointed out that Westport has already had a number of transportation studies, and that the results of many of these studies have not been implemented. It was stated that opening up the STC meetings to the public is a way to ensure that recommendations are enacted upon. The response to this question will be discussed at the next steering committee meeting, although it was mentioned that this type of corridor study is used by CTDOT to prioritize actual improvement projects as part of the STIP.
- A question was asked about changing the name of the study to something other than "Main to Train". It was stated that as a corridor study for Route 1, it does not accurately account for other connections between Downtown and the train station such as Imperial Avenue, as well as improved bus services. It was stated that calling the study "Main to Train" could limit the ability to get funding for a broader study that looks at all connections between the train station and Downtown in the future.
- There was a concern that in waiting a year for the study to be completed, the Town is missing out on moving forward with improving vehicular and pedestrian safety at troublesome intersections such as Route 1 and Compo Road. It was stated that the Town should be looking to put funding into DPW's budget (possibly through LOTCIP) so that it can do the detailed engineering design and construct improvements at these intersections. In response to this comment, the Town indicated that while the Downtown Master Plan identified a number of improvements to improve pedestrian safety on Route 1 including additional crosswalks & traffic signal timing improvements, they were told by CTDOT that this corridor study needs to be done before these improvements can be implemented.
- The Town of Westport indicated that the study is going to focus on improving pedestrian and bicycle movement/safety moving north to south (along Riverside Avenue, Compo Road, etc.) across Route 1 so that people utilizing these modes can more effectively travel to the train station, while at the same time looking to improve vehicular circulation and safety east to west along Route 1.
- The point was raised that transit improvements (e.g. improved shuttle service and Coastal Link service) should also be considered as part of the study. The response to this was that the recommendations from the Westport Bus Study as well as the Route 1 BRT Study will be incorporated into this study.
- The point was made that the intersection of Route 1 and Route 33 has no pedestrian signal lights, which makes it difficult to cross especially for children, and that this should be addressed by this study. The response to this is that this will definitely be addressed during the study.
- The question was asked; who is doing the traffic analysis? The response was that NV5 is doing the traffic analysis with input from CTDOT.

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

Public Information Meeting #2

January 7, 2019 at 7:00pm

at Westport Town Hall

Attendees:

Peter Ratkiewich	Westport DPW
Michelle Perillie	Westport P&Z
Sarah Harris	Westport Selectman's Office
Allan D'Amura	Westport PD
Sam Arciola	Westport PD
Sal Liccione	
Michael Calise	
Jennifer Johnson	
Amy Kaplan	
Jonathan Steinberg	CGA
Victor Minerva	NV5
Chris Lucas	NV5
Justin Iwinski	NV5
Nicole Sullivan	WestCOG
Kristin Hadjstylianos	WestCOG
Kristin Floberg	WestCOG

Purpose:

The purpose of Public Information Meeting #2 was to present the review of existing conditions and the results of the traffic analysis. Specifically, the presentation covered the following information:

- Review of Existing Conditions
- Traffic Analysis
- Accident Analysis
- Parking Analysis

Topics/Points Raised:

- ➔ **Presentation.** Following NV5's presentation which addressed each of the items listed above, the public provided questions and comments. The following is a summary of their input.
    - A question was asked about traffic signal timing along Post Road and whether the signal at Post Road East and Compo Shopping Center would be considered coordinated as the signal immediately to the west in the study area (Post Road East and Compo Road) is not coordinated.

- NV5 indicated that they will determine if the signal coordination extends east of Compo Road, outside of the study area.

- A point was made that connections other than Route 33 between downtown and the train station should be examined given that the bicycle ridership on Route 33 was so low.
    - NV5 replied that the demand for a bicycle facility on Riverside will be revealed through the public input process. Low ridership can be the result of low demand, but it is also frequently associated with conditions that cyclists feel are not safe and therefore do not use as a route.
- A comment was made that tough choices are needed in order to make space for bicycles, such as removing parking when necessary to accommodate bicyclists and pedestrians.

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

Public Information Meeting #3

March 25th, 2019 at 7:30pm

at Westport Town Hall

Attendees:

Hon. Jim Marpe	Westport First Selectman
Peter Ratkiewich	Westport DPW
Sara Harris	Westport Selectman's Office
Allan D'Amura	Westport PD
Michelle Perillie	Westport P&Z
Sam Arciola	Westport PD
Victor Minerva	NV5
Chris Lucas	NV5
Nicole Sullivan	WestCOG
Kristin Floberg	WestCOG
Diane Johnson	
Sal Liccione	
Berry Kresch	
Pippa Bellader	
Jran Miller	
Jennifer Johnson	
Amy Kaplan	
David Ames	
Peter Gold	
Cathy Walsh	

Purpose:

The purpose of Public Information Meeting #3 was to provide participants with an opportunity to discuss and share observations, concerns, and ideas about the study, in an open house format.

Topics/Points Raised:

- **Open House.** NV5 provided three informational boards that presented a detailed description of what the project was about, initial public input from the first two public meetings and stakeholder interviews, and an overview map of the study area. Large scale aerial maps were also provided along with post it notes which allowed participants to write or post their ideas/concerns directly on the aerials. In addition, a brief survey was available for participants

to fill out and return which asked more pointed questions about specific intersections in the study area that presented problems to pedestrians and motorists. A summary of the public comments provided on the aerial maps (broken down by route), as well as from the returned surveys is provided below.

- **Comments on Aerial Maps**
  - Route 1
    - Long crossing at Route 33 and Route 1. No crosswalk on west side of intersection
    - Vehicles get backed up on bridge on Route 1
    - Need for additional crosswalks on Route 1 (intersection with Parker Harding Plaza)
    - Need bus shelters on Route 1
    - No stop sign at Playhouse Square driveway
    - Delayed left in the southbound movement on Compo Road delays traffic
    - Compo Road should have a bicycle lane
    - Trader Joes entrance/exit unsafe. T-bone accidents occur often.
    - School bus parking lot on Route 1 should be relocated
  - Route 33
    - Drives don't yield to pedestrians at Sylvan Lane crosswalk
    - Very dangerous for bicyclists on Route 33 (need for signage or markings-sharrows)
    - Need for additional pedestrian crossings on Route 33
    - Treadwell Avenue and Route 33 intersection is dangerous for pedestrians
    - Need to investigate roundabout for Treadwell Avenue/Route 33 intersection
  - Surveys
    - Riverside Avenue and Post Road are difficult to bicycle on. Need for increased signage and markings
    - Need for more buses and shelters
    - Need for bus shuttle to Main Street
    - Route 33/Post Road West intersection is dangerous for pedestrians

WESTPORT MAIN TO TRAIN STUDY

- Buses leaving lot on Post Road East is an safety issue
- Post Road East/Compo Shopping Center and Post Road East and East Main Street intersections are difficult for pedestrians.
- Drivers are oblivious to the crosswalk at Route 33 and Sylvan Road
- Treadwell Avenue/Route 33 intersection can be unsafe

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

Public Information Meeting #4

May 20, 2019 at 7:00pm

at Westport Town Hall

Attendees:

Keith Wilberg	Westport DPW
Sara Harris	Westport Selectman's Office
Allan D'Amura	Westport PD
Michelle Perillie	Westport P&Z
Sam Arciola	Westport PD
Victor Minerva	NV5
Justin Iwinski	NV5
Nicole Sullivan	WestCOG
Kristin Floberg	WestCOG
Patsy Cimarosa	Westport Transit District
Martin Fox	Westport Transit District
Sal Liccione	
Peter Gold	
David Ames	
Rep. Jonathan Steinberg	

Purpose:

The purpose of Public Information Meeting #4 was to provide participants with an opportunity to discuss and share observations and concerns about potential improvements and concepts in an open house format.

Topics/Points Raised:

- **Open House.** NV5 provided 17 informational boards that presented a matrix of all of the alternatives including vehicular improvements, pedestrian and bicycle improvements, and transit improvements, along with related concept drawings. A summary of the public comments provided at the open house is shown below.
    - Sharrow bicycle markings on Riverside Avenue (SR 33) is a good start to help bicyclists but in the longer term it would be great to have an actual bike lane.
    - Removing on-street parking on the Post Road East bridge (US 1) will have a negative impact on the businesses located near the intersection of Post Road East and Riverside Ave. In regard to the alternative design for Post Road East between Riverside Avenue and Parker Harding Plaza/Jesup Road to include bicycle lanes in both directions, it was

asked whether more existing parking spaces along the south curb could be preserved in this design.

- A number of people indicated that they thought aligning the entrances to Compo Shopping Center and Compo Acres was a good idea, although it will require coordination with the property owners.
- It was suggested that the median proposed at Compo Road (SR 136) and Post Road East (US 1) should be extended further south to prevent vehicles from "cheating" the left turn exiting the Compo Acres driveway.
- A few recommendations were made to create a bicycle route parallel to Post Road East utilizing Jesup Road, Imperial Avenue, the Senior Center Parking Lot, and town-owned property east of the Senior Center to connect to Compo Road south of Post Road East.
- It was suggested that a summer shuttle loop connecting the Saugatuck Train Station, downtown Westport, the Senior Center, and Compo Beach for visitors, young adults and seniors without automobile access would improve mobility within the town.
- It was mentioned that the Coastal Link bus service has a few different phone applications that provide bus arrival time and scheduling information. However, they only serve specific zones along the bus route depending on the operator. It was suggested that one integrated application for the entire route be developed and coordinated between the municipalities which operate the bus route.
- It was asked whether a sidewalk could be installed along the east side of Riverside Avenue (SR 33) from Cross Street (where it currently terminates) to the Saugatuck Elementary School.

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

Public Information Meeting #5

June 24th, 2019 at 7:00pm

at Westport Town Hall

Attendees:

Hon. Jim Marpe	Westport First Selectman
Peter Ratkiewich	Westport DPW
Keith Wilberg	Westport DPW
Sarah Harris	Westport Selectman's Office
Sam Arciola	Westport PD
Michelle Perillie	Westport P&Z
Victor Minerva	NV5
Justin Iwinski	NV5
Nicole Sullivan	WestCOG
Sal Liccione	
Lynandro Simmons	
Lou Mall	
Jessica Bran	

Purpose:

The purpose of Public Information Meeting #5 was to present the recommended improvements to study area intersections to promote the project objectives, including a summarization of the process and public input given through-out the project.

Topics/Points Raised:

- **Presentation.** Following NV5's presentation which addressed each of the items listed above, the public provided questions and comments. The following is a summary of their input.
    - One question was asked regarding the process for modifying the driveway of Compo Shopping Center which lies on private property.
        - NV5 responded that further coordination will be required with the property owner to the north to get buy-in for improvements outside of the public right-of-way.
    - Comments were made by a few town residents stating that the bicycle 'sharrow' improvement along Riverside Avenue would not feel safe and suggest that the curb-side bicycle lane alternative improvement along Riverside Ave would be more appropriate.

- NV5 responded that both options are being considered, however, implementation of curb-side bicycle lanes would eliminate existing parking and drop-off areas near the Saugatuck Elementary School and adjacent to the Birchwood Country Club. Elimination of parking would require coordination with stakeholders and the town to determine another means of providing parking and drop-off locations to avoid blockage of the bicycle lanes.

- One comment was made concerning the existing parking demand along Riverside Avenue that would be potentially displaced onto local streets by the implementation of curb-side bicycle lanes.
  - NV5 acknowledged the comment, and agreed that alternatives should be coordinated with stakeholders and the town for parking and drop-off conditions along Riverside Avenue to avoid displacing parking and drop-off activities on local residential streets near Riverside Avenue.
- One comment was made on the new sidewalk recommended along Riverside Avenue Park which was favorable but that Westport Parks and Recreation Department should be notified and coordinated with for these sidewalk improvements.
  - NV5 acknowledged comment.

WESTPORT RAIL STATION STUDY – PHASE 2

MEETING SNAPSHOT

Kickoff Meeting

August 2nd, 2018 at 1:00pm

at Westport Town Hall

Attendees:

Peter Ratkiewich	Westport DPW
Santosh Patel	CTDOT
Kristin Hadjstylianos	WestCOG
Kristin Floberg	WestCOG
Greg Del Rio	NV5
Victor Minerva	NV5
Michelle Perillie	Westport P&Z
Mary Young	Westport P&Z
Sarah Harris	Westport Selectman's Office
Allan D'Amura	Westport PD
John Lockaby	CTDOT – Traffic
Jonathan Corilla	CTDOT – Project Development
Nicole Sullivan	WestCOG
Graig Bordiere	CTDOT
Marlon Pena	CTDOT

Purpose:

Project Kick-off meeting to introduce the Study Technical Committee (STC) to the project, review the scope, schedule, and public outreach approach, and discuss goals and objectives, as well as data collection efforts and needs.

Action Items:

- ☐ **Development Applications.** NV5 will obtain recent and relevant development applications from the Town of Westport's web-site.
- ☐ **Signal Plans.** NV5 will obtain signal plans (closed loop timings) for all of the signalized intersections in the study area from CTDOT.
- ☐ **Traffic Assumptions Memorandum.** NV5 will prepare a memorandum for CTDOT that will summarize our assumptions for the traffic analysis such as peak hours, peak hour factors, growth rates, etc..

WESTPORT RAIL STATION STUDY – PHASE 2

- ☐ **Parking Inventory**. NV5 will do a parking inventory along Route 33 to capture occupancy.
- ☐ **Road Safety Audit (RSA) Meeting**. NV5 will attend the RSA Meeting in Westport scheduled for September 12th. NV5 will also obtain all presentation materials from CTDOT/WestCOG.
- ☐ **Cross Sections of Route 33.** As an early action item, NV5 will prepare cross sections of Route 33 to show the feasibility of adding a bicycle lane(s), as CTDOT is scheduled to repave this roadway (with 11 ft. travel lanes).

Key Decisions:

- ✓ **Name of Study**. STC members agreed that the name of the study should be the "Main to Train Study" to be clearer to the public about the general extent and nature of the study.
- ✓ **Stakeholders**. STC members indicated that the following stakeholder groups should be part of the study:
    - Downtown Implementation Committee – Dewey Loselle
    - Downtown Merchants Association
    - Local Bike Organization
    - Director of School Operations
    - Westport Chamber of Commerce
    - CT Commuter Council
    - CTDEEP
- ✓ **Web-Site.** Posters and flyers will include a scan-able bar code that directs people to the project web page. The web page will be managed by the consultant.
- ✓ **Promotion and Media releases and promotion**. The study should be promoted through the use of posters and flyers posted at Saugatuck Station, Westport Town Hall, Library, and Post Office. WestCOG will work with the Town of Westport to distribute/coordinate media releases (to outlets such as Westport NOW at appropriate intervals during the study.) The consultant will develop/prepare all media materials.
- ✓ **First Public Meetings**. The first public meeting should be scheduled for the end of September. This meeting should be coordinated with the Cribari Bridge meeting. The meeting as well as all subsequent meetings should be filmed. Requests for the scheduling and filming of meetings should take place through the Town's Eileen Francis. *Following the kick-off meeting, the date of the first public meeting was scheduled for October 1st.*

WESTPORT RAIL STATION STUDY – PHASE 2

Topics/Points Raised:

- **General Study Objectives/Hoped-For Outcomes.** Attendees provided input from their perspectives on issues, as well as the goals, objectives and desired outcomes of the project. The following is a summary of their input.
  - Need to improve north/south pedestrian connections across Route 1, particularly at Compo Road, while improving east/west vehicular operations
  - Better facilities for pedestrians and bicyclist in both corridors
  - Better traffic signal coordination (including improved coordination with ped signals)
  - Need to establish a better connection between Route 1 and the train station
  - Should discuss how these studies are necessary to help fund future improvements and guide CTDOT's decision making. Can illustrate this during the public meeting by providing a series of historical maps showing how Route 1 has changed and what improvements were made
  - Should focus on shifting modes from vehicles to pedestrian and bicycles which will reduce traffic congestion
- **Data Collection**. NV5 conducted traffic counts and performed field observations during the week of June 11th. As noted earlier, traffic signal plans are being requested from CTDOT. In addition, a number of other studies and plans, were brought up by the Town and CTDOT during the meeting and will be reviewed by NV5. These studies and plans (which are grouped by source) include:

  NV5
  - Westport Rail Stations Study (prepared by NV5)
  - Downtown Master Plan (prepared by NV5)

  Town of Westport
  - 2017 POCD
  - Saugatuck TOD Study (given to NV5 at meeting)
  - Plan for Whole Foods corridor
  - Replacing the parking lots at Parker Harding and Jessup Green
  - East of Church Lane – ramp near Patagonia

  CTDOT
  - Route 1 BRT Study
  - Replacement of traffic signals at Taylor Place/Main St. and Parker Harding/Main St.

- Pedestrian control at House Lane (Hawk Signal)
- Resurfacing of Route 33 (mentioned earlier)

<u>WestCOG</u>

- Replacing signal at Treadwell/Riverside – LOTCIP
- Compo Road to Bridge Street – LOTCIP

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

STC Meeting #2

December 11th at 2:00pm

at Westport Town Hall

Attendees:

Peter Ratkiewich	Westport DPW
Michelle Perillie	Westport P&Z
Mary Young	Westport P&Z
Sarah Harris	Westport Selectman's Office
Allan D'Amura	Westport PD
Sam Arciola	Westport PD
John Lockaby	CTDOT
Jonathan Corilla	CTDOT
Sal Liccione	
Peter Gold	
Nicole Sullivan	WestCOG
Kristin Hadjstylianos	WestCOG
Kristin Floberg	WestCOG
Victor Minerva	NV5
Justin Iwinski	NV5
Marty Fox	Westport Transit District
Anna Bergeron	CTDOT
Marlon Pena	CTDOT

Purpose:

The main purpose of the second STC Meeting was to review the Existing Conditions Report as well as the existing traffic conditions.

Action Items: None

Key Decisions:

- ✓ **Economic Development Scenarios**. The question was asked whether the Town was planning on any significant zoning changes along the Route 1 corridor which would impact future traffic conditions. The Town indicated that there were no zoning changes planned for the corridor.

Topics/Points Raised:

WESTPORT MAIN TO TRAIN STUDY

- **Review of minutes from Public Meeting #1.** NV5 went over the meeting minutes from the first public meeting. These minutes are provided on the project web-site.
- **Review of Existing Conditions Report**. NV5 presented a summary of the Existing Conditions Report focusing on the key findings in each chapter which included relevant plan and studies, the roadway network, pedestrian features and facilities, environmental conditions, and transit service. Comments on the report included including the recent results of the transit district survey into the relevant plans and studies chapter, and correcting the date of the crash data. After addressing these comments, the report will be posted to the project web-site.
- **Review of existing traffic conditions**. NV5 presented a summary of the data collection effort and existing traffic analysis. Lane groups operating poorly at congested intersections were discussed, as well as aspects of the existing traffic demand and signal timing that could be causing congestion. The most problematic intersections identified were Post Rd West and Riverside Ave/Wilton Ave, Post Rd East and Compo Rd North/South, and Riverside Ave and Treadwell Ave/Saugatuck Ave.
    - Following the discussion of existing conditions, select no-build projects were discussed to get further input from the Study Technical Committee:
        - Plan for Whole Foods Corridor – CTDOT Planning did not have any information on this project, NV5 was directed to reach out to Paul O'Keefe at CTDOT and Sharat Kalluri at CDM Smith for more information.
        - Bridge No. 01349 –CTDOT Planning did not have any input or assumptions for changes to traffic patterns in the area. Therefore, it was agreed to assume the project would not affect traffic patterns for the Main to Train Study.
        - Village at Saugatuck (28-47 Hiawatha Lane) – Westport P&Z mentioned this newly submitted project that should be reviewed by NV5 to assess its impact on the traffic study area.
        - 215 Post Road West – Westport P&Z reported that a potential 80-100 DU development may occur at 215 Post Rd West, as the site is currently under bank control. NV5 to consider including as a potential development.
- **Review of parking inventory on Route 33.** NV5 presented the results of the parking inventory that was conducted on Route 33 to determine the utilization of on-street parking, to inform the implementation of potential bicycle facilities along the roadway. The inventory focused on the three zones along Riverside Avenue (Route 33): (1) Between Post Rd West (US 1) and Cross St, (2) Along the Saugatuck Elementary School, and (3) Along the Birchwood Country Club.
    - Location 1: Parking was low to moderately utilized during the weekday midday and evening periods.
    - Location 2: Parking was only 33% utilized in the midday period, while no vehicles were present parked during the evening periods.

- Location 3: Parking was significantly utilized during the weekday midday period, while only one parked vehicle was observed during the evening period.
- The STC agreed that implementation of new bicycle infrastructure should continue to be explored, even with parking demand present during the weekday midday period. This could include elimination or restriction of parking on the east side of Riverside Avenue between Cross St and Treadwell Ave, while parking should likely remain between Cross St and Post Rd West.

➔ **Discussion of Public Meeting #2.** The format and topic of the second public meeting #2 was discussed. The second meeting would present the findings from the Existing Conditions Report and well as the complete Traffic (existing and no build) and Accident Analysis.

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

STC Meeting #3

February 19, 2019 at 2:00pm

at Westport Town Hall

Attendees:

Peter Ratkiewich	Westport DPW
Sara Harris	Westport Selectman's Office
Allan D'Amura	Westport PD
Michelle Perillie	Westport P&Z
Sam Arciola	Westport PD
Jay Lockaby	CTDOT
Jonathan Corilla	CTDOT
Santosh Patel	CTDOT
Kristin Hadjstylianos	WestCOG
Victor Minerva	NV5
Peter Gold	
Jarrett Leiotta	
Justin Iwinski	NV5
Nicole Sullivan	WestCOG

Purpose:

The main purpose of the third STC Meeting was to review the received comments on the Draft Traffic Analysis Report.

Action Items: None

Key Decisions: None

Topics/Points Raised:

- **Review of minutes from Public Meeting #2.** NV5 went over the meeting minutes from the second public meeting. These minutes are provided on the project web-site.
- **Review of Draft Traffic Analysis Report**. NV5 indicated that comments provided by CTDOT will be addressed in the revised report. With respect to comments related to Appendix C, NV5 indicated that while miovision counts were not collected at the former town hall (as it was not part of the traffic analysis) visual observations could be made to account for the level of bicycle and pedestrian activity. One additional comment raised by the STC involved revising the

sentence on page 11 that begins with, "The approximate ADT of Post Road is approximately 18,200 vehicles per day at Riverside Avenue (SR 33), and 22,900 vehicles per day at Compo Road". The word approximate will be deleted as it is repeated in the sentence.

➔ **Results of Stakeholder Interviews -** NV5 presented the results of the stakeholder interviews. To date, over the phone interviews have been held with the Downtown Merchants Association and Sound Cyclists to obtain their input on issues/opportunities related to Route 1 and Route 33. NV5 will continue to follow up with the other stakeholder groups identified by the STC, this includes the Downtown Implementation Plan Committee, School Operations, Chamber of Commerce, CT Commuter Rail Council, Saugatuck TOD Master Plan Steering Committee, POCD Steering Committee, and Commission on People with Disabilities. Key issues/opportunities raised by the two stakeholder groups interviewed include:

<u>Merchants Association</u>

- Difficulty for pedestrians to cross between North and South side of Post Road
- Lack of cars stopping at the mid-block crossing on Post Road when pedestrians are present
- People cross at Starbucks near the bridge
- Increasing foot traffic is a goal of the Merchants Association
- Wayfinding is needed for pedestrians and motorists

<u>Sound Cyclists</u>

- The most problematic places for bicycling are the strip of road on Riverside Avenue opposite the Rowing Club, Cribari Bridge, and Ferry Lane
- Bicycle lanes on both Riverside Avenue and Post Road would be very helpful
- Signage is needed that identifies where bicycle parking is located
- Wayfinding signage should target tourists

The results of these interviews will be summarized and included as an appendix in the Final Report.

➔ **Review of Public Invovlement.** Ideas to increase involvement for the next public meeting were discussed. Outreach to the Westport RTM, Railroad Parking, Parks & Recreation, Downtown Merchants Association, Downtown Implementation Plan Committee, and the Chamber of Commerce was suggested.

➔ **Discussion of Format for Public Meeting #3.** NV5 indicated that Public Meeting #3 would be a workshop format where the public can view large-scale aerials of the study area and provide comments to the project team.

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

STC Meeting #4

May 1 at 2:00pm

at Westport Town Hall

Attendees:

Peter Ratkiewich	Westport DPW
Kristin Hadjstylianos	WestCOG
Victor Minerva	NV5
Justin Iwinski	NV5
Nicole Sullivan	WestCOG
John Lockaby	CTDOT
Jonathan Corilla	CTDOT
Santosh Patel	CTDOT
Sarah Harris	Westport Selectman's Office
Allan D'Amura	Westport PD
Sam Arciola	Westport PD
Marty Fox	Westport Transit District
Michelle Perille	Westport P&Z
Peter Gold	
Pippa Bell Ader	

Purpose:

The main purpose of the fourth STC Meeting was to review the Draft Alternatives Matrix.

Action Items: None

Key Decisions: None

Topics/Points Raised:

- **Review of minutes from Public Meeting #3.** NV5 went over the meeting minutes from the third public meeting. These minutes are provided on the project web-site.
- **Review of Draft Alternatives Matrix**. NV5 presented each of the alternatives outlined in the matrix which were grouped into vehicular improvements, pedestrian/bicycle improvements, and transit improvements. The following comments were provided by the STC:
    - Generally - Ensure that the appropriate design vehicle is used when developing roadway improvements. Typically, a WB67 is used as a design vehicle for intersecting state

roadways. In other locations, use engineering judgement and vehicle classification data if available.

- Additional WB Through Lane at Post Road East and Riverside Avenue was determined infeasible when designing for a WB-67 design vehicle. Additionally, there are concerns regarding the loss of parking along the south curb east of the intersection.
- Consider a road diet on Post Road East between Riverside Avenue and Parker Harding Plaza/Jesup Road to improve traffic flow and incorporate bicycle lanes.
- Post Road East (US 1) & Parker Harding Plaza/Jesup Road – New pedestrian signal heads with countdown timers at all four corners scheduled as part of CTDOT improvements in 2022.
- Post Road East (US 1) & Main Street/Taylor Place - New crosswalk pavement marking on east leg of intersection scheduled for implementation in 2020.
- Post Road East (US 1) & Imperial Avenue/Myrtle Ave – NV5 to review analyze intersection with concurrent pedestrian phasing to determine if signal timing adjustment is feasible.
- Riverside Avenue (SR 33) & Burr Road – Eliminate additional signage and pavement marking recommendations.
- Riverside Avenue (SR 33) & Sylvan Road – Eliminate additional signage and pavement marking recommendations for south crossings as pedestrian volumes are too low to justify.
- Riverside Avenue (SR-33) & Saugatuck Avenue/Treadwell Avenue – A roundabout was considered in a previous study, and was brought forward to the Technical Committee. Due to factors including the required land acquisition and adjacent active businesses, geometry of the existing approaches, and proximity to other signalized intersections, it was determined that a roundabout at this location would not be feasible and could potentially negatively impact traffic flow.
    - Pedestrian facilities including signals and crosswalks do not match current standards and were recommended to be upgraded to current standards and added to the alternatives matrix.
- Sidewalk along east side of Riverside Avenue and Riverside Park needs continued evaluation.
- It was recommended that the alternatives matrix should include reference to the improvement of Level of Service (LOS) where applicable.

➔ **Discussion of Format for Public Meeting #4.** NV5 indicated that Public Meeting #4 would be an open house format where the public can view the draft alternatives matrix and concept drawings, and provide comments to NV5 staff members.

WESTPORT MAIN TO TRAIN STUDY

MEETING SNAPSHOT

STC Meeting #5

June 12th at 2:00pm

at Westport Town Hall

Attendees:

Peter Ratkiewich	Westport DPW
Justin Iwinski	NV5
John Lockaby	CTDOT
Jonathan Corilla	CTDOT
Santosh Patel	CTDOT
Sarah Harris	Westport Selectman's Office
Allan D'Amura	Westport PD
Michelle Perillie	Westport P&Z
Nicole Sullivan	WestCOG
TJ Elgir	
Denise Balnr	
Sal Liccione	
Peter Gold	

Purpose:

The purpose of the fifth and final STC Meeting was to review the latest draft Alternatives Matrix focusing on key comments from the previous STC meeting and the fourth public information meeting, and getting input on prioritization of draft improvements for the short, medium and long term time frame.

Action Items: None

Key Decisions: None

Topics/Points Raised:

- **Review of minutes from STC #4.** NV5 went over the meeting minutes from the fourth public information and STC meeting. These minutes will be uploaded onto the project web-site.
- **Review of Draft Alternatives Matrix**. NV5 presented designs and recommendations requiring further input and clarification from the STC onto their ultimate inclusion. The following comments were provided by the STC.
    - At the Post Road East and Compo Shopping Center intersection, articulated trucks were observed turning into the parking lot and travelling through the one-way driveway

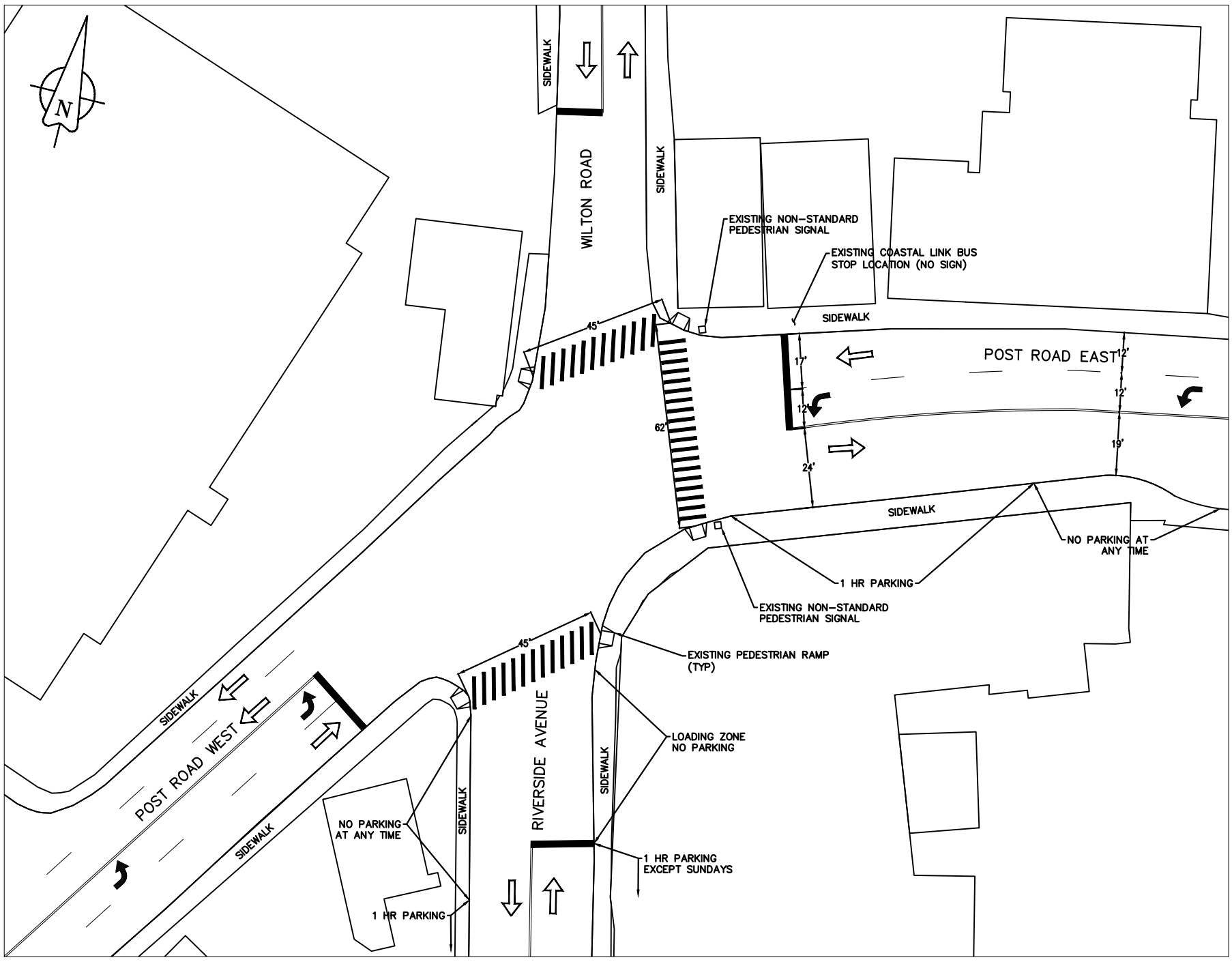
between the two main buildings on-site. It was noted that the improvements currently proposed for the intersection may not allow for articulated truck access at this location, as the driveway would be offset from the curb cut at the intersection. It was confirmed that the improvement as currently proposed should remain but further coordination should occur between the property owner and truck access to the site to determine if there are viable alternative access locations/routes from East Main Street on the north side of the development.

- Pavement marking modifications on Post Road East between Riverside Avenue and Parker Harding Plaza/Jesup Road were presented which would improve traffic flow and incorporate bicycle lanes. The STC was generally in favor for the improvements, and CTDOT provided minor comments on the lane widths and geometry.
- A comparison of LOS utilizing concurrent pedestrian phase signal timing was presented at Post Road East and Myrtle Avenue/Imperial Avenue, and showed an improvement in traffic conditions while reducing pedestrian delay.
- Curb extensions were ruled out for Post Road East and Compo Road, as this would require the removal of the median and existing tree on the south leg of the intersection. The recommendations will continue to include the median extension to the south, and pedestrian refuge on the north side of the median.
- For bicycle pavement marking treatment recommendations on Riverside Avenue, Curb-side bicycle lanes were discussed as an additional alternative to sharrows. Challenges to implementation include the relocation of parking adjacent to the country club/auto body shop, and enforcement of no drop-offs adjacent to the Saugatuck Elementary School. It was agreed that the curb-side lane recommendation would remain in the recommendations matrix but would require further coordination with stakeholders for parking and drop-off alternatives.

➔ **Prioritization of Recommendations**. The STC provided guidance on which improvements would be considered short, medium, and long term which will be presented at the final presentation and included in the final report.

➔ **Discussion of Format for Public Meeting #5.** NV5 indicated that Public Meeting #5 would be a formal public presentation, presenting the findings and proposed improvements. These findings would be grouped by intersection.

B. Concept Plans



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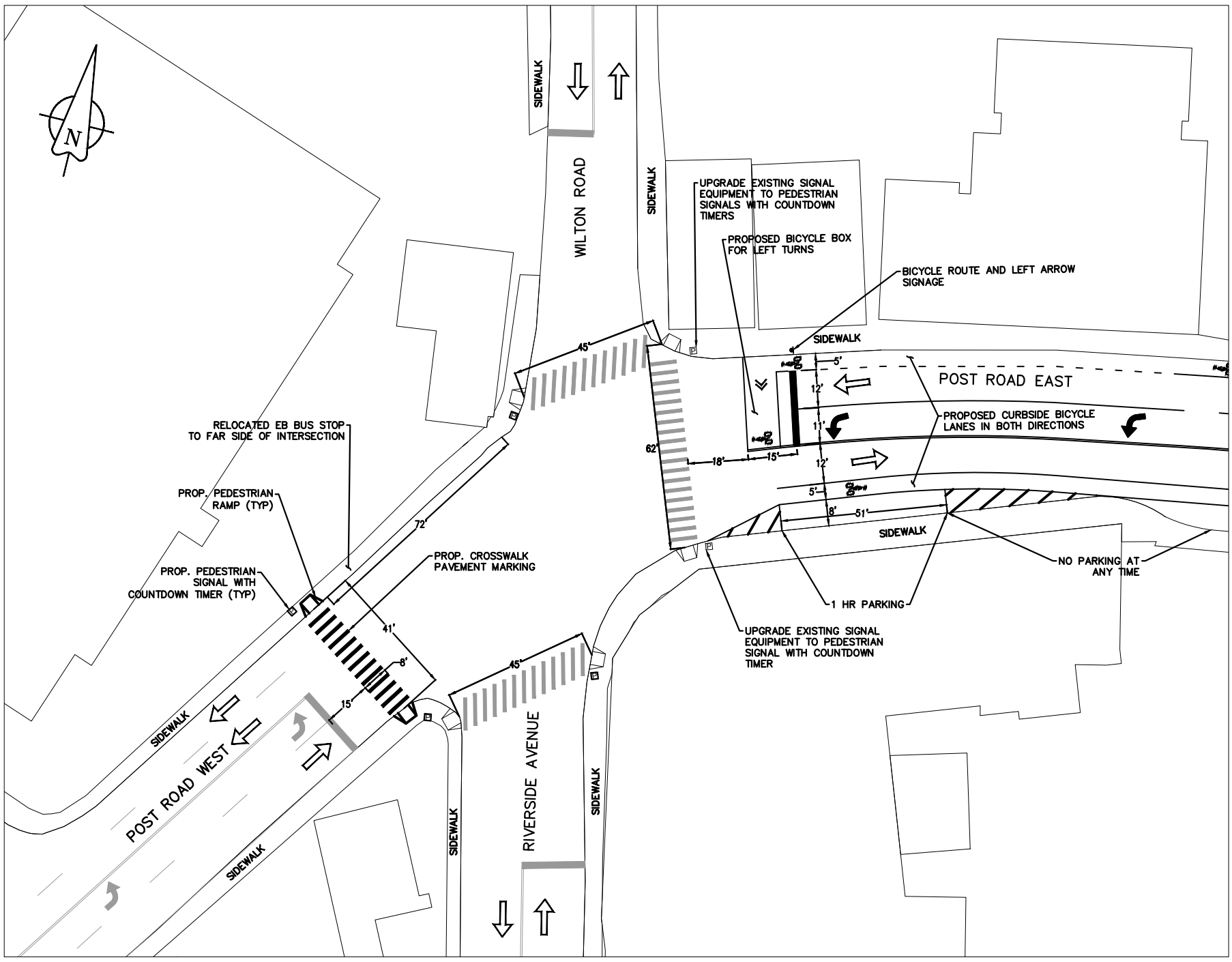


CONCEPT PLAN

NV5
32 OLD SLIP, SUITE 401
NEW YORK, NEW YORK 10005
P: 212.741.8090 WWW.NV5.COM

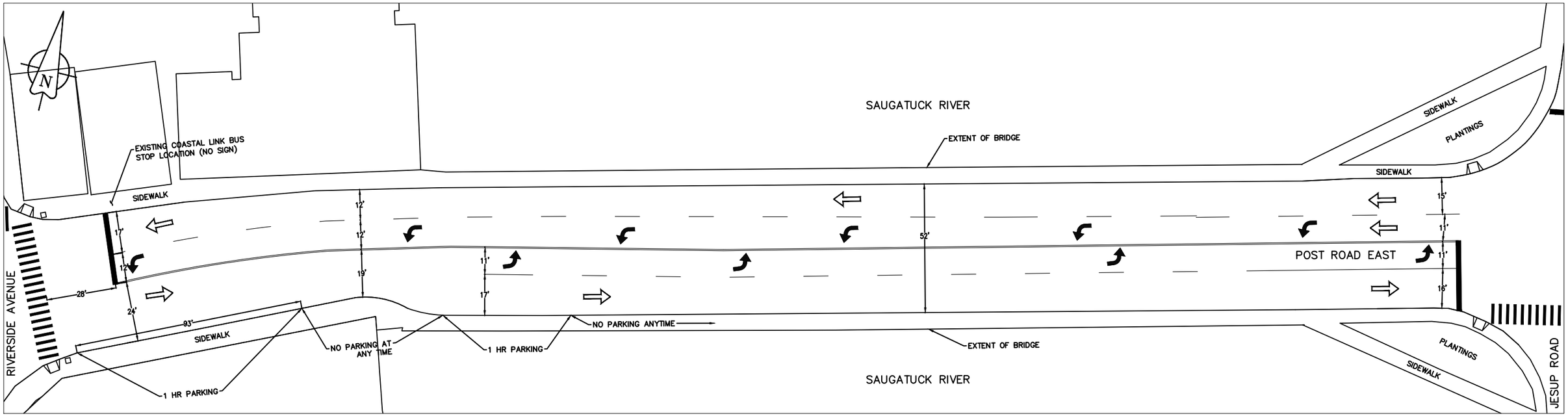
NOTES:

1) THIS DRAWING IS NOT BASED ON A SURVEY. BACKGROUNDS BASED ON GIS LINE DATA, PHYSICAL INVENTORY AND AERIAL PHOTOGRAPHS.
2) PROPOSED PEDESTRIAN RAMPS SHOULD BE INSTALLED TO ADA STANDARDS WITH DETECTABLE WARNING SURFACES AND APPROPRIATE SLOPES.
3) UPGRADES AND NEW INSTALLATIONS OF PEDESTRIAN SIGNAL EQUIPMENT SHALL BE DONE ACCORDING TO THE CURRENT CT DOT STANDARDS.
4) TOTAL NET PARKING LOSS: SIX SPACES ON SOUTH CURB OF POST ROAD EAST.

WESTPORT MAIN TO TRAIN STUDY
PRELIMINARY INTERSECTION IMPROVEMENTS

POST ROAD EAST (US 1) AND RIVERSIDE AVE (SR 33)

DATE: 06/24/19	NOT TO SCALE	CONCEPT PLAN 1A



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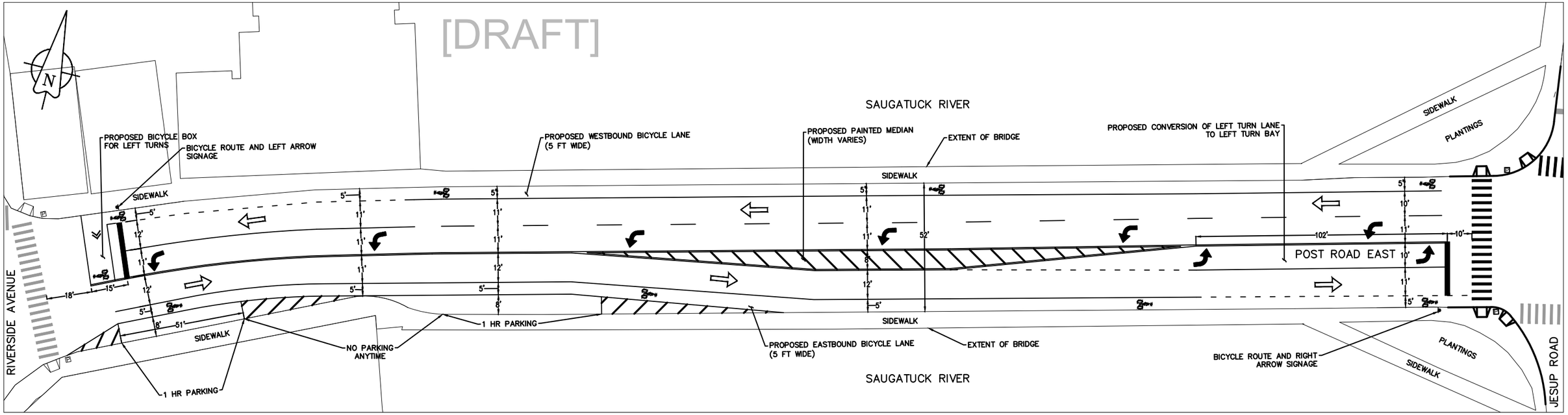

CONCEPT PLAN

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2) PROPOSED PEDESTRIAN RAMPS SHOULD BE INSTALLED TO ADA STANDARDS WITH DETECTABLE WARNING SURFACES AND APPROPRIATE SLOPES.
3) UPGRADES AND NEW INSTALLATIONS OF PEDESTRIAN SIGNAL EQUIPMENT SHALL BE DONE ACCORDING TO THE CURRENT CT DOT STANDARDS.
4) TOTAL NET PARKING LOSS: TWO SPACES ON SOUTH CURB OF POST ROAD EAST.

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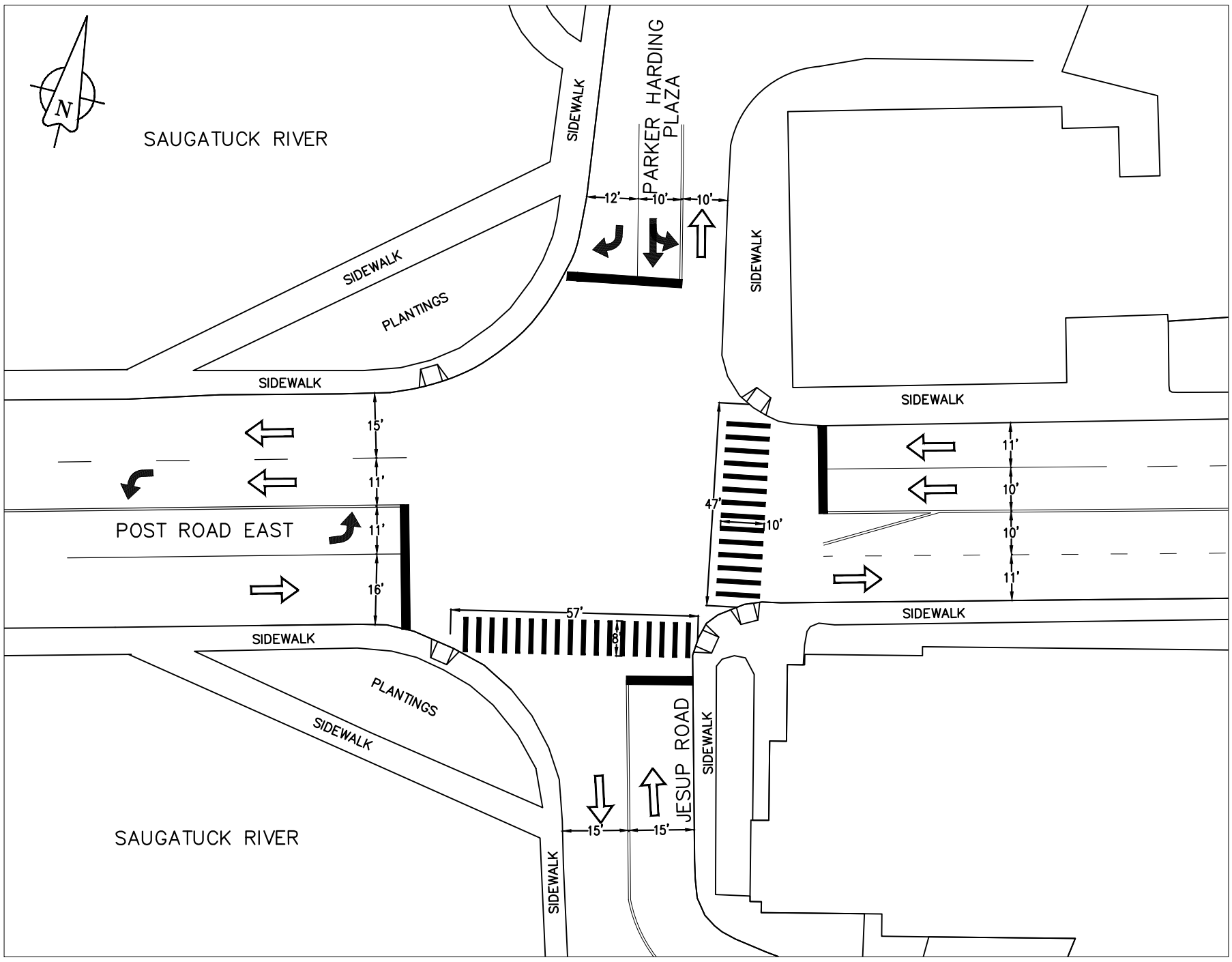
WESTPORT MAIN TO TRAIN STUDY
PRELIMINARY INTERSECTION IMPROVEMENTS

POST ROAD EAST (US 1) BETWEEN RIVERSIDE AVE (SR 33) AND PARKER HARDING PLAZA/JESUP RD

DATE: 06/24/19	NOT TO SCALE	CONCEPT PLAN 1B



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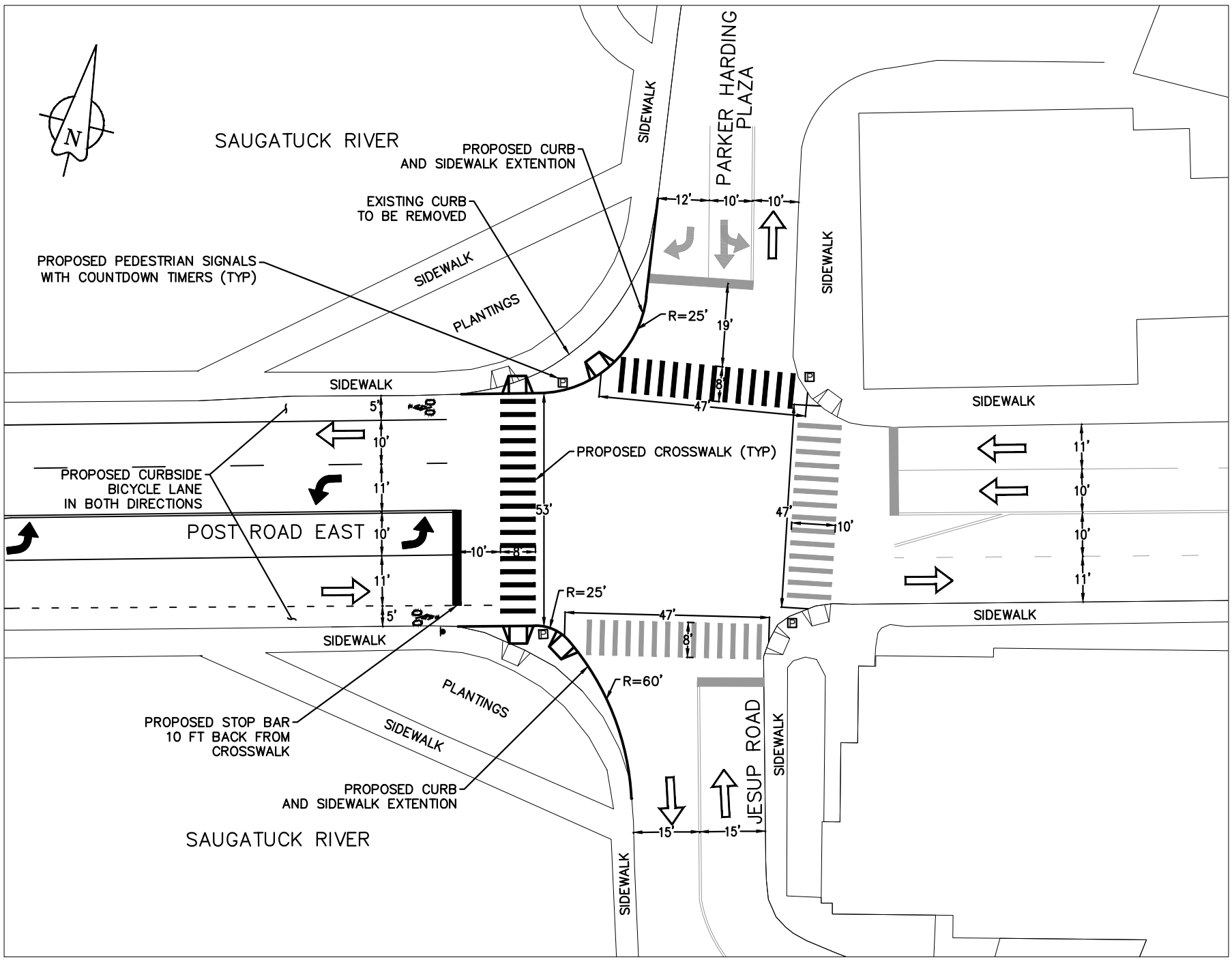

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3) UPGRADES AND NEW INSTALLATIONS OF PEDESTRIAN SIGNAL EQUIPMENT SHALL BE DONE ACCORDING TO THE CURRENT CT DOT STANDARDS.
4) PROPOSED CURB GEOMETRY BASED ON RIGHT TURNS MADE BY A BUS-40 DESIGN VEHICLE.

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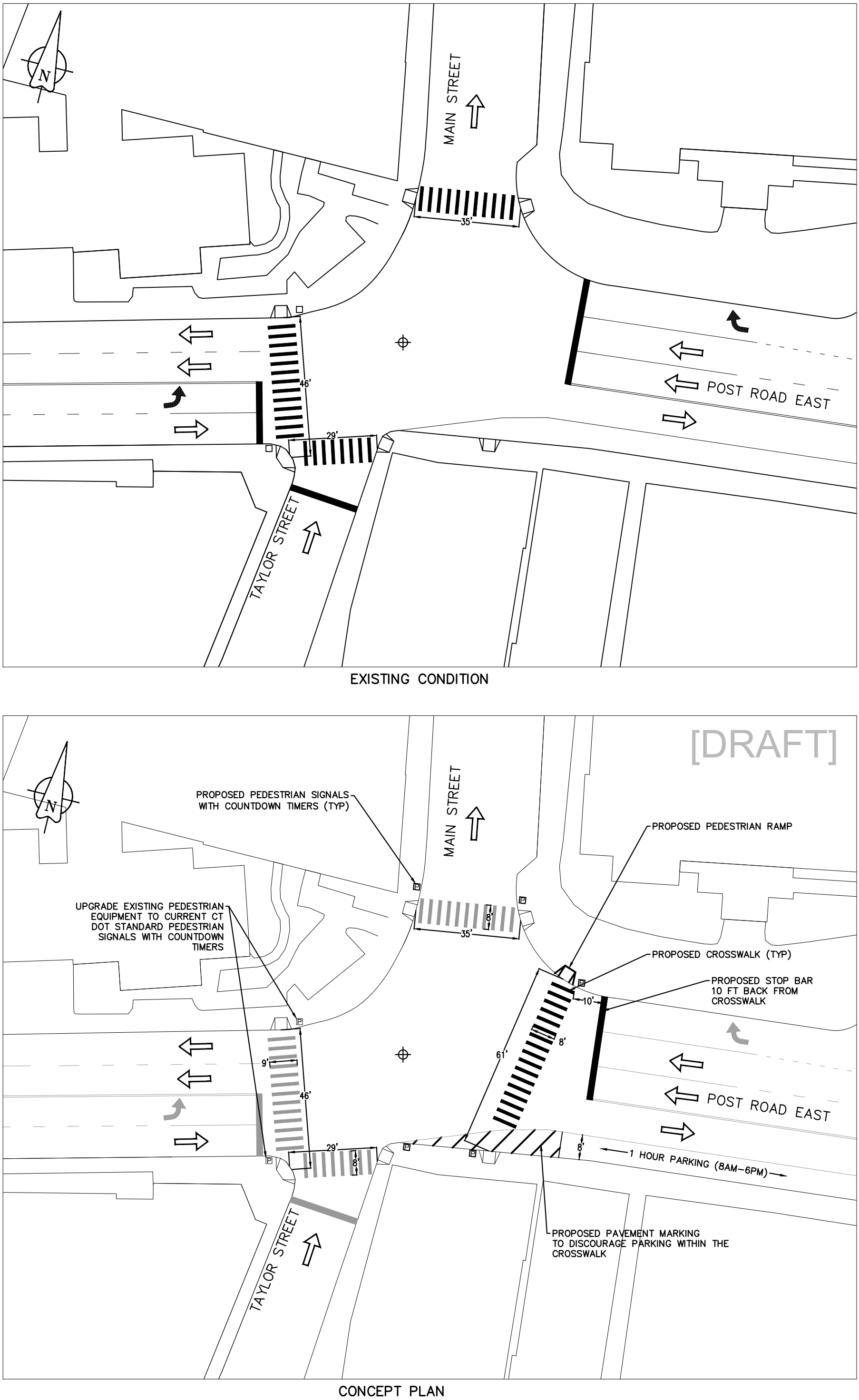
WESTPORT MAIN TO TRAIN STUDY
PRELIMINARY INTERSECTION IMPROVEMENTS

POST ROAD EAST (US 1) AND PARKER HARDING PLAZA/JESUP ROAD

DATE: 06/24/19	NOT TO SCALE	CONCEPT PLAN 2



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CONCEPT PLAN

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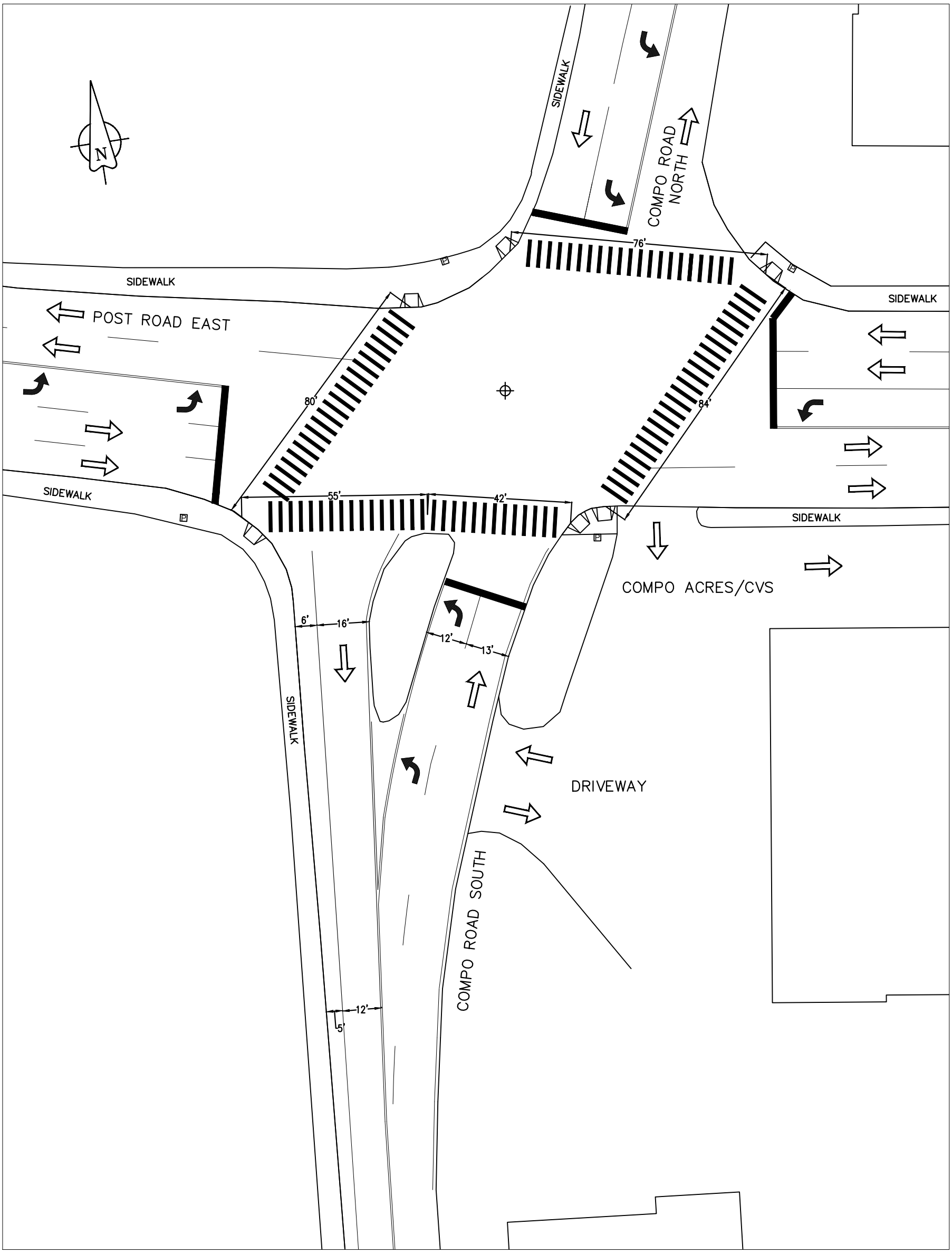
WESTPORT MAIN TO TRAIN STUDY
PRELIMINARY INTERSECTION IMPROVEMENTS

POST ROAD EAST (US 1) AND MAIN STREET/TAYLOR STREET

DATE: 06/24/19	NOT TO SCALE	CONCEPT PLAN 3



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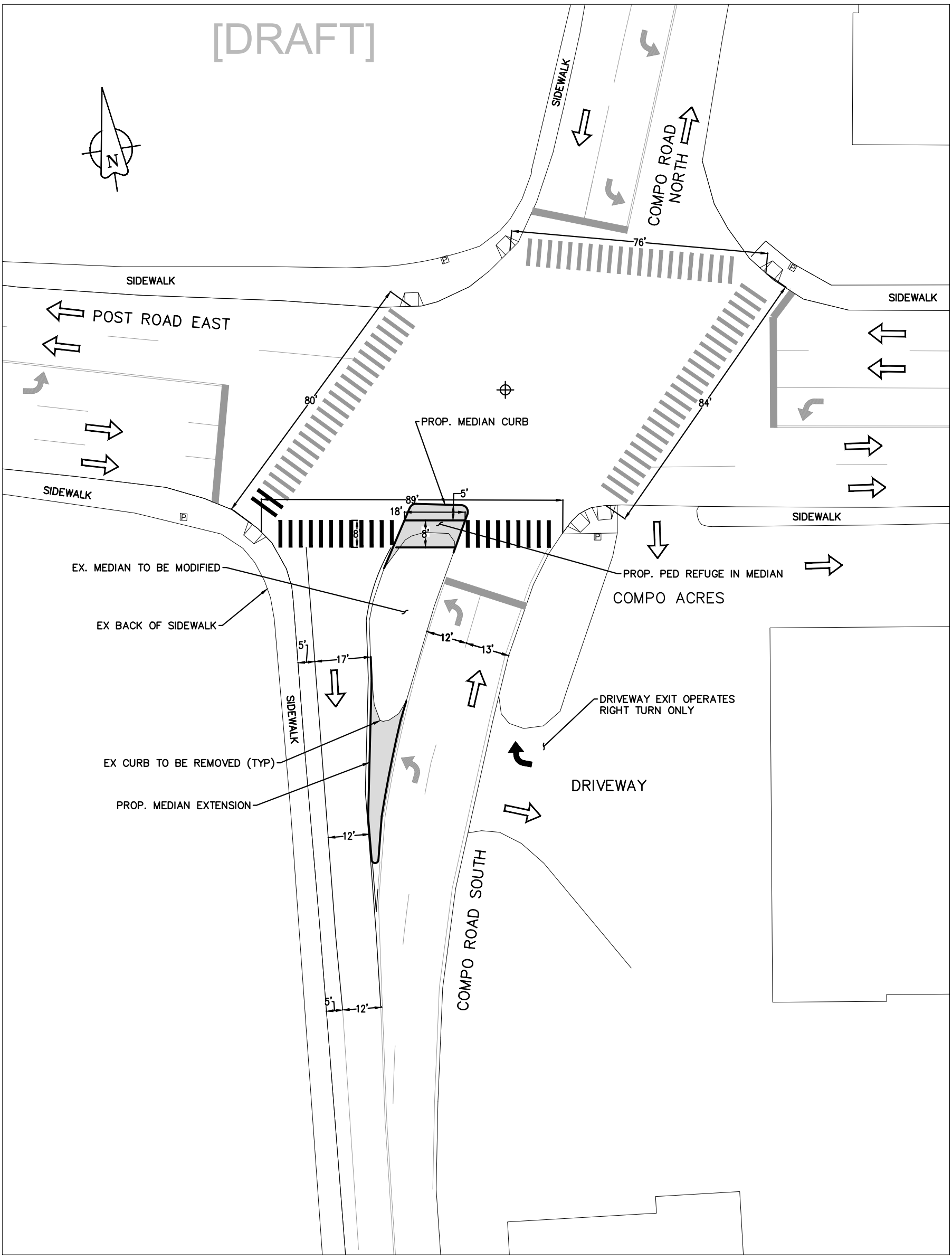
WESTPORT MAIN TO TRAIN STUDY PRELIMINARY INTERSECTION IMPROVEMENTS		
POST ROAD EAST (US 1) AND COMPO ROAD (SR 136)		
DATE: 06/24/19	NOT TO SCALE	CONCEPT PLAN 4A

[DRAFT]



CONCEPT PLAN

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3) UPGRADES AND NEW INSTALLATIONS OF PEDESTRIAN SIGNAL EQUIPMENT SHALL BE DONE ACCORDING TO THE CURRENT CT DOT STANDARDS.

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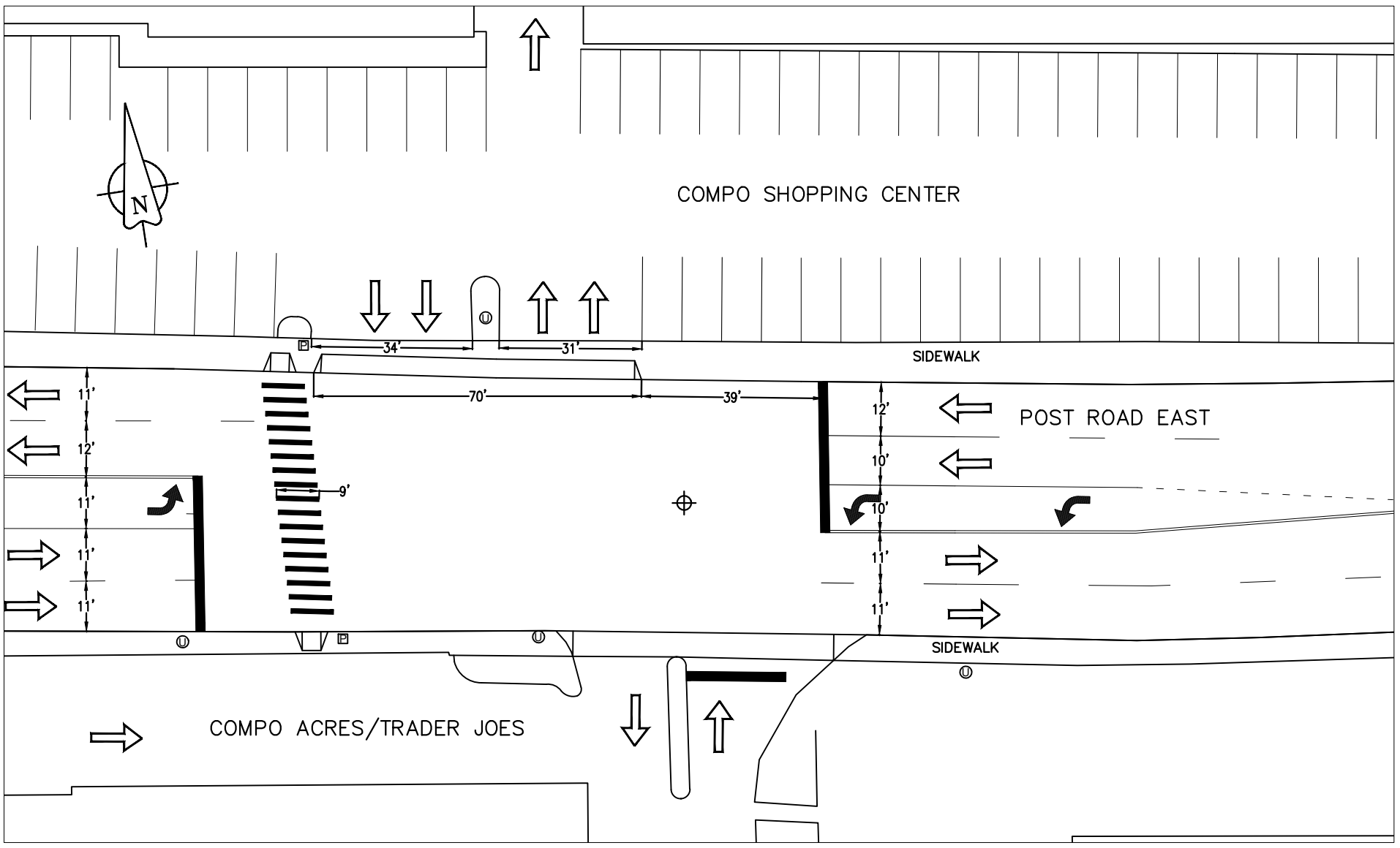
WESTPORT MAIN TO TRAIN STUDY PRELIMINARY INTERSECTION IMPROVEMENTS		
POST ROAD EAST (US 1) AND COMPO ROAD (SR 136)		
DATE: 06/24/19	NOT TO SCALE	CONCEPT PLAN 4B



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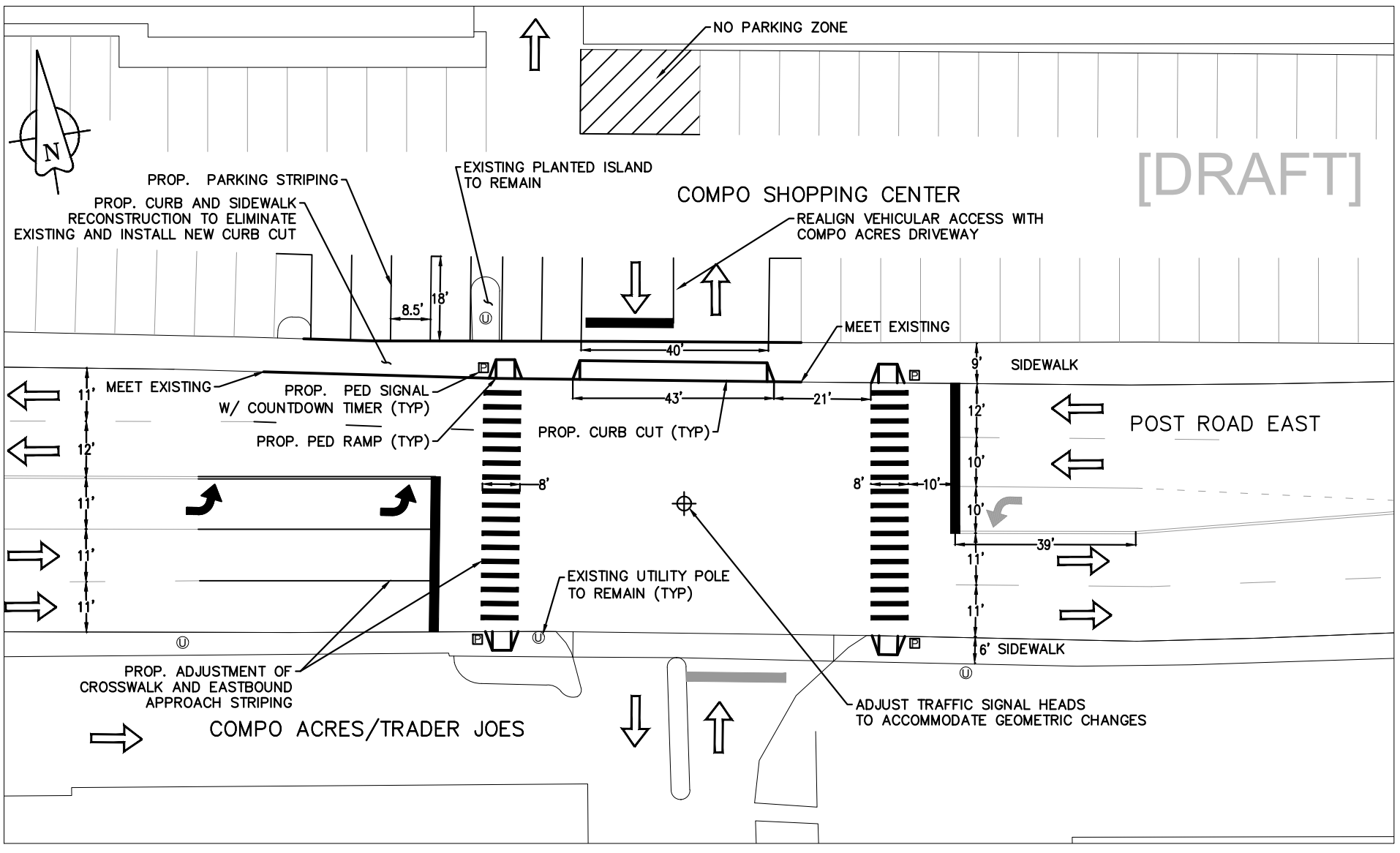

CONCEPT PLAN

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3) UPGRADES AND NEW INSTALLATIONS OF PEDESTRIAN SIGNAL EQUIPMENT SHALL BE DONE ACCORDING TO THE CURRENT CT DOT STANDARDS.
4) TOTAL NET PARKING LOSS: TWO SPACES ON COMPO SHOPPING CENTER PROPERTY.
5) NO PARKING PERMITTED ALONG POST ROAD EAST ON BOTH NORTH AND SOUTH CURBS.

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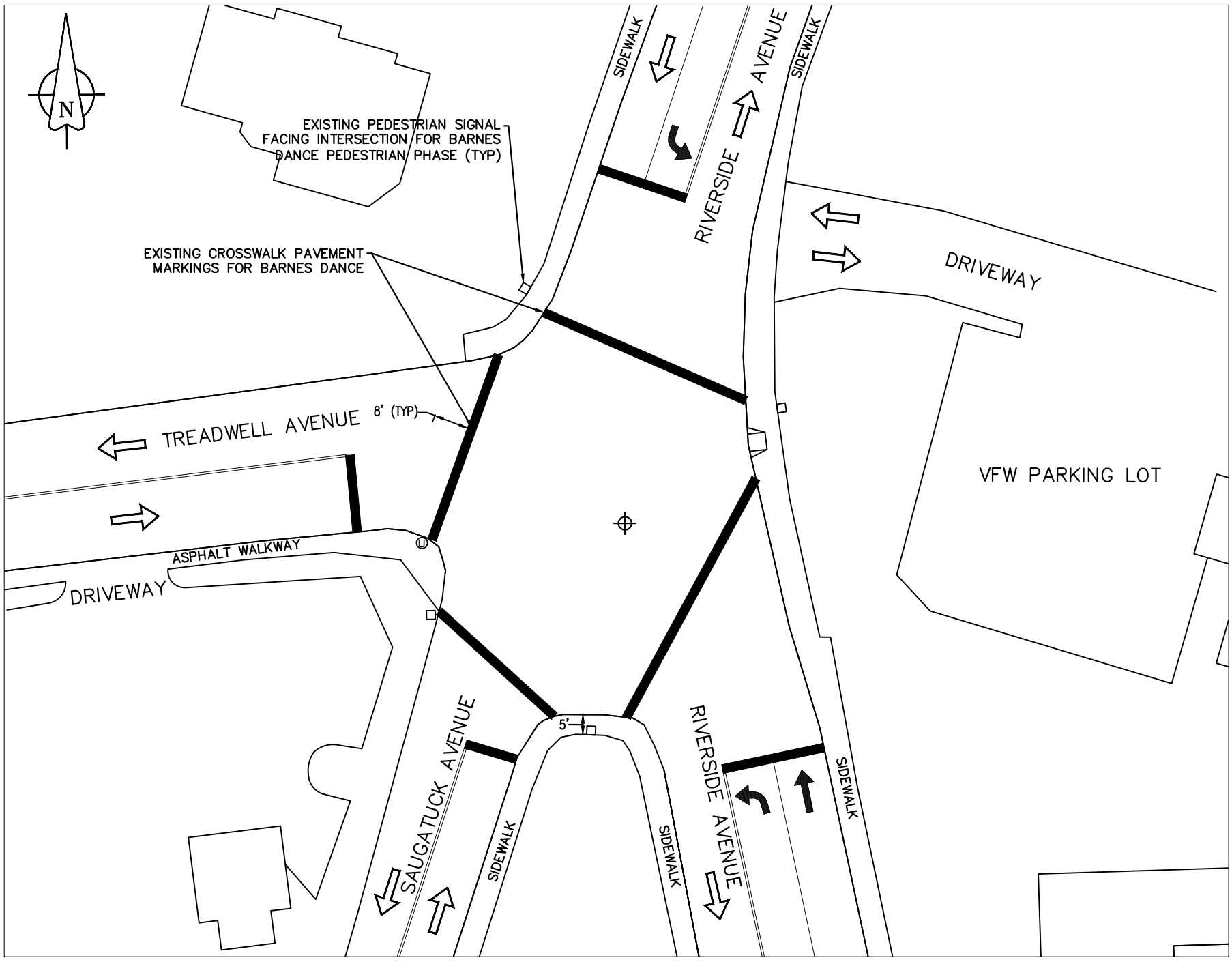
WESTPORT MAIN TO TRAIN STUDY
PRELIMINARY INTERSECTION IMPROVEMENTS

POST ROAD EAST (US 1) AND COMPO SHOPPING CENTER/COMPO ACRES DRIVEWAY

DATE: 06/24/19	NOT TO SCALE	CONCEPT PLAN 5



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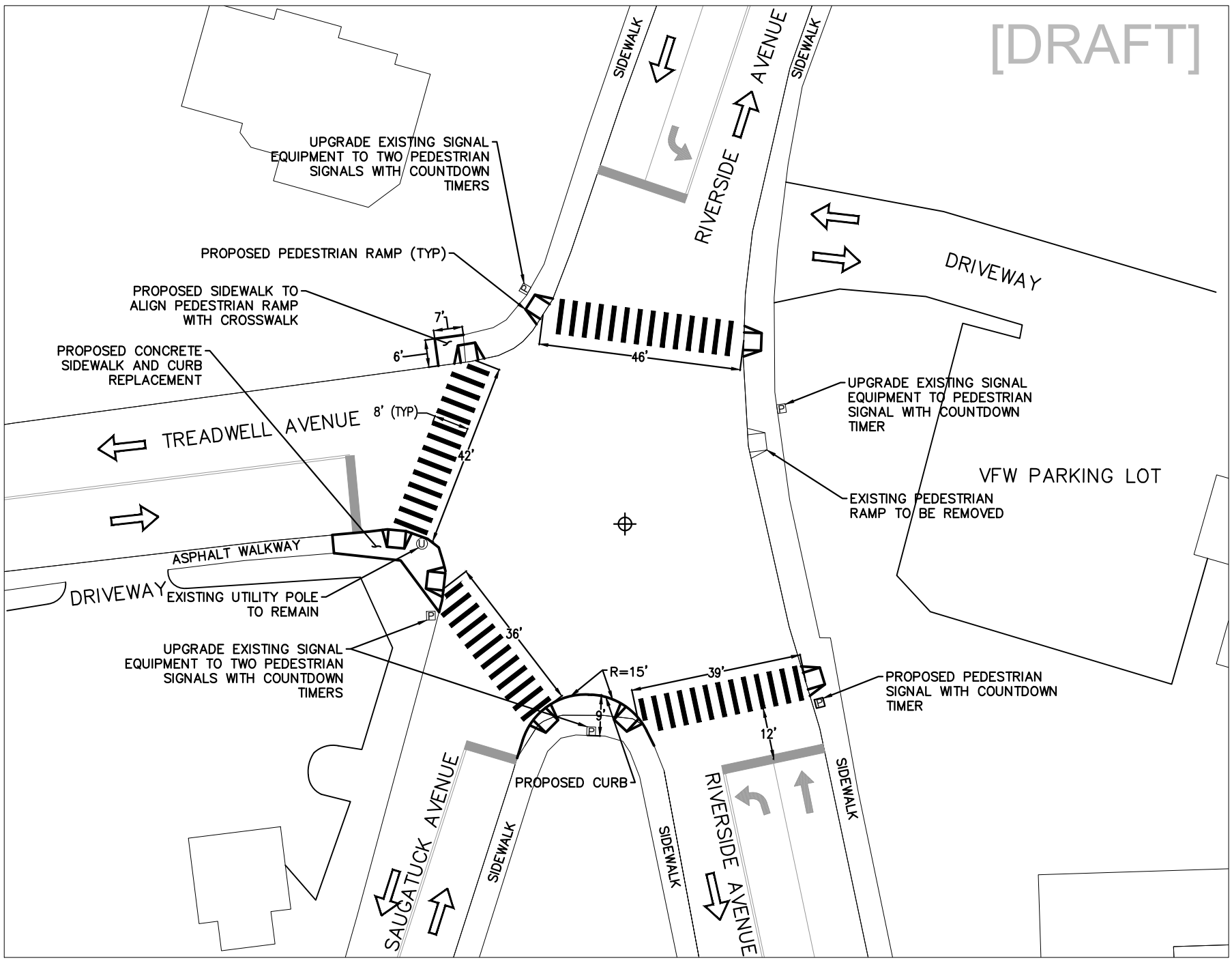

CONCEPT PLAN

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NOTES:

1) THIS DRAWING IS NOT BASED ON A SURVEY. BACKGROUNDS BASED ON GIS LINE DATA, PHYSICAL INVENTORY AND AERIAL PHOTOGRAPHS. LOCATIONS OF EXISTING UTILITIES, PAVEMENT MARKINGS SHOULD BE TAKEN AS APPROXIMATE LOCATIONS.
2) PROPOSED PEDESTRIAN RAMPS SHOULD BE INSTALLED TO ADA STANDARDS WITH DETECTABLE WARNING SURFACES AND APPROPRIATE SLOPES.
3) UPGRADES AND NEW INSTALLATIONS OF PEDESTRIAN SIGNAL EQUIPMENT SHALL BE DONE ACCORDING TO THE CURRENT CT DOT STANDARDS.

WESTPORT MAIN TO TRAIN STUDY
PRELIMINARY INTERSECTION IMPROVEMENTS

RIVERSIDE AVE (SR 33) AND SAUGATUCK AVE (SR 33) AND TREADWELL AVE

DATE: 06/24/19	NOT TO SCALE	CONCEPT PLAN 6

C. Traffic Signal Modification Tables

Westport Main To Train Pedestrian Crossing Time Calculations

Calculation Reference: MUTCD 2009 Edition, Page 497, Sect. 4E.06

Variable	Value	MUTCD Sect. 4E.06 Paragraph No.
Start-up Time	7 sec	Paragraph 11, 12 and 14 apply. Between 4 to 7 seconds depending on pedestrian conditions.
Walking Speed	3.5 ft/s	*up to 4 ft/s can be used under Paragraph 8 if slower pedestrians can use an extended pushbutton press function. Under Paragraph 10, slower walking speeds can be considered if wheelchairs or walkers are common. The traffic signal plans indicated that a 3.0 ft/s pedestrian crossing time were used.

			Minimum Required Crossing Time			Proposed Minimum Crossing Time			
Post Road Intersection	Crossing Direction	Length (ft)*	Walk (s)	Flashing Don't Walk (s)	Total Crossing Time Req.	AM	MD	PM	SAT
Riverside Ave	Crossing Post Rd	62	7	18	25	25	25	25	25
	Crossing Riverside	46	7	14	21	21	21	21	21
Parker Harding Plaza	Crossing Post Rd	53	7	16	23	23	23	23	23
	Crossing Parker Hardin	47	7	14	21	21	21	21	21
Main St/Taylor Pl	Crossing Post Rd	61	7	18	25	25	25	25	25
	Crossing Main St	35	7	10	17				
Imperial Ave/Myrtle Ave	Crossing Post Rd	68	7	20	27	27	27	27	27
	Crossing Myrtle Ave	55	7	16	23	23	23	23	23
Playhouse Square	Crossing Post Rd	46	7	14	21	21	21	21	21
Compo Rd	Crossing Post Rd	84	7	24	31	31	31	31	31
	Crossing Compo	89	7	26	33	33	33	33	33
Compo Shopping Cntr	Crossing Post Rd	54	7	16	23	23	23	23	23
Riverside Ave Intersection									
Saugatuck Ave/Treadwell Ave	Exclusive Ped Phase	46	7	14	21	21	21	21	21

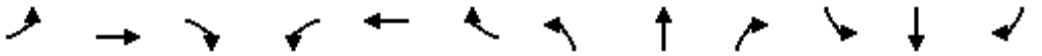
* Length of crossings determined from Physical Inventory conducted by NV5 in October 2018

Westport Main to Train Study - Proposed Signal Timing Modifications

Intersection	Signal Phase	No-Build Signal Timing				Proposed Signal Timing				Notes
		AM	MD	PM	SAT	AM	MD	PM	SAT	
1 Post Road West & Riverside Avenue	EB L/WB L	18	18	18	18	8.5	9	11	9	Minimum green time adjusted to accommodate minimum pedestrian crossing time.
	EB LTR	-	-	-	-	-	-	10	8	
	WB LTR	-	-	-	-	21.5	7	-	-	Maximum Splits adjusted based on future traffic demand.
	EB/WB	39	39	39	39	25.5	34.5	31.5	34.5	
	NB/SB	41.5	41.5	41.5	41.5	43	48	46	47	
	CL	**98.5**	**98.5**	**98.5**	**98.5**	**98.5**	**98.5**	**98.5**	**98.5**	
	Offset	-	-	-	-	-	-	-	-	
2 Post Road East & Parker Harding Plaza/Jesup Road	EB LTR	14	14	14	14	14	14	14	14	Minimum green time adjusted to accommodate minimum pedestrian crossing time.
	EB/WB	44	44	44	44	35	35	35	35	
	WB LTR	8	8	8	8	8	8	8	8	Maximum Splits adjusted based on future traffic demand.
	NB/SB	24	24	24	24	33	33	33	33	
	CL	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	
	Offset	*55*	*30*	*30*	*30*	*55*	*30*	*30*	*30*	
3 Post Road East & Main Street/Taylor Place	EB LTR	14	14	14	14	14	14	14	14	Minimum green time adjusted to accommodate minimum pedestrian crossing time.
	EB/WB	32	32	32	32	30	30	30	30	
	PED	22	22	22	22	25	25	25	25	Maximum Splits adjusted based on future traffic demand.
	NB LTR	22	22	22	22	21	21	21	21	
	CL	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	
	Offset	*65*	*40*	*50*	*40*	*65*	*40*	*50*	*40*	
4 Post Road East & Imperial Avenue/Myrtle Avenue	EB LTR	9	9	9	9	9	9	9	9	Minimum green time adjusted to accommodate minimum pedestrian crossing time.
	EB/WB	24	15	12	15	42	42	42	42	
	PED	24	24	24	24	-	-	-	-	Pedestrian Phase is proposed to occur concurrently with EB-WB and NB-SB Phases.
	SB LTR	10	12	15	12	10	10	10	10	
	NB/SB	23	30	30	30	29	29	29	29	Maximum Splits adjusted based on future traffic demand.
	CL	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	
	Offset	*15*	*45*	*45*	*45*	*15*	*45*	*45*	*45*	
5 Post Road East & Playhouse Square	EB/WB	71	69	69	69	68	68	68	68	Minimum green time adjusted to accommodate minimum pedestrian crossing time.
	NB/SB	19	21	21	21	22	22	22	22	
	CL	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	Maximum Splits adjusted based on future traffic demand.
	Offset	*30*	*55*	*55*	*55*	*30*	*55*	*55*	*55*	
6 Post Road East & Compo Road	EB L/WB L	16.8	16.8	16.8	16.8	10	10	11	12	Operates as an actuated uncoordinated signal in no-build, proposed to operate actuated coordinated (new offsets proposed).
	EB LTR	5	5	5	5	-	-	-	-	
	EB/WB	43	43	43	43	37	37	35	35	
	PED	32	32	32	32	-	-	-	-	Pedestrian Phase would occur concurrently with EB-WB and NB-SB Phases.
	NB L/SB L	14.2	14.2	14.2	14.2	10	10	11	10	Minimum green time adjusted to accommodate minimum pedestrian crossing time.
	NB/SB	27	27	27	27	33	33	33	33	
	CL	**138**	**138**	**138**	**138**	**90**	**90**	**90**	**90**	Maximum Splits adjusted based on future traffic demand.
	Offset	-	-	-	-	*70*	*70*	*70*	*70*	
7 Post Road East & Compo Shopping Center	EB L/WB L	8	8	8	8	8	8	8	8	Minimum green time adjusted to accommodate minimum pedestrian crossing time.
	EB/WB	60	58	58	58	58	58	58	58	
	NB/SB	22	24	24	24	24	24	24	24	Maximum Splits adjusted based on future traffic demand.
	CL	**90**	**90**	**90**	**90**	**90**	**90**	**90**	**90**	
	Offset	-	-	-	-	*75*	*80*	*80*	*80*	

All Times Shown Are Maximum Splits (seconds) for Actuated Traffic Signals.

D. Synchro Reports



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	331	10	574	864	111	30	242	161	90	270	111
Future Volume (vph)	72	331	10	574	864	111	30	242	161	90	270	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	16	16	12	11	12	12	14	12
Grade (%)		-3%			0%			0%			0%	
Satd. Flow (prot)	1527	1727	0	1770	2019	0	0	1319	0	0	1896	0
Flt Permitted	0.182			0.159				0.883			0.672	
Satd. Flow (perm)	292	1727	0	296	2019	0	0	1170	0	0	1286	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		682			657			610			1340	
Travel Time (s)		18.6			17.9			13.9			30.5	
Confl. Peds. (#/hr)			7	7					7	7		
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.80	0.93	0.88	0.90	0.90	0.90	0.63	0.92	0.91	0.82	0.91	0.91
Heavy Vehicles (%)	12%	11%	14%	2%	4%	9%	20%	9%	12%	4%	3%	0%
Parking (#/hr)								10				
Shared Lane Traffic (%)												
Lane Group Flow (vph)	90	367	0	638	1083	0	0	488	0	0	529	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.9	15.0		5.0	15.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	8.1	22.1		8.1	22.1		28.5	28.5		28.5	28.5	
Total Split (s)	8.5	25.5		30.0	47.0		43.0	43.0		43.0	43.0	
Total Split (%)	8.6%	25.9%		30.5%	47.7%		43.7%	43.7%		43.7%	43.7%	
Yellow Time (s)	3.0	3.6		3.0	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	0.1	0.5		0.1	0.5		2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.1	4.1		3.1	4.1			6.5			6.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	27.8	21.4		52.4	44.6			36.5			36.5	
Actuated g/C Ratio	0.28	0.22		0.53	0.45			0.37			0.37	
v/c Ratio	0.60	0.98		1.14	1.18			1.13			1.11	
Control Delay	35.2	81.4		109.5	122.1			113.8			106.5	
Queue Delay	0.0	0.0		0.0	0.1			0.0			0.0	
Total Delay	35.2	81.4		109.5	122.2			113.8			106.5	
LOS	D	F		F	F			F			F	
Approach Delay		72.3			117.5			113.8			106.5	
Approach LOS		E			F			F			F	
90th %ile Green (s)	5.4	21.4		26.9	42.9		36.5	36.5		36.5	36.5	
90th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
70th %ile Green (s)	5.4	21.4		26.9	42.9		36.5	36.5		36.5	36.5	

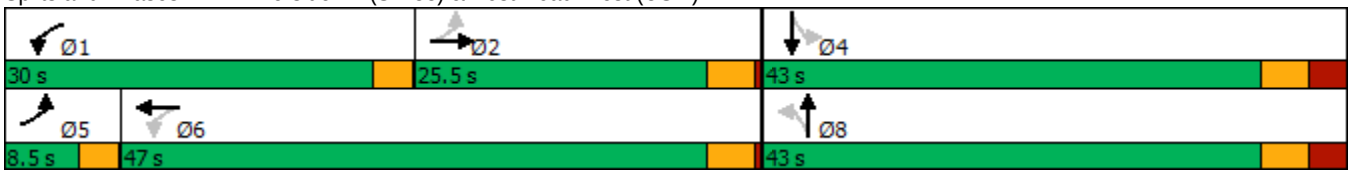
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
70th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
50th %ile Green (s)	5.4	21.4		26.9	42.9		36.5	36.5		36.5	36.5	
50th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
30th %ile Green (s)	5.4	21.4		26.9	42.9		36.5	36.5		36.5	36.5	
30th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
10th %ile Green (s)	0.0	21.4		26.9	51.4		36.5	36.5		36.5	36.5	
10th %ile Term Code	Skip	Max		Max	Hold		Max	Max		Max	Max	
Queue Length 50th (ft)	27	230		~420	~845			~356			~382	
Queue Length 95th (ft)	48	#413		#637	#1089			#552			#583	
Internal Link Dist (ft)		602			577			530			1260	
Turn Bay Length (ft)												
Base Capacity (vph)	150	375		560	914			433			476	
Starvation Cap Reductn	0	0		0	16			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.60	0.98		1.14	1.21			1.13			1.11	

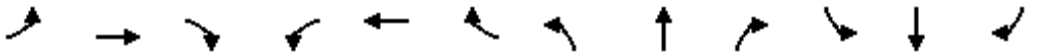
Intersection Summary	
Area Type:	Other
Cycle Length: 98.5	
Actuated Cycle Length: 98.5	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 108.7	Intersection LOS: F
Intersection Capacity Utilization 118.6%	ICU Level of Service H
Analysis Period (min) 15	
90th %ile Actuated Cycle: 98.5	
70th %ile Actuated Cycle: 98.5	
50th %ile Actuated Cycle: 98.5	
30th %ile Actuated Cycle: 98.5	
10th %ile Actuated Cycle: 98.5	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Riverside Av (SR 33) & Post Road West (US 1)





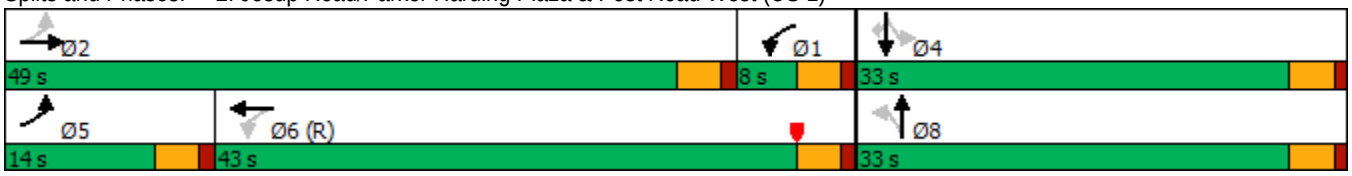
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	419	92	10	1187	0	160	10	0	70	30	202
Future Volume (vph)	71	419	92	10	1187	0	160	10	0	70	30	202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	16	12	12	10	12	12	15	12	12	10	12
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1646	1870	0	0	3238	0	0	1927	0	0	1663	1599
Flt Permitted	0.119				0.945			0.534			0.805	
Satd. Flow (perm)	206	1870	0	0	3063	0	0	1077	0	0	1372	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22										249
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		657			264			553			224	
Travel Time (s)		17.9			7.2			15.1			5.1	
Confl. Peds. (#/hr)			6	6					9	9		
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.80	0.87	0.70	0.58	0.92	0.25	0.81	0.56	0.25	0.68	0.42	0.81
Heavy Vehicles (%)	6%	10%	13%	0%	4%	0%	4%	0%	0%	6%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	613	0	0	1307	0	0	216	0	0	174	249
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	13.0		4.0	13.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	9.0	24.0		8.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	14.0	49.0		8.0	43.0		33.0	33.0		33.0	33.0	33.0
Total Split (%)	15.6%	54.4%		8.9%	47.8%		36.7%	36.7%		36.7%	36.7%	36.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0			4.0			4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?												
Recall Mode	None	None		None	C-Max		None	None		None	None	None
Act Effct Green (s)	59.8	59.8			52.0			22.2			22.2	22.2
Actuated g/C Ratio	0.66	0.66			0.58			0.25			0.25	0.25
v/c Ratio	0.39	0.49			0.74			0.82			0.51	0.43
Control Delay	11.9	9.9			13.6			54.6			33.6	5.6
Queue Delay	0.0	0.1			0.4			0.0			0.0	0.0
Total Delay	11.9	10.0			14.0			54.6			33.6	5.6
LOS	B	A			B			D			C	A
Approach Delay		10.2			14.0			54.6			17.1	
Approach LOS		B			B			D			B	
90th %ile Green (s)	7.2	53.0		0.0	41.8		29.0	29.0		29.0	29.0	29.0

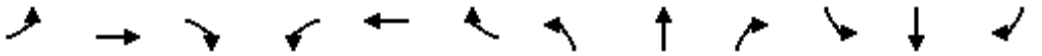
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Gap	Coord		Skip	Coord		Max	Max		Hold	Hold	Hold
70th %ile Green (s)	5.8	55.6		0.0	45.8		26.4	26.4		26.4	26.4	26.4
70th %ile Term Code	Gap	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
50th %ile Green (s)	5.0	59.2		0.0	50.2		22.8	22.8		22.8	22.8	22.8
50th %ile Term Code	Min	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
30th %ile Green (s)	5.0	62.9		0.0	53.9		19.1	19.1		19.1	19.1	19.1
30th %ile Term Code	Min	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
10th %ile Green (s)	0.0	68.4		0.0	68.4		13.6	13.6		13.6	13.6	13.6
10th %ile Term Code	Skip	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
Queue Length 50th (ft)	16	150			33			115			85	0
Queue Length 95th (ft)	36	265			#366			98			55	35
Internal Link Dist (ft)		577			184			473			144	
Turn Bay Length (ft)												100
Base Capacity (vph)	296	1250			1770			347			442	684
Starvation Cap Reductn	0	0			122			0			0	0
Spillback Cap Reductn	0	54			0			0			0	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.30	0.51			0.79			0.62			0.39	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 6:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 81.7%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Jesup Road/Parker Harding Plaza & Post Road West (US 1)





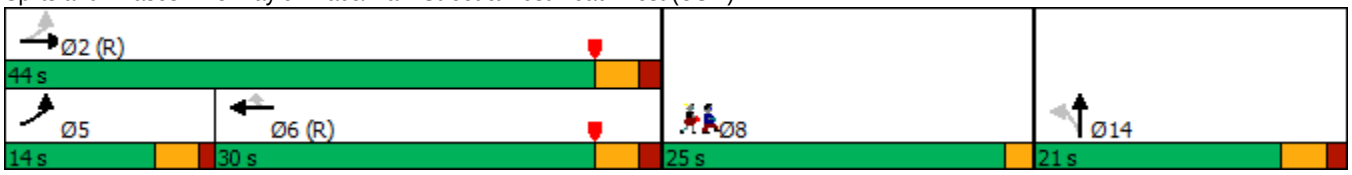
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	427	0	0	1187	50	10	50	10	0	0	0
Future Volume (vph)	62	427	0	0	1187	50	10	50	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	12	12	11	12	12	13	12	12	12	12
Satd. Flow (prot)	1574	1612	0	0	3355	1380	0	1666	0	0	0	0
Flt Permitted	0.131							0.990				
Satd. Flow (perm)	217	1612	0	0	3355	1321	0	1666	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						91		12				
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		264			99			221			659	
Travel Time (s)		7.2			2.7			5.0			18.0	
Confl. Peds. (#/hr)	7					7						4
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.96	0.89	0.80	0.80	0.88	0.68	0.42	0.71	0.44	0.80	0.80	0.80
Heavy Vehicles (%)	7%	10%	0%	0%	4%	17%	0%	18%	14%	0%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	480	0	0	1349	74	0	117	0	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA				
Protected Phases	5	2			6			14				
Permitted Phases	2					6	14					
Detector Phase	5	2			6	6	14	14				
Switch Phase												
Minimum Initial (s)	6.0	19.0			19.0	19.0	9.0	9.0				
Minimum Split (s)	10.0	23.5			23.5	23.5	15.5	15.5				
Total Split (s)	14.0	44.0			30.0	30.0	21.0	21.0				
Total Split (%)	15.6%	48.9%			33.3%	33.3%	23.3%	23.3%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.5			1.5	1.5	1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.5			4.5	4.5		4.5				
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?												
Recall Mode	None	C-Max			C-Max	C-Max	None	None				
Act Effct Green (s)	68.8	69.2			60.7	60.7		11.0				
Actuated g/C Ratio	0.76	0.77			0.67	0.67		0.12				
v/c Ratio	0.25	0.39			0.60	0.08		0.55				
Control Delay	6.8	7.0			12.9	3.6		42.8				
Queue Delay	0.0	0.2			0.8	0.0		2.1				
Total Delay	6.8	7.2			13.7	3.6		44.9				
LOS	A	A			B	A		D				
Approach Delay		7.2			13.1			44.9				
Approach LOS		A			B			D				
90th %ile Green (s)	8.5	44.2			31.7	31.7	14.8	14.8				
90th %ile Term Code	Gap	Coord			Coord	Coord	Gap	Gap				
70th %ile Green (s)	6.0	69.0			59.0	59.0	12.0	12.0				
70th %ile Term Code	Min	Coord			Coord	Coord	Gap	Gap				

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	4.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	28%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	20.0
90th %ile Term Code	Ped
70th %ile Green (s)	0.0
70th %ile Term Code	Skip

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Green (s)	6.0	70.9			60.9	60.9	10.1	10.1				
50th %ile Term Code	Min	Coord			Coord	Coord	Gap	Gap				
30th %ile Green (s)	6.0	72.0			62.0	62.0	9.0	9.0				
30th %ile Term Code	Min	Coord			Coord	Coord	Min	Min				
10th %ile Green (s)	0.0	85.5			85.5	85.5	0.0	0.0				
10th %ile Term Code	Skip	Coord			Coord	Coord	Skip	Skip				
Queue Length 50th (ft)	7	51			84	0		58				
Queue Length 95th (ft)	m30	329			#608	26		80				
Internal Link Dist (ft)		184			19			141			579	
Turn Bay Length (ft)												
Base Capacity (vph)	316	1239			2263	921		315				
Starvation Cap Reductn	0	247			538	0		0				
Spillback Cap Reductn	0	117			130	0		103				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.21	0.48			0.78	0.08		0.55				

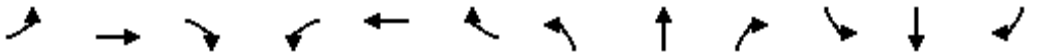
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 65 (72%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 59.1%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Taylor Place/Main Street & Post Road West (US 1)



Lane Group	Ø8
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

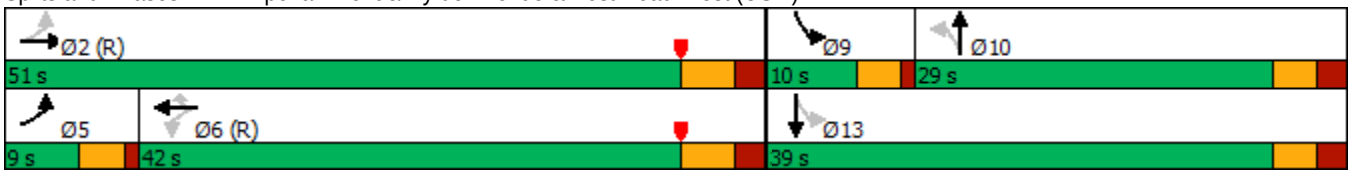


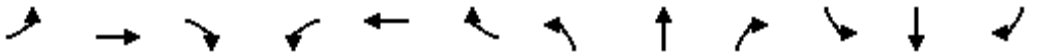
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	386	21	120	1076	190	11	60	70	100	60	40
Future Volume (vph)	30	386	21	120	1076	190	11	60	70	100	60	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	12	13	12	14	12	12	12	12
Grade (%)		0%			-4%			0%			0%	
Storage Length (ft)	0		185	0		150	0		0	60		0
Storage Lanes	0		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2963	0	0	3530	1653	0	1555	0	1656	1767	0
Flt Permitted		0.722			0.805			0.982		0.326		
Satd. Flow (perm)	0	2148	0	0	2853	1580	0	1529	0	565	1767	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		287			718			629			396	
Travel Time (s)		7.8			19.6			17.2			10.8	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Confl. Bikes (#/hr)						2			1			1
Peak Hour Factor	0.80	0.89	0.94	0.82	0.91	0.89	0.92	0.64	0.52	0.80	0.70	0.67
Heavy Vehicles (%)	19%	12%	7%	2%	4%	3%	9%	2%	31%	9%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	494	0	0	1328	213	0	241	0	125	146	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			10		9	13	
Permitted Phases	2			6		6	10			13		
Detector Phase	5	2		6	6	6	10	10		9	13	
Switch Phase												
Minimum Initial (s)	5.0	14.0		14.0	14.0	14.0	7.0	7.0		5.0	7.0	
Minimum Split (s)	9.0	19.7		25.7	25.7	25.7	29.1	29.1		9.0	18.4	
Total Split (s)	9.0	51.0		42.0	42.0	42.0	29.0	29.0		10.0	39.0	
Total Split (%)	10.0%	56.7%		46.7%	46.7%	46.7%	32.2%	32.2%		11.1%	43.3%	
Yellow Time (s)	3.0	3.6		3.6	3.6	3.6	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	2.1		2.1	2.1	2.1	2.1	2.1		1.0	2.1	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		5.7			5.7	5.7		5.1		4.0	5.1	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	Min	C-Max		C-Max	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)		50.9			41.9	41.9		18.3		29.4	28.3	
Actuated g/C Ratio		0.57			0.47	0.47		0.20		0.33	0.31	
v/c Ratio		0.40			1.00	0.29		0.77		0.49	0.26	
Control Delay		14.0			45.6	18.6		50.2		27.6	23.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		14.0			45.6	18.6		50.2		27.6	23.1	
LOS		B			D	B		D		C	C	
Approach Delay		14.0			41.8			50.2			25.2	
Approach LOS		B			D			D			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Green (s)	5.0	45.3		36.3	36.3	36.3	23.9	23.9		6.0	33.9	
90th %ile Term Code	Max	Coord		Coord	Coord	Coord	Ped	Ped		Max	Hold	
70th %ile Green (s)	5.0	47.5		38.5	38.5	38.5	21.7	21.7		6.0	31.7	
70th %ile Term Code	Min	Coord		Coord	Coord	Coord	Gap	Gap		Max	Hold	
50th %ile Green (s)	5.0	50.4		41.4	41.4	41.4	18.8	18.8		6.0	28.8	
50th %ile Term Code	Min	Coord		Coord	Coord	Coord	Gap	Gap		Max	Hold	
30th %ile Green (s)	5.0	53.4		44.4	44.4	44.4	15.8	15.8		6.0	25.8	
30th %ile Term Code	Min	Coord		Coord	Coord	Coord	Gap	Gap		Max	Hold	
10th %ile Green (s)	5.0	57.8		48.8	48.8	48.8	11.5	11.5		5.9	21.4	
10th %ile Term Code	Min	Coord		Coord	Coord	Coord	Gap	Gap		Gap	Hold	
Queue Length 50th (ft)		108			~216	56		130		51	61	
Queue Length 95th (ft)		58			#599	m107		130		74	74	
Internal Link Dist (ft)		207			638			549			316	
Turn Bay Length (ft)						150				60		
Base Capacity (vph)		1244			1327	735		406		257	665	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.40			1.00	0.29		0.59		0.49	0.22	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 15 (17%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 35.5		Intersection LOS: D	
Intersection Capacity Utilization 81.3%		ICU Level of Service D	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Imperial Avenue/Myrtle Avenue & Post Road West (US 1)





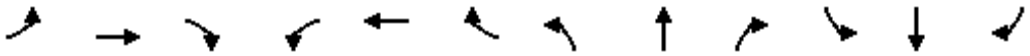
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	346	10	10	1516	40	0	0	10	10	0	30
Future Volume (vph)	30	346	10	10	1516	40	0	0	10	10	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	11	13	12	16	12	12	16	12
Satd. Flow (prot)	0	3223	0	0	3367	0	0	1099	0	0	1866	0
Flt Permitted		0.669			0.946						0.893	
Satd. Flow (perm)	0	2167	0	0	3188	0	0	1099	0	0	1694	0
Right Turn on Red			No			No			Yes			Yes
Satd. Flow (RTOR)								489			41	
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		718			679			170			193	
Travel Time (s)		19.6			18.5			3.9			5.3	
Confl. Peds. (#/hr)	2					2			2	2		
Peak Hour Factor	0.55	0.81	0.50	0.50	0.88	0.73	0.25	0.80	0.50	0.50	0.80	0.78
Heavy Vehicles (%)	0%	6%	50%	0%	3%	3%	0%	0%	67%	10%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	502	0	0	1798	0	0	20	0	0	58	0
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		9.0	9.0		9.0	9.0	
Minimum Split (s)	21.4	21.4		21.4	21.4		22.0	22.0		22.0	22.0	
Total Split (s)	68.0	68.0		68.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	75.6%	75.6%		75.6%	75.6%		24.4%	24.4%		24.4%	24.4%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.8	2.8		2.8	2.8		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.4			6.4			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effct Green (s)		72.7			72.7			10.8			10.8	
Actuated g/C Ratio		0.81			0.81			0.12			0.12	
v/c Ratio		0.29			0.70			0.04			0.24	
Control Delay		2.0			7.3			0.1			18.0	
Queue Delay		0.0			0.8			0.0			0.0	
Total Delay		2.0			8.1			0.1			18.0	
LOS		A			A			A			B	
Approach Delay		2.0			8.1			0.1			18.0	
Approach LOS		A			A			A			B	
90th %ile Green (s)	61.6	61.6		61.6	61.6		18.0	18.0		18.0	18.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Ped	Ped		Ped	Ped	
70th %ile Green (s)	70.6	70.6		70.6	70.6		9.0	9.0		9.0	9.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
50th %ile Green (s)	70.6	70.6		70.6	70.6		9.0	9.0		9.0	9.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Min	Min	
30th %ile Green (s)	70.6	70.6		70.6	70.6		9.0	9.0		9.0	9.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Min	Min	
10th %ile Green (s)	83.6	83.6		83.6	83.6		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)		23			161			0			9	
Queue Length 95th (ft)		42			m457			0			33	
Internal Link Dist (ft)		638			599			90			113	
Turn Bay Length (ft)												
Base Capacity (vph)		1749			2574			611			371	
Starvation Cap Reductn		0			423			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.29			0.84			0.03			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 30 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 7.0		Intersection LOS: A	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Post Road West (US 1) & Playhouse Square Driveway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	293	31	110	1375	40	71	110	91	111	210	121
Future Volume (vph)	52	293	31	110	1375	40	71	110	91	111	210	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	11	11	12	11	11	12
Storage Length (ft)	140		0	120		0	110		0	180		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1504	3166	0	1678	3355	0	1572	1575	0	1646	1610	0
Flt Permitted	0.117			0.472			0.267			0.504		
Satd. Flow (perm)	185	3166	0	799	3355	0	432	1575	0	843	1610	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		679			454			1260			941	
Travel Time (s)		18.5			12.4			24.5			18.3	
Confl. Peds. (#/hr)	50		50	50		50	50		50	50		50
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.65	0.75	0.80	0.96	0.86	0.60	0.71	0.95	0.85	0.94	0.82	0.80
Heavy Vehicles (%)	16%	6%	25%	4%	3%	3%	11%	7%	3%	6%	6%	4%
Bus Blockages (#/hr)	0	0	2	0	0	2	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	430	0	115	1666	0	100	223	0	118	407	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		9	14		13	10	
Permitted Phases	2			6			14			10		
Detector Phase	5	2		1	6		9	14		13	10	
Switch Phase												
Minimum Initial (s)	3.2	12.0		3.2	12.0		4.8	4.0		4.8	4.0	
Minimum Split (s)	10.0	35.0		10.0	35.0		9.0	33.0		9.0	33.0	
Total Split (s)	10.0	37.0		10.0	37.0		10.0	33.0		10.0	33.0	
Total Split (%)	11.1%	41.1%		11.1%	41.1%		11.1%	36.7%		11.1%	36.7%	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	3.8	2.0		3.8	2.0		1.2	2.0		1.2	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.8	6.0		6.8	6.0		4.2	6.0		4.2	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	38.8	36.4		38.8	36.4		30.2	23.0		31.6	25.1	
Actuated g/C Ratio	0.43	0.40		0.43	0.40		0.34	0.26		0.35	0.28	
v/c Ratio	0.56	0.34		0.30	1.23		0.47	0.55		0.34	0.90	
Control Delay	45.0	29.8		14.4	135.2		24.2	33.5		19.9	56.4	
Queue Delay	0.0	0.0		0.0	0.1		1.9	0.0		0.0	4.0	
Total Delay	45.0	29.8		14.4	135.2		26.1	33.5		19.9	60.4	
LOS	D	C		B	F		C	C		B	E	
Approach Delay		32.2			127.4			31.2			51.3	
Approach LOS		C			F			C			D	
90th %ile Green (s)	3.2	31.0		3.2	31.0		5.8	27.0		5.8	27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Coord		Max	Coord		Max	Ped		Max	Max	
70th %ile Green (s)	3.2	31.0		3.2	31.0		5.8	27.0		5.8	27.0	
70th %ile Term Code	Max	Coord		Max	Coord		Max	Hold		Max	Max	
50th %ile Green (s)	3.2	31.0		3.2	31.0		5.8	27.0		5.8	27.0	
50th %ile Term Code	Max	Coord		Max	Coord		Max	Hold		Max	Max	
30th %ile Green (s)	6.4	31.0		6.4	31.0		5.0	23.8		5.8	24.6	
30th %ile Term Code	Max	Coord		Max	Coord		Gap	Hold		Max	Gap	
10th %ile Green (s)	0.0	57.9		0.0	57.9		0.0	10.1		5.8	20.1	
10th %ile Term Code	Skip	Coord		Skip	Coord		Skip	Gap		Max	Hold	
Queue Length 50th (ft)	40	118		24	~691		34	103		40	216	
Queue Length 95th (ft)	40	147		m44	#762		50	172		75	#316	
Internal Link Dist (ft)		599			374			1180			861	
Turn Bay Length (ft)	140			120			110			180		
Base Capacity (vph)	142	1279		385	1356		220	472		347	483	
Starvation Cap Reductn	0	0		0	2		0	0		0	0	
Spillback Cap Reductn	0	0		0	22		43	0		0	34	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.56	0.34		0.30	1.25		0.56	0.47		0.34	0.91	

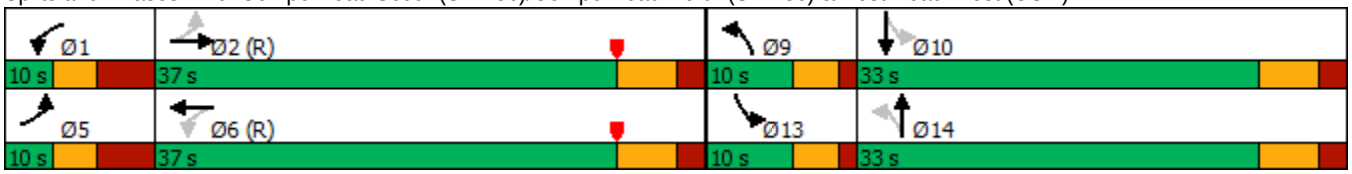
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 70 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.23			
Intersection Signal Delay: 89.3		Intersection LOS: F	
Intersection Capacity Utilization 88.8%		ICU Level of Service E	
Analysis Period (min) 15			

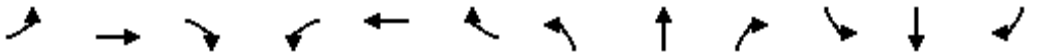
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Compo Road South (SR 136)/Compo Road North (SR 136) & Post Road West (US 1)





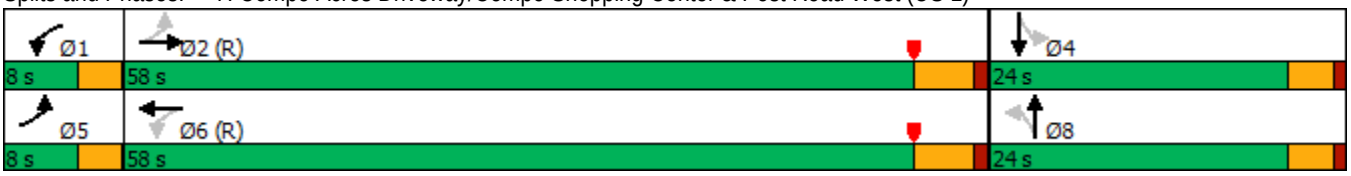
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	545	20	50	1345	30	20	0	10	20	0	10
Future Volume (vph)	30	545	20	50	1345	30	20	0	10	20	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	11	12	12	14	12	12	16	12
Storage Length (ft)	140		0	80		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1678	3301	0	1685	3309	0	0	1866	0	0	1944	0
Flt Permitted	0.124			0.384				0.821			0.836	
Satd. Flow (perm)	219	3301	0	680	3309	0	0	1571	0	0	1669	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			6			62			62	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		454			381			155			251	
Travel Time (s)		12.4			10.4			4.2			6.8	
Confl. Peds. (#/hr)			4	4			8					8
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.82	0.85	0.56	0.77	0.87	0.67	0.46	0.50	0.40	0.60	0.80	0.35
Heavy Vehicles (%)	4%	5%	0%	0%	5%	4%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	677	0	65	1591	0	0	68	0	0	62	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	6.1	20.0		6.1	20.0		24.0	24.0		24.0	24.0	
Total Split (s)	8.0	58.0		8.0	58.0		24.0	24.0		24.0	24.0	
Total Split (%)	8.9%	64.4%		8.9%	64.4%		26.7%	26.7%		26.7%	26.7%	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.1	1.0		0.1	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.1	5.0		3.1	5.0			4.0			4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	72.8	68.4		73.7	70.0			9.7			9.7	
Actuated g/C Ratio	0.81	0.76		0.82	0.78			0.11			0.11	
v/c Ratio	0.15	0.27		0.11	0.62			0.30			0.26	
Control Delay	3.1	3.3		2.9	8.5			14.0			11.8	
Queue Delay	0.0	0.0		0.0	9.9			0.0			0.0	
Total Delay	3.1	3.3		2.9	18.3			14.1			11.8	
LOS	A	A		A	B			B			B	
Approach Delay		3.3			17.7			14.1			11.8	
Approach LOS		A			B			B			B	
90th %ile Green (s)	4.9	53.0		4.9	53.0		20.0	20.0		20.0	20.0	

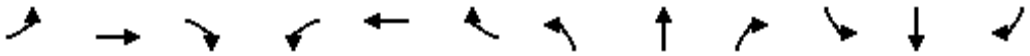
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Coord		Max	Coord		Ped	Ped		Ped	Ped	
70th %ile Green (s)	4.4	65.8		4.7	66.1		7.4	7.4		7.4	7.4	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	4.2	66.5		4.4	66.7		7.0	7.0		7.0	7.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Min	Min		Min	Min	
30th %ile Green (s)	0.0	66.7		4.2	74.0		7.0	7.0		7.0	7.0	
30th %ile Term Code	Skip	Coord		Gap	Coord		Min	Min		Min	Min	
10th %ile Green (s)	0.0	85.0		0.0	85.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Coord		Skip	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	2	41		4	192			3			0	
Queue Length 95th (ft)	m6	82		18	417			7			24	
Internal Link Dist (ft)		374			301			75			171	
Turn Bay Length (ft)	140			80								
Base Capacity (vph)	257	2511		612	2573			397			419	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	966			18			18	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.14	0.27		0.11	0.99			0.18			0.15	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 75 (83%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 13.4 Intersection LOS: B
Intersection Capacity Utilization 57.4% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

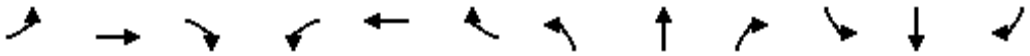
Splits and Phases: 7: Compo Acres Driveway/Compo Shopping Center & Post Road West (US 1)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	545	30	20	1425	230	0	0	10	0	0	0
Future Volume (vph)	10	545	30	20	1425	230	0	0	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3412	0	0	3401	0	0	1644	0	0	0	0
Flt Permitted		0.999			0.999							
Satd. Flow (perm)	0	3412	0	0	3401	0	0	1644	0	0	0	0
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		381			619			336			318	
Travel Time (s)		10.4			16.9			7.6			8.7	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.67	0.82	0.82	0.75	0.89	0.88	0.38	0.80	0.33	0.80	0.80	0.80
Heavy Vehicles (%)	0%	5%	4%	0%	4%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	717	0	0	1889	0	0	30	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

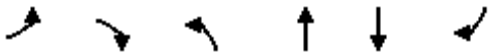
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 71.1%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	545	30	20	1425	230	0	0	10	0	0	0
Future Volume (Veh/h)	10	545	30	20	1425	230	0	0	10	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.82	0.82	0.75	0.89	0.88	0.38	0.80	0.33	0.80	0.80	0.80
Hourly flow rate (vph)	15	665	37	27	1601	261	0	0	30	0	0	0
Pedestrians								2				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								0				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		381										
pX, platoon unblocked				0.95			0.95	0.95	0.95	0.95	0.95	
vC, conflicting volume	1862			704			1570	2632	353	2178	2520	931
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1862			590			1499	2613	222	2137	2496	931
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			97			100	100	96	100	100	100
cM capacity (veh/h)	329			947			77	22	749	25	26	272

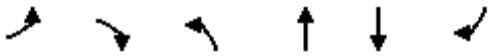
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	348	370	828	1062	30
Volume Left	15	0	27	0	0
Volume Right	0	37	0	261	30
cSH	329	1700	947	1700	749
Volume to Capacity	0.05	0.22	0.03	0.62	0.04
Queue Length 95th (ft)	4	0	2	0	3
Control Delay (s)	1.6	0.0	0.8	0.0	10.0
Lane LOS	A		A		B
Approach Delay (s)	0.8		0.3		10.0
Approach LOS					B

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	71.1%	ICU Level of Service		C
Analysis Period (min)	15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	71	72	435	757	70
Future Volume (vph)	30	71	72	435	757	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	12	12	16	12
Satd. Flow (prot)	1642	0	0	1556	2067	0
Flt Permitted	0.986			0.991		
Satd. Flow (perm)	1642	0	0	1556	2067	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	720			689	451	
Travel Time (s)	19.6			15.7	10.3	
Confl. Peds. (#/hr)	2		4			4
Peak Hour Factor	0.56	0.51	0.64	0.91	0.75	0.69
Heavy Vehicles (%)	0%	9%	0%	11%	3%	2%
Parking (#/hr)				0		0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	193	0	0	591	1110	0
Sign Control	Stop			Free	Free	

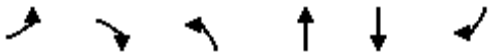
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 87.0%		ICU Level of Service E	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	71	72	435	757	70
Future Volume (Veh/h)	30	71	72	435	757	70
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.56	0.51	0.64	0.91	0.75	0.69
Hourly flow rate (vph)	54	139	113	478	1009	101
Pedestrians	4				2	
Lane Width (ft)	13.0				16.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1770	1064	1114			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1770	1064	1114			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	29	47	82			
cM capacity (veh/h)	76	262	632			

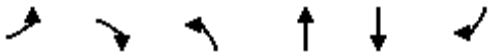
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	193	591	1110
Volume Left	54	113	0
Volume Right	139	0	101
cSH	155	632	1700
Volume to Capacity	1.24	0.18	0.65
Queue Length 95th (ft)	280	16	0
Control Delay (s)	209.8	4.7	0.0
Lane LOS	F	A	
Approach Delay (s)	209.8	4.7	0.0
Approach LOS	F		

Intersection Summary			
Average Delay	22.8		
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	40	0	517	818	0
Future Volume (vph)	10	40	0	517	818	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	11	12
Satd. Flow (prot)	1493	0	0	1555	1783	0
Flt Permitted	0.988					
Satd. Flow (perm)	1493	0	0	1555	1783	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	382			399	413	
Travel Time (s)	8.7			9.1	9.4	
Confl. Peds. (#/hr)			4			4
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.44	0.56	0.92	0.89	0.72	0.92
Heavy Vehicles (%)	0%	37%	2%	10%	3%	2%
Parking (#/hr)				0		0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	94	0	0	581	1136	0
Sign Control	Stop			Free	Free	

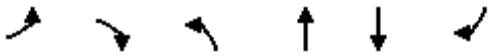
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	40	0	517	818	0
Future Volume (Veh/h)	10	40	0	517	818	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.44	0.56	0.92	0.89	0.72	0.92
Hourly flow rate (vph)	23	71	0	581	1136	0
Pedestrians	4					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1721	1140	1140			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1721	1140	1140			
tC, single (s)	6.4	6.6	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.6	2.2			
p0 queue free %	77	66	100			
cM capacity (veh/h)	99	207	610			

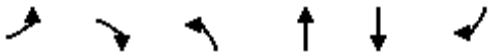
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	94	581	1136
Volume Left	23	0	0
Volume Right	71	0	0
cSH	164	1700	1700
Volume to Capacity	0.57	0.34	0.67
Queue Length 95th (ft)	75	0	0
Control Delay (s)	53.2	0.0	0.0
Lane LOS	F		
Approach Delay (s)	53.2	0.0	0.0
Approach LOS	F		

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	140	507	748	140
Future Volume (vph)	0	0	140	507	748	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	12	16	12
Storage Length (ft)	0	0	90			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	0	0	1547	1727	1994	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1547	1727	1994	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	465			367	399	
Travel Time (s)	10.6			8.3	9.1	
Confl. Peds. (#/hr)			4			4
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.89	0.92	0.89	0.92	0.75	0.63
Heavy Vehicles (%)	2%	2%	5%	10%	4%	11%
Parking (#/hr)						0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	157	551	1219	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	140	507	748	140
Future Volume (Veh/h)	0	0	140	507	748	140
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.92	0.89	0.92	0.75	0.63
Hourly flow rate (vph)	0	0	157	551	997	222
Pedestrians	4					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1977	1112	1223			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1977	1112	1223			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	72			
cM capacity (veh/h)	49	254	560			

Direction, Lane #	NB 1	NB 2	SB 1
Volume Total	157	551	1219
Volume Left	157	0	0
Volume Right	0	0	222
cSH	560	1700	1700
Volume to Capacity	0.28	0.32	0.72
Queue Length 95th (ft)	29	0	0
Control Delay (s)	13.9	0.0	0.0
Lane LOS	B		
Approach Delay (s)	3.1		0.0
Approach LOS			

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	80	23	13	180	142	13	525	13	225	523	80
Future Volume (vph)	30	80	23	13	180	142	13	525	13	225	523	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	11	12	12	12	12	10	12	12
Storage Length (ft)	0		0	0		300	0		0	180		0
Storage Lanes	0		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2016	0	0	1811	1553	0	1727	0	1620	1773	0
Flt Permitted		0.988			0.995			0.968		0.950		
Satd. Flow (perm)	0	2016	0	0	1806	1553	0	1673	0	1620	1773	0
Right Turn on Red			No			No			No			Yes
Satd. Flow (RTOR)											10	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1250			990			1098			1022	
Travel Time (s)		34.1			27.0			25.0			23.2	
Confl. Peds. (#/hr)			7	7			5					5
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.80	0.83	0.80	0.55	0.84	0.81	0.75	0.89	0.69	0.74	0.77	0.68
Heavy Vehicles (%)	4%	2%	0%	0%	1%	4%	17%	9%	18%	4%	5%	1%
Parking (#/hr)			0									
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	0	0	238	175	0	626	0	304	797	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA		Prot	NA	
Protected Phases	9	9		12	12	1		2		1	6	
Permitted Phases						12	2					
Detector Phase	9	9		12	12	1	2	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		7.0	7.0	6.0	15.0	15.0		6.0	15.0	
Minimum Split (s)	12.0	12.0		12.0	12.0	10.0	22.0	22.0		10.0	21.0	
Total Split (s)	21.0	21.0		17.0	17.0	21.0	40.0	40.0		21.0	61.0	
Total Split (%)	17.5%	17.5%		14.2%	14.2%	17.5%	33.3%	33.3%		17.5%	50.8%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	4.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	1.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	4.0		6.0		4.0	6.0	
Lead/Lag						Lead	Lag	Lag		Lead		
Lead-Lag Optimize?						Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Min	Min		None	Min	
Act Effct Green (s)		11.7			12.1	34.3		34.3		17.2	55.5	
Actuated g/C Ratio		0.12			0.12	0.35		0.35		0.17	0.56	
v/c Ratio		0.68			1.07	0.32		1.08		1.08	0.80	
Control Delay		58.0			124.7	28.0		92.9		117.8	26.4	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		58.0			124.7	28.0		92.9		117.8	26.4	
LOS		E			F	C		F		F	C	
Approach Delay		58.0			83.7			92.9			51.7	
Approach LOS		E			F			F			D	
90th %ile Green (s)	16.0	16.0		12.0	12.0	17.0	34.0	34.0		17.0	55.0	

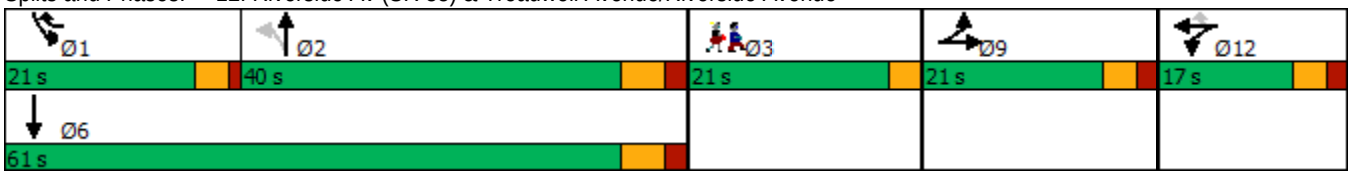
Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	21.0
Total Split (%)	18%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	17.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Max	
70th %ile Green (s)	13.7	13.7		12.0	12.0	17.0	34.0	34.0		17.0	55.0	
70th %ile Term Code	Gap	Gap		Max	Max	Max	Max	Max		Max	Max	
50th %ile Green (s)	11.8	11.8		12.0	12.0	17.0	34.0	34.0		17.0	55.0	
50th %ile Term Code	Gap	Gap		Max	Max	Max	Max	Max		Max	Hold	
30th %ile Green (s)	10.0	10.0		12.0	12.0	17.0	34.0	34.0		17.0	55.0	
30th %ile Term Code	Gap	Gap		Max	Max	Max	Max	Max		Max	Hold	
10th %ile Green (s)	7.5	7.5		12.0	12.0	17.0	34.0	34.0		17.0	55.0	
10th %ile Term Code	Gap	Gap		Max	Max	Max	Max	Max		Max	Hold	
Queue Length 50th (ft)		95			~156	75		~411		~200	335	
Queue Length 95th (ft)		177			#362	155		#829		#362	593	
Internal Link Dist (ft)		1170			910			1018			942	
Turn Bay Length (ft)						300				180		
Base Capacity (vph)		329			222	539		581		281	1000	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.50			1.07	0.32		1.08		1.08	0.80	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 98.8	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 69.1	Intersection LOS: E
Intersection Capacity Utilization 97.5%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 119	
70th %ile Actuated Cycle: 96.7	
50th %ile Actuated Cycle: 94.8	
30th %ile Actuated Cycle: 93	
10th %ile Actuated Cycle: 90.5	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Riverside Av (SR 33) & Treadwell Avenue/Riverside Avenue



Lane Group	Ø3
90th %ile Term Code	Ped
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

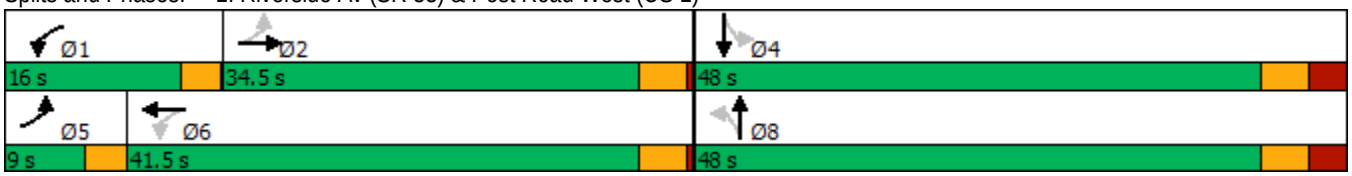
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	526	20	326	468	214	40	199	276	143	169	51
Future Volume (vph)	112	526	20	326	468	214	40	199	276	143	169	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	16	12	12	11	12	12	14	12
Grade (%)		-3%			0%			0%			0%	
Satd. Flow (prot)	1693	1847	0	1752	1956	0	0	1310	0	0	1825	0
Flt Permitted	0.132			0.119				0.935			0.540	
Satd. Flow (perm)	235	1847	0	220	1956	0	0	1229	0	0	998	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		682			657			610			1340	
Travel Time (s)		18.6			17.9			13.9			30.5	
Confl. Peds. (#/hr)	22		11	11		22	20		33	33		20
Peak Hour Factor	0.89	0.95	0.56	0.89	0.97	0.86	0.81	0.83	0.96	0.96	0.87	0.67
Heavy Vehicles (%)	1%	3%	6%	3%	2%	1%	7%	11%	5%	7%	6%	3%
Parking (#/hr)								10				
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	590	0	366	731	0	0	577	0	0	419	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	8.1	22.1		8.1	22.1		28.5	28.5		28.5	28.5	
Total Split (s)	9.0	34.5		16.0	41.5		48.0	48.0		48.0	48.0	
Total Split (%)	9.1%	35.0%		16.2%	42.1%		48.7%	48.7%		48.7%	48.7%	
Yellow Time (s)	3.0	3.6		3.0	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	0.1	0.5		0.1	0.5		2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.1	4.1		3.1	4.1			6.5			6.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	37.3	30.4		47.4	37.4			41.5			41.5	
Actuated g/C Ratio	0.38	0.31		0.48	0.38			0.42			0.42	
v/c Ratio	0.72	1.04		1.20	0.99			1.12			1.00	
Control Delay	40.5	81.9		141.2	61.2			104.6			73.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	40.5	81.9		141.2	61.2			104.6			73.9	
LOS	D	F		F	E			F			E	
Approach Delay		74.6			87.9			104.6			73.9	
Approach LOS		E			F			F			E	
90th %ile Green (s)	5.9	30.4		12.9	37.4		41.5	41.5		41.5	41.5	
90th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
70th %ile Green (s)	5.9	30.4		12.9	37.4		41.5	41.5		41.5	41.5	
70th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	

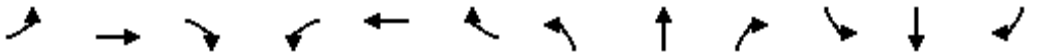
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Green (s)	5.9	30.4		12.9	37.4		41.5	41.5		41.5	41.5	
50th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
30th %ile Green (s)	5.9	30.4		12.9	37.4		41.5	41.5		41.5	41.5	
30th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
10th %ile Green (s)	5.9	30.4		12.9	37.4		41.5	41.5		41.5	41.5	
10th %ile Term Code	Max	Max		Max	Hold		Max	Max		Max	Max	
Queue Length 50th (ft)	43	~401		~228	447			~418			256	
Queue Length 95th (ft)	#110	#609		#401	#694			#549			#436	
Internal Link Dist (ft)		602			577			530			1260	
Turn Bay Length (ft)												
Base Capacity (vph)	176	570		306	742			517			420	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.72	1.04		1.20	0.99			1.12			1.00	

Intersection Summary

Area Type: Other
Cycle Length: 98.5
Actuated Cycle Length: 98.5
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.20
Intersection Signal Delay: 85.9 Intersection LOS: F
Intersection Capacity Utilization 115.9% ICU Level of Service H
Analysis Period (min) 15
90th %ile Actuated Cycle: 98.5
70th %ile Actuated Cycle: 98.5
50th %ile Actuated Cycle: 98.5
30th %ile Actuated Cycle: 98.5
10th %ile Actuated Cycle: 98.5
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Riverside Av (SR 33) & Post Road West (US 1)



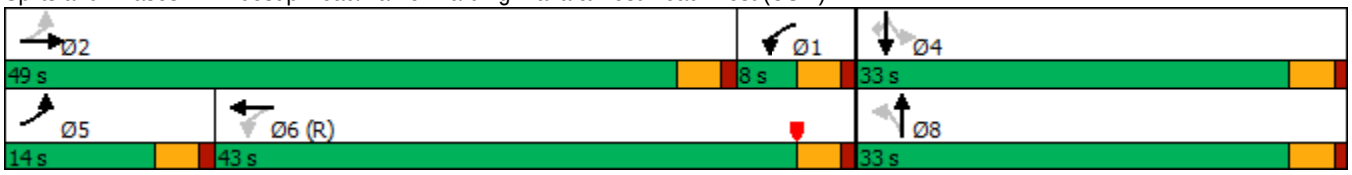


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	672	151	60	675	70	141	50	10	150	80	192
Future Volume (vph)	132	672	151	60	675	70	141	50	10	150	80	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	16	12	12	10	12	12	15	12	12	10	12
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	1970	0	0	3206	0	0	1933	0	0	1710	1568
Flt Permitted	0.226				0.775			0.485			0.709	
Satd. Flow (perm)	412	1970	0	0	2492	0	0	962	0	0	1228	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			15			4				213
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		657			264			553			224	
Travel Time (s)		17.9			7.2			15.1			5.1	
Confl. Peds. (#/hr)	22		18	18		22	12		38	38		12
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.92	0.95	0.90	0.98	0.92	0.86	0.86	0.73	0.58	0.96	0.82	0.90
Heavy Vehicles (%)	0%	5%	5%	0%	3%	2%	2%	0%	29%	1%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	875	0	0	876	0	0	249	0	0	254	213
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	13.0		4.0	13.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	9.0	26.0		8.0	26.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	14.0	49.0		8.0	43.0		33.0	33.0		33.0	33.0	33.0
Total Split (%)	15.6%	54.4%		8.9%	47.8%		36.7%	36.7%		36.7%	36.7%	36.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0			4.0			4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?												
Recall Mode	None	None		None	C-Max		None	None		None	None	None
Act Effct Green (s)	56.6	56.6			46.1			25.4			25.4	25.4
Actuated g/C Ratio	0.63	0.63			0.51			0.28			0.28	0.28
v/c Ratio	0.40	0.70			0.68			0.91			0.74	0.37
Control Delay	11.1	15.7			25.5			67.0			42.0	5.3
Queue Delay	0.0	1.2			0.3			0.0			0.0	0.0
Total Delay	11.1	16.9			25.8			67.0			42.0	5.3
LOS	B	B			C			E			D	A
Approach Delay		16.1			25.8			67.0			25.2	
Approach LOS		B			C			E			C	
90th %ile Green (s)	9.0	53.0		0.0	40.0		29.0	29.0		29.0	29.0	29.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Gap	Coord		Skip	Coord		Max	Max		Max	Max	Max
70th %ile Green (s)	7.4	53.0		0.0	41.6		29.0	29.0		29.0	29.0	29.0
70th %ile Term Code	Gap	Coord		Skip	Coord		Max	Max		Hold	Hold	Hold
50th %ile Green (s)	6.3	54.1		0.0	43.8		27.9	27.9		27.9	27.9	27.9
50th %ile Term Code	Gap	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
30th %ile Green (s)	5.0	58.3		0.0	49.3		23.7	23.7		23.7	23.7	23.7
30th %ile Term Code	Min	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
10th %ile Green (s)	5.0	64.8		0.0	55.8		17.2	17.2		17.2	17.2	17.2
10th %ile Term Code	Min	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
Queue Length 50th (ft)	32	318			88			129			125	0
Queue Length 95th (ft)	60	490			215			165			183	48
Internal Link Dist (ft)		577			184			473			144	
Turn Bay Length (ft)												100
Base Capacity (vph)	407	1246			1283			312			395	635
Starvation Cap Reductn	0	132			86			0			0	0
Spillback Cap Reductn	0	179			0			0			0	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.35	0.82			0.73			0.80			0.64	0.34

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 30 (33%), Referenced to phase 6:WBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 25.9		Intersection LOS: C	
Intersection Capacity Utilization 95.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 2: Jesup Road/Parker Harding Plaza & Post Road West (US 1)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	742	0	0	795	140	10	40	40	0	0	0
Future Volume (vph)	90	742	0	0	795	140	10	40	40	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	12	12	11	12	12	13	12	12	12	12
Satd. Flow (prot)	1532	1705	0	0	3421	1583	0	1759	0	0	0	0
Flt Permitted	0.246							0.992				
Satd. Flow (perm)	397	1705	0	0	3421	1047	0	1759	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						167		36				
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		264			99			221			659	
Travel Time (s)		7.2			2.7			5.0			18.0	
Confl. Peds. (#/hr)	94		1	1		94				4		97
Peak Hour Factor	0.91	0.93	0.80	0.80	0.93	0.84	0.55	0.84	0.81	0.80	0.80	0.80
Heavy Vehicles (%)	10%	4%	0%	0%	2%	2%	9%	7%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	798	0	0	855	167	0	115	0	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA				
Protected Phases	5	2			6			14				
Permitted Phases	2					6	14					
Detector Phase	5	2			6	6	14	14				
Switch Phase												
Minimum Initial (s)	6.0	19.0			19.0	19.0	9.0	9.0				
Minimum Split (s)	10.0	23.5			23.5	23.5	15.5	15.5				
Total Split (s)	14.0	44.0			30.0	30.0	21.0	21.0				
Total Split (%)	15.6%	48.9%			33.3%	33.3%	23.3%	23.3%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.5			1.5	1.5	1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.5			4.5	4.5		4.5				
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?												
Recall Mode	None	C-Max			C-Max	C-Max	None	None				
Act Effct Green (s)	60.9	61.3			51.8	51.8		10.1				
Actuated g/C Ratio	0.68	0.68			0.58	0.58		0.11				
v/c Ratio	0.27	0.69			0.43	0.25		0.50				
Control Delay	7.5	15.6			25.0	12.3		33.8				
Queue Delay	0.0	0.9			0.4	0.2		0.7				
Total Delay	7.5	16.5			25.4	12.5		34.5				
LOS	A	B			C	B		C				
Approach Delay		15.5			23.3			34.5				
Approach LOS		B			C			C				
90th %ile Green (s)	10.2	46.0			31.8	31.8	13.0	13.0				
90th %ile Term Code	Gap	Coord			Coord	Coord	Gap	Gap				
70th %ile Green (s)	8.3	48.6			36.3	36.3	10.4	10.4				
70th %ile Term Code	Gap	Coord			Coord	Coord	Gap	Gap				
50th %ile Green (s)	7.2	50.0			38.8	38.8	9.0	9.0				

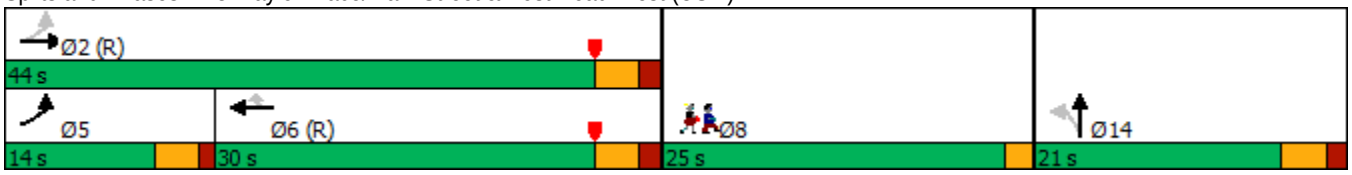
Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	4.0
Minimum Split (s)	22.0
Total Split (s)	25.0
Total Split (%)	28%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	20.0
90th %ile Term Code	Ped
70th %ile Green (s)	20.0
70th %ile Term Code	Ped
50th %ile Green (s)	20.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Term Code	Gap	Coord			Coord	Coord	Min	Min				
30th %ile Green (s)	6.0	72.0			62.0	62.0	9.0	9.0				
30th %ile Term Code	Min	Coord			Coord	Coord	Min	Min				
10th %ile Green (s)	0.0	85.5			85.5	85.5	0.0	0.0				
10th %ile Term Code	Skip	Coord			Coord	Coord	Skip	Skip				
Queue Length 50th (ft)	16	419			202	22		43				
Queue Length 95th (ft)	m27	#679			292	72		84				
Internal Link Dist (ft)		184			19			141			579	
Turn Bay Length (ft)												
Base Capacity (vph)	395	1161			1968	673		351				
Starvation Cap Reductn	0	144			559	133		0				
Spillback Cap Reductn	0	149			46	0		78				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.25	0.79			0.61	0.31		0.42				

Intersection Summary

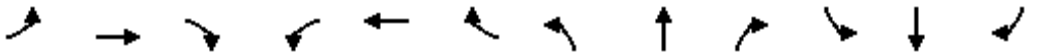
Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 40 (44%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 20.5 Intersection LOS: C
Intersection Capacity Utilization 59.1% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Taylor Place/Main Street & Post Road West (US 1)



Lane Group	Ø8
50th %ile Term Code	Ped
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	662	50	150	765	200	60	120	180	140	80	40
Future Volume (vph)	40	662	50	150	765	200	60	120	180	140	80	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	12	13	12	14	12	12	12	12
Grade (%)		0%			-4%			0%			0%	
Storage Length (ft)	0		185	0		150	0		0	60		0
Storage Lanes	0		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3193	0	0	3587	1685	0	1844	0	1770	1689	0
Flt Permitted		0.841			0.617			0.919		0.253		
Satd. Flow (perm)	0	2694	0	0	2225	1611	0	1705	0	470	1689	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		287			718			629			396	
Travel Time (s)		7.8			19.6			17.2			10.8	
Confl. Peds. (#/hr)	11		21	21		11	9		8	8		9
Confl. Bikes (#/hr)									2			
Peak Hour Factor	0.96	0.91	0.82	0.90	0.90	0.86	0.88	0.65	0.89	0.82	0.87	0.50
Heavy Vehicles (%)	0%	4%	3%	1%	2%	1%	2%	2%	1%	2%	0%	8%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	830	0	0	1017	233	0	455	0	171	172	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			10		9	13	
Permitted Phases	2			6		6	10			13		
Detector Phase	5	2		6	6	6	10	10		9	13	
Switch Phase												
Minimum Initial (s)	4.0	14.0		9.3	9.3	9.3	7.0	7.0		5.0	7.0	
Minimum Split (s)	8.0	19.7		25.7	25.7	25.7	29.1	29.1		9.0	18.4	
Total Split (s)	9.0	51.0		42.0	42.0	42.0	29.0	29.0		10.0	39.0	
Total Split (%)	10.0%	56.7%		46.7%	46.7%	46.7%	32.2%	32.2%		11.1%	43.3%	
Yellow Time (s)	3.0	3.6		3.6	3.6	3.6	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	2.1		2.1	2.1	2.1	2.1	2.1		1.0	2.1	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		5.7			5.7	5.7		5.1		4.0	5.1	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	None	C-Max		C-Max	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)		45.3			45.3	45.3		23.9		35.0	33.9	
Actuated g/C Ratio		0.50			0.50	0.50		0.27		0.39	0.38	
v/c Ratio		0.61			0.91	0.29		1.01		0.64	0.27	
Control Delay		20.0			20.3	8.4		79.0		31.3	20.9	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		20.0			20.3	8.4		79.0		31.3	20.9	
LOS		C			C	A		E		C	C	
Approach Delay		20.0			18.1			79.0			26.1	
Approach LOS		C			B			E			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Green (s)	0.0	45.3		45.3	45.3	45.3	23.9	23.9		6.0	33.9	
90th %ile Term Code	Skip	Coord		Coord	Coord	Coord	Ped	Ped		Max	Hold	
70th %ile Green (s)	0.0	45.3		45.3	45.3	45.3	23.9	23.9		6.0	33.9	
70th %ile Term Code	Skip	Coord		Coord	Coord	Coord	Max	Max		Max	Hold	
50th %ile Green (s)	0.0	45.3		45.3	45.3	45.3	23.9	23.9		6.0	33.9	
50th %ile Term Code	Skip	Coord		Coord	Coord	Coord	Max	Max		Max	Hold	
30th %ile Green (s)	0.0	45.3		45.3	45.3	45.3	23.9	23.9		6.0	33.9	
30th %ile Term Code	Skip	Coord		Coord	Coord	Coord	Max	Max		Max	Hold	
10th %ile Green (s)	0.0	45.3		45.3	45.3	45.3	23.9	23.9		6.0	33.9	
10th %ile Term Code	Skip	Coord		Coord	Coord	Coord	Max	Max		Max	Hold	
Queue Length 50th (ft)		85			70	24		~261		64	67	
Queue Length 95th (ft)		328			#399	m69		248		100	111	
Internal Link Dist (ft)		207			638			549			316	
Turn Bay Length (ft)						150				60		
Base Capacity (vph)		1355			1119	810		452		269	636	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.61			0.91	0.29		1.01		0.64	0.27	

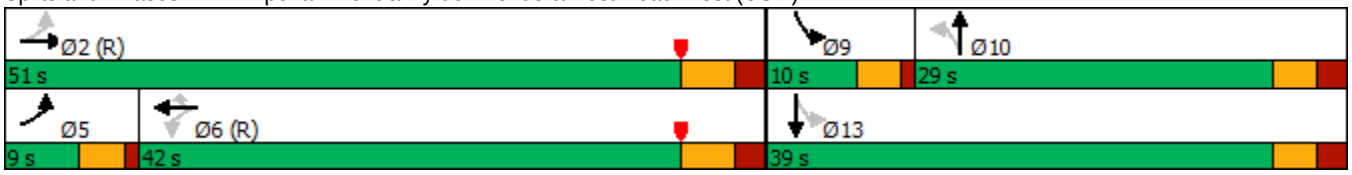
Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 45 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 29.2	Intersection LOS: C
Intersection Capacity Utilization 93.5%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Imperial Avenue/Myrtle Avenue & Post Road West (US 1)



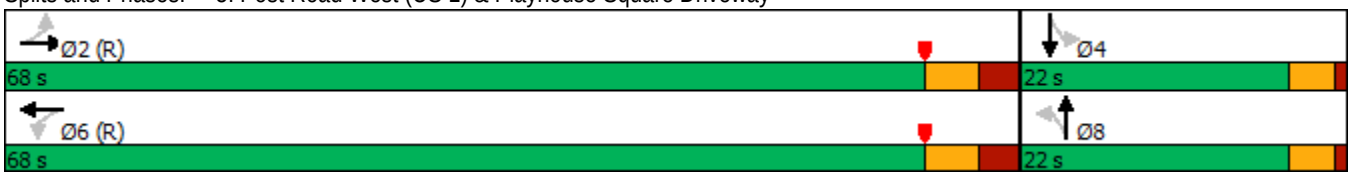
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	932	10	10	1025	130	0	0	10	110	0	120
Future Volume (vph)	70	932	10	10	1025	130	0	0	10	110	0	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	11	13	12	16	12	12	16	12
Satd. Flow (prot)	0	3356	0	0	3306	0	0	1194	0	0	1909	0
Flt Permitted		0.642			0.939						0.846	
Satd. Flow (perm)	0	2165	0	0	3107	0	0	1194	0	0	1653	0
Right Turn on Red			No			No			Yes			Yes
Satd. Flow (RTOR)								161			58	
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		718			679			170			193	
Travel Time (s)		19.6			18.5			3.9			5.3	
Confl. Peds. (#/hr)	9		7	7		9	12					12
Peak Hour Factor	0.66	0.95	0.50	0.75	0.91	0.82	0.25	0.80	0.75	0.89	0.25	0.83
Heavy Vehicles (%)	0%	3%	25%	50%	3%	1%	0%	0%	56%	0%	0%	1%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1107	0	0	1298	0	0	13	0	0	269	0
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		9.0	9.0		9.0	9.0	
Minimum Split (s)	21.4	21.4		21.4	21.4		22.0	22.0		22.0	22.0	
Total Split (s)	68.0	68.0		68.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	75.6%	75.6%		75.6%	75.6%		24.4%	24.4%		24.4%	24.4%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.8	2.8		2.8	2.8		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.4			6.4			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effct Green (s)		64.0			64.0			15.6			15.6	
Actuated g/C Ratio		0.71			0.71			0.17			0.17	
v/c Ratio		0.72			0.59			0.04			0.81	
Control Delay		7.2			19.5			0.2			46.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		7.2			19.5			0.2			46.6	
LOS		A			B			A			D	
Approach Delay		7.2			19.5			0.2			46.6	
Approach LOS		A			B			A			D	
90th %ile Green (s)	61.6	61.6		61.6	61.6		18.0	18.0		18.0	18.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Ped	Ped		Max	Max	
70th %ile Green (s)	61.6	61.6		61.6	61.6		18.0	18.0		18.0	18.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	62.3	62.3		62.3	62.3		17.3	17.3		17.3	17.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	65.2	65.2		65.2	65.2		14.4	14.4		14.4	14.4	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	69.5	69.5		69.5	69.5		10.1	10.1		10.1	10.1	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)		138			372			0			114	
Queue Length 95th (ft)		m55			m397			0			25	
Internal Link Dist (ft)		638			599			90			113	
Turn Bay Length (ft)												
Base Capacity (vph)		1540			2210			367			377	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.72			0.59			0.04			0.71	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 17.0		Intersection LOS: B	
Intersection Capacity Utilization 95.8%		ICU Level of Service F	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Post Road West (US 1) & Playhouse Square Driveway



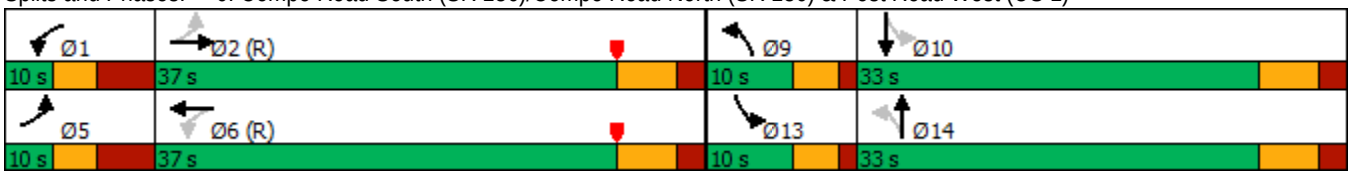
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	901	110	130	915	100	130	200	120	160	200	150
Future Volume (vph)	91	901	110	130	915	100	130	200	120	160	200	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	11	11	12	11	11	12
Storage Length (ft)	140		0	120		0	110		0	180		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1678	3313	0	1711	3321	0	1728	1650	0	1678	1661	0
Flt Permitted	0.130			0.125			0.256			0.326		
Satd. Flow (perm)	229	3313	0	225	3321	0	464	1650	0	575	1661	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		679			454			1260			941	
Travel Time (s)		18.5			12.4			24.5			18.3	
Confl. Peds. (#/hr)	3		4	4		3	5		3	3		5
Confl. Bikes (#/hr)						1						3
Peak Hour Factor	0.85	0.93	0.76	0.86	0.92	0.82	0.70	0.94	0.88	0.84	0.86	0.93
Heavy Vehicles (%)	4%	3%	2%	2%	3%	4%	1%	7%	0%	4%	3%	3%
Bus Blockages (#/hr)	0	0	2	0	0	2	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	107	1114	0	151	1117	0	186	349	0	190	394	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		9	14		13	10	
Permitted Phases	2			6			14			10		
Detector Phase	5	2		1	6		9	14		13	10	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	5.0		5.0	5.0	
Minimum Split (s)	11.8	35.0		11.8	35.0		14.2	33.0		9.2	33.0	
Total Split (s)	10.0	37.0		10.0	37.0		10.0	33.0		10.0	33.0	
Total Split (%)	11.1%	41.1%		11.1%	41.1%		11.1%	36.7%		11.1%	36.7%	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	3.8	2.0		3.8	2.0		1.2	2.0		1.2	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.8	6.0		6.8	6.0		4.2	6.0		4.2	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	34.9	30.8		37.3	32.0		31.9	24.1		31.9	24.1	
Actuated g/C Ratio	0.39	0.34		0.41	0.36		0.35	0.27		0.35	0.27	
v/c Ratio	0.64	0.98		0.78	0.95		0.75	0.79		0.69	0.89	
Control Delay	30.1	44.1		52.6	39.6		39.8	43.9		33.5	54.0	
Queue Delay	0.0	0.0		0.0	0.2		0.0	0.0		0.0	0.0	
Total Delay	30.1	44.1		52.6	39.8		39.8	43.9		33.5	54.0	
LOS	C	D		D	D		D	D		C	D	
Approach Delay		42.9			41.3			42.5			47.3	
Approach LOS		D			D			D			D	
90th %ile Green (s)	3.2	31.0		3.2	31.0		5.8	27.0		5.8	27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Max	Max	
70th %ile Green (s)	3.2	31.0		3.2	31.0		5.8	27.0		5.8	27.0	
70th %ile Term Code	Max	Coord		Max	Coord		Max	Hold		Max	Max	
50th %ile Green (s)	4.1	31.0		4.1	31.0		5.8	26.1		5.8	26.1	
50th %ile Term Code	Max	Coord		Max	Coord		Max	Hold		Max	Gap	
30th %ile Green (s)	7.4	31.0		7.4	31.0		5.8	22.8		5.8	22.8	
30th %ile Term Code	Max	Coord		Max	Coord		Max	Hold		Max	Gap	
10th %ile Green (s)	6.4	30.1		12.5	36.2		6.7	17.7		6.7	17.7	
10th %ile Term Code	Gap	Coord		Max	Coord		Max	Hold		Max	Gap	
Queue Length 50th (ft)	28	316		46	330		67	178		69	208	
Queue Length 95th (ft)	m#50	#464		#130	#473		83	275		106	#320	
Internal Link Dist (ft)		599			374			1180			861	
Turn Bay Length (ft)	140			120			110			180		
Base Capacity (vph)	166	1141		193	1181		248	495		277	498	
Starvation Cap Reductn	0	0		0	3		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.64	0.98		0.78	0.95		0.75	0.71		0.69	0.79	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 70 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 43.0		Intersection LOS: D	
Intersection Capacity Utilization 82.3%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Compo Road South (SR 136)/Compo Road North (SR 136) & Post Road West (US 1)

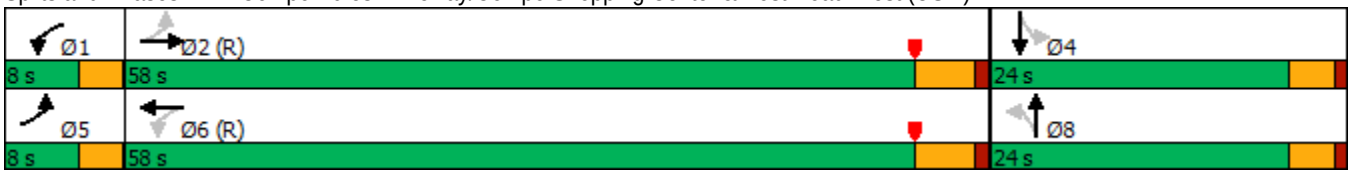


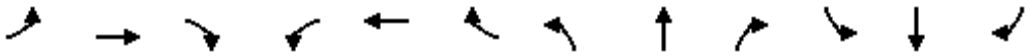
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	921	70	80	985	70	40	10	30	70	20	50
Future Volume (vph)	90	921	70	80	985	70	40	10	30	70	20	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	11	12	12	14	12	12	16	12
Storage Length (ft)	140		0	80		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1728	3320	0	1685	3340	0	0	1877	0	0	1942	0
Flt Permitted	0.223			0.208				0.716			0.799	
Satd. Flow (perm)	405	3320	0	369	3340	0	0	1373	0	0	1588	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			16			30			26	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		454			381			155			251	
Travel Time (s)		12.4			10.4			4.2			6.8	
Confl. Peds. (#/hr)	2		1	1		2	10					10
Peak Hour Factor	0.78	0.88	0.75	0.85	0.98	0.85	0.75	0.83	0.78	0.83	0.54	0.83
Heavy Vehicles (%)	1%	4%	0%	0%	3%	5%	0%	0%	0%	2%	0%	5%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	115	1140	0	94	1087	0	0	103	0	0	181	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	6.1	20.0		6.1	20.0		24.0	24.0		24.0	24.0	
Total Split (s)	8.0	58.0		8.0	58.0		24.0	24.0		24.0	24.0	
Total Split (%)	8.9%	64.4%		8.9%	64.4%		26.7%	26.7%		26.7%	26.7%	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.1	1.0		0.1	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.1	5.0		3.1	5.0			4.0			4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	66.7	60.6		66.4	60.4			13.9			13.9	
Actuated g/C Ratio	0.74	0.67		0.74	0.67			0.15			0.15	
v/c Ratio	0.31	0.51		0.27	0.48			0.43			0.68	
Control Delay	3.3	4.8		5.4	9.1			29.3			42.8	
Queue Delay	0.0	0.1		0.0	0.0			0.0			0.0	
Total Delay	3.3	4.9		5.4	9.1			29.3			42.8	
LOS	A	A		A	A			C			D	
Approach Delay		4.7			8.8			29.3			42.8	
Approach LOS		A			A			C			D	
90th %ile Green (s)	4.9	53.0		4.9	53.0		20.0	20.0		20.0	20.0	
90th %ile Term Code	Max	Coord		Max	Coord		Ped	Ped		Ped	Ped	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
70th %ile Green (s)	6.1	55.9		5.7	55.5		16.3	16.3		16.3	16.3	
70th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	5.3	58.9		5.1	58.7		13.9	13.9		13.9	13.9	
50th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	4.7	61.9		4.6	61.8		11.4	11.4		11.4	11.4	
30th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	0.0	73.1		0.0	73.1		7.9	7.9		7.9	7.9	
10th %ile Term Code	Skip	Coord		Skip	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	6	90		10	146			38			84	
Queue Length 95th (ft)	m9	m100		27	234			71			72	
Internal Link Dist (ft)		374			301			75			171	
Turn Bay Length (ft)	140			80								
Base Capacity (vph)	377	2239		346	2247			328			373	
Starvation Cap Reductn	0	233		0	0			0			0	
Spillback Cap Reductn	0	0		0	134			1			1	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.31	0.57		0.27	0.51			0.31			0.49	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 80 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 10.0		Intersection LOS: A	
Intersection Capacity Utilization 57.4%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

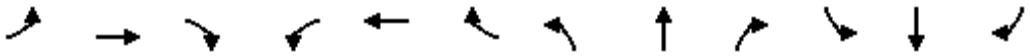
Splits and Phases: 7: Compo Acres Driveway/Compo Shopping Center & Post Road West (US 1)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	1081	10	10	1125	130	10	0	10	0	0	0
Future Volume (vph)	40	1081	10	10	1125	130	10	0	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3496	0	0	3460	0	0	1726	0	0	0	0
Flt Permitted		0.998						0.977				
Satd. Flow (perm)	0	3496	0	0	3460	0	0	1726	0	0	0	0
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		381			619			336			318	
Travel Time (s)		10.4			16.9			7.6			8.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.88	0.91	0.58	0.75	0.97	0.81	0.88	0.50	0.83	0.80	0.80	0.25
Heavy Vehicles (%)	0%	3%	0%	0%	2%	6%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1250	0	0	1333	0	0	23	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

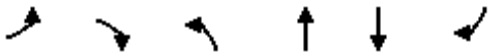
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.9%		ICU Level of Service D	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1081	10	10	1125	130	10	0	10	0	0	0
Future Volume (Veh/h)	40	1081	10	10	1125	130	10	0	10	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.91	0.58	0.75	0.97	0.81	0.88	0.50	0.83	0.80	0.80	0.25
Hourly flow rate (vph)	45	1188	17	13	1160	160	11	0	12	0	0	0
Pedestrians		1						2			3	
Lane Width (ft)		12.0						12.0			0.0	
Walking Speed (ft/s)		4.0						4.0			4.0	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		381										
pX, platoon unblocked				0.84			0.84	0.84	0.84	0.84	0.84	
vC, conflicting volume	1323			1207			1896	2638	604	1965	2566	664
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1323			858			1680	2567	138	1763	2481	664
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			98			77	100	98	100	100	100
cM capacity (veh/h)	529			661			48	20	745	41	22	408

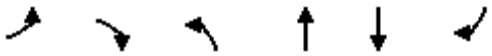
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	639	611	593	740	23
Volume Left	45	0	13	0	11
Volume Right	0	17	0	160	12
cSH	529	1700	661	1700	94
Volume to Capacity	0.09	0.36	0.02	0.44	0.24
Queue Length 95th (ft)	7	0	2	0	22
Control Delay (s)	2.4	0.0	0.5	0.0	54.9
Lane LOS	A		A		F
Approach Delay (s)	1.2		0.2		54.9
Approach LOS					F

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	73.9%	ICU Level of Service	D	
Analysis Period (min)	15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	40	41	511	540	10
Future Volume (vph)	10	40	41	511	540	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	12	12	16	12
Satd. Flow (prot)	1593	0	0	1586	2048	0
Flt Permitted	0.994			0.995		
Satd. Flow (perm)	1593	0	0	1586	2048	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	720			689	451	
Travel Time (s)	19.6			15.7	10.3	
Confl. Peds. (#/hr)			12			12
Peak Hour Factor	0.94	0.50	0.63	0.79	0.67	0.90
Heavy Vehicles (%)	0%	9%	0%	8%	5%	0%
Parking (#/hr)				0		0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	91	0	0	712	817	0
Sign Control	Stop			Free	Free	

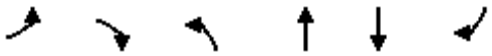
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 70.7%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	40	41	511	540	10
Future Volume (Veh/h)	10	40	41	511	540	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.50	0.63	0.79	0.67	0.90
Hourly flow rate (vph)	11	80	65	647	806	11
Pedestrians	12					
Lane Width (ft)	13.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1600	824	829			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1600	824	829			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	90	78	92			
cM capacity (veh/h)	107	359	803			

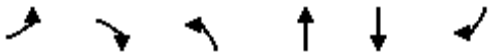
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	91	712	817
Volume Left	11	65	0
Volume Right	80	0	11
cSH	279	803	1700
Volume to Capacity	0.33	0.08	0.48
Queue Length 95th (ft)	34	7	0
Control Delay (s)	24.0	2.1	0.0
Lane LOS	C	A	
Approach Delay (s)	24.0	2.1	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	10	0	532	580	0
Future Volume (vph)	0	10	0	532	580	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	11	12
Satd. Flow (prot)	1863	0	0	1598	1749	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1598	1749	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	382			399	413	
Travel Time (s)	8.7			9.1	9.4	
Confl. Peds. (#/hr)			13			13
Peak Hour Factor	0.75	0.63	0.92	0.94	0.93	0.92
Heavy Vehicles (%)	0%	0%	0%	7%	5%	0%
Parking (#/hr)				0		0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	566	624	0
Sign Control	Stop			Free	Free	

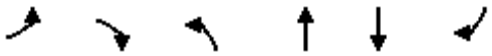
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	10	0	532	580	0
Future Volume (Veh/h)	0	10	0	532	580	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.63	0.92	0.94	0.93	0.92
Hourly flow rate (vph)	0	16	0	566	624	0
Pedestrians	13					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1203	637	637			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1203	637	637			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	100			
cM capacity (veh/h)	203	474	943			

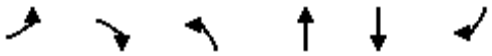
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	16	566	624
Volume Left	0	0	0
Volume Right	16	0	0
cSH	474	1700	1700
Volume to Capacity	0.03	0.33	0.37
Queue Length 95th (ft)	3	0	0
Control Delay (s)	12.9	0.0	0.0
Lane LOS	B		
Approach Delay (s)	12.9	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	40.5%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	220	527	547	50
Future Volume (vph)	0	0	220	527	547	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	12	16	12
Storage Length (ft)	0	0	90			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	0	0	1577	1776	2032	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1577	1776	2032	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	465			367	399	
Travel Time (s)	10.6			8.3	9.1	
Confl. Peds. (#/hr)			15			15
Peak Hour Factor	0.89	0.92	0.91	0.94	0.94	0.73
Heavy Vehicles (%)	0%	0%	3%	7%	5%	0%
Parking (#/hr)						0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	242	561	650	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	220	527	547	50
Future Volume (Veh/h)	0	0	220	527	547	50
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.92	0.91	0.94	0.94	0.73
Hourly flow rate (vph)	0	0	242	561	582	68
Pedestrians	15					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1676	631	665			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1676	631	665			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	74			
cM capacity (veh/h)	78	485	919			

Direction, Lane #	NB 1	NB 2	SB 1
Volume Total	242	561	650
Volume Left	242	0	0
Volume Right	0	0	68
cSH	919	1700	1700
Volume to Capacity	0.26	0.33	0.38
Queue Length 95th (ft)	26	0	0
Control Delay (s)	10.3	0.0	0.0
Lane LOS	B		
Approach Delay (s)	3.1		0.0
Approach LOS			

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	130	51	40	130	183	11	509	41	224	516	40
Future Volume (vph)	10	130	51	40	130	183	11	509	41	224	516	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	11	12	12	12	12	10	12	12
Storage Length (ft)	0		0	0		300	0		0	180		0
Storage Lanes	0		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1987	0	0	1718	1538	0	1764	0	1620	1747	0
Flt Permitted		0.995			0.986			0.974		0.950		
Satd. Flow (perm)	0	1987	0	0	1713	1502	0	1720	0	1620	1747	0
Right Turn on Red			No			No			No			Yes
Satd. Flow (RTOR)											7	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1250			990			1098			1022	
Travel Time (s)		34.1			27.0			25.0			23.2	
Confl. Peds. (#/hr)			3	3			1					1
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.40	0.74	0.91	0.64	0.83	0.80	0.58	0.89	0.61	0.93	0.98	0.59
Heavy Vehicles (%)	13%	4%	0%	4%	6%	5%	0%	7%	0%	4%	7%	4%
Parking (#/hr)			0									
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	257	0	0	220	229	0	658	0	241	595	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA		Prot	NA	
Protected Phases	9	9		12	12	1		2		1	6	
Permitted Phases						12	2					
Detector Phase	9	9		12	12	1	2	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		7.0	7.0	6.0	15.0	15.0		6.0	15.0	
Minimum Split (s)	12.0	12.0		12.0	12.0	10.0	22.0	22.0		10.0	21.0	
Total Split (s)	21.0	21.0		17.0	17.0	20.0	41.0	41.0		20.0	61.0	
Total Split (%)	17.5%	17.5%		14.2%	14.2%	16.7%	34.2%	34.2%		16.7%	50.8%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	4.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	1.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	4.0		6.0		4.0	6.0	
Lead/Lag						Lead	Lag	Lag		Lead		
Lead-Lag Optimize?						Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Min	Min		None	Min	
Act Effct Green (s)		16.1			12.1	29.2		35.2		16.1	55.3	
Actuated g/C Ratio		0.16			0.12	0.28		0.34		0.16	0.54	
v/c Ratio		0.83			1.09	0.53		1.12		0.96	0.63	
Control Delay		65.7			134.9	35.4		108.0		91.3	21.7	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		65.7			134.9	35.4		108.0		91.3	21.7	
LOS		E			F	D		F		F	C	
Approach Delay		65.7			84.1			108.0			41.7	
Approach LOS		E			F			F			D	
90th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	

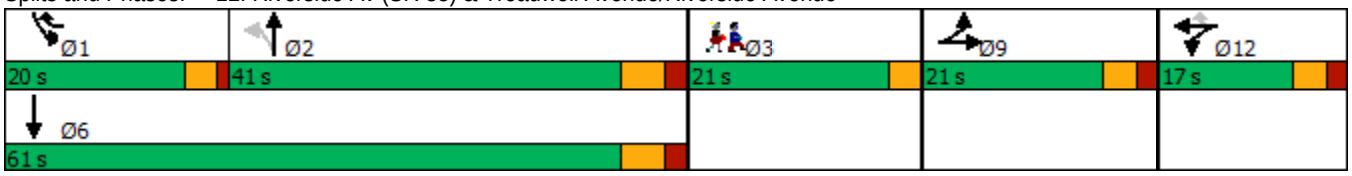
Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	21.0
Total Split (%)	18%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	17.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Max	
70th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
70th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
50th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
50th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
30th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
30th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
10th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
10th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
Queue Length 50th (ft)		158			~153	112		~467		152	235	
Queue Length 95th (ft)		#261			#331	201		#861		#374	505	
Internal Link Dist (ft)		1170			910			1018			942	
Turn Bay Length (ft)						300				180		
Base Capacity (vph)		310			201	430		587		252	941	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.83			1.09	0.53		1.12		0.96	0.63	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 103	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 73.0	Intersection LOS: E
Intersection Capacity Utilization 95.9%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 119	
70th %ile Actuated Cycle: 99	
50th %ile Actuated Cycle: 99	
30th %ile Actuated Cycle: 99	
10th %ile Actuated Cycle: 99	

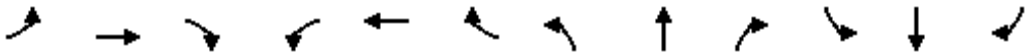
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Riverside Av (SR 33) & Treadwell Avenue/Riverside Avenue



Lane Group	Ø3
90th %ile Term Code	Ped
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

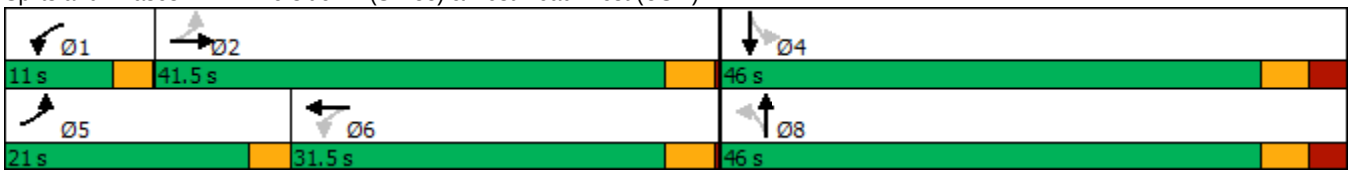


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	327	745	10	255	424	204	30	316	242	115	187	31
Future Volume (vph)	327	745	10	255	424	204	30	316	242	115	187	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	16	12	12	11	12	12	14	12
Grade (%)		-3%			0%			0%			0%	
Satd. Flow (prot)	1693	1903	0	1752	1985	0	0	1488	0	0	1887	0
Flt Permitted	0.131			0.146				0.962			0.475	
Satd. Flow (perm)	233	1903	0	269	1985	0	0	1436	0	0	910	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		895			657			610			1340	
Travel Time (s)		24.4			17.9			13.9			30.5	
Confl. Peds. (#/hr)	4		3	3		4	2		13	13		2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.81	0.97	0.63	0.97	0.96	0.91	0.85	0.85	0.96	0.84	0.82	0.71
Heavy Vehicles (%)	1%	1%	0%	3%	2%	2%	0%	1%	1%	0%	7%	0%
Parking (#/hr)								5				
Shared Lane Traffic (%)												
Lane Group Flow (vph)	404	784	0	263	666	0	0	659	0	0	409	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	8.1	22.1		8.1	22.1		28.5	28.5		28.5	28.5	
Total Split (s)	21.0	41.5		11.0	31.5		46.0	46.0		46.0	46.0	
Total Split (%)	21.3%	42.1%		11.2%	32.0%		46.7%	46.7%		46.7%	46.7%	
Yellow Time (s)	3.0	3.6		3.0	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	0.1	0.5		0.1	0.5		2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.1	4.1		3.1	4.1			6.5			6.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	49.4	37.4		36.3	27.4			39.5			39.5	
Actuated g/C Ratio	0.50	0.38		0.37	0.28			0.40			0.40	
v/c Ratio	1.06	1.09		1.21	1.21			1.15			1.12	
Control Delay	89.5	90.1		152.6	142.4			114.4			115.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	89.5	90.1		152.6	142.4			114.4			115.3	
LOS	F	F		F	F			F			F	
Approach Delay		89.9			145.2			114.4			115.3	
Approach LOS		F			F			F			F	
90th %ile Green (s)	17.9	37.4		7.9	27.4		39.5	39.5		39.5	39.5	
90th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
70th %ile Green (s)	17.9	37.4		7.9	27.4		39.5	39.5		39.5	39.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
70th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
50th %ile Green (s)	17.9	37.4		7.9	27.4		39.5	39.5		39.5	39.5	
50th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
30th %ile Green (s)	17.9	37.4		7.9	27.4		39.5	39.5		39.5	39.5	
30th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
10th %ile Green (s)	17.9	37.4		7.9	27.4		39.5	39.5		39.5	39.5	
10th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
Queue Length 50th (ft)	~229	~555		~147	~512			~487			~298	
Queue Length 95th (ft)	#343	#781		#310	#729			#642			#417	
Internal Link Dist (ft)		815			577			530			1260	
Turn Bay Length (ft)												
Base Capacity (vph)	382	722		218	552			575			364	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	1.06	1.09		1.21	1.21			1.15			1.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 98.5			
Actuated Cycle Length: 98.5			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay: 114.4		Intersection LOS: F	
Intersection Capacity Utilization 123.3%		ICU Level of Service H	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 98.5			
70th %ile Actuated Cycle: 98.5			
50th %ile Actuated Cycle: 98.5			
30th %ile Actuated Cycle: 98.5			
10th %ile Actuated Cycle: 98.5			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Riverside Av (SR 33) & Post Road West (US 1)

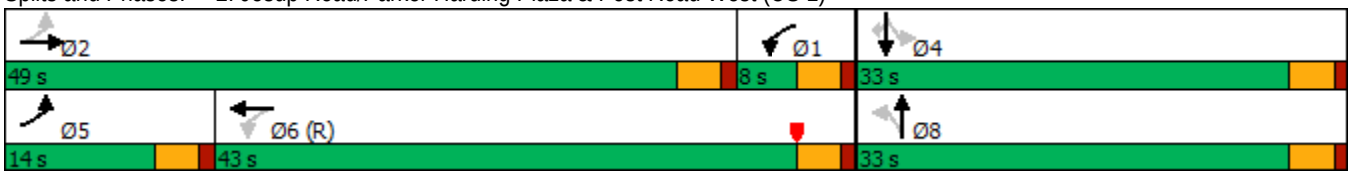


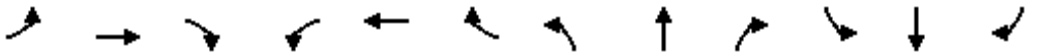
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	900	101	50	555	20	123	20	0	70	60	205
Future Volume (vph)	101	900	101	50	555	20	123	20	0	70	60	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	16	12	12	10	12	12	15	12	12	10	12
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	2080	0	0	3260	0	0	1954	0	0	1714	1599
Flt Permitted	0.334				0.671			0.537			0.824	
Satd. Flow (perm)	607	2080	0	0	2199	0	0	1093	0	0	1417	1578
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			8							218
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		657			264			553			224	
Travel Time (s)		17.9			7.2			15.1			5.1	
Confl. Peds. (#/hr)	16		12	12		16	1		44	44		1
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.87	0.93	0.83	0.81	0.98	0.58	0.73	0.75	0.50	0.81	0.70	0.94
Heavy Vehicles (%)	0%	1%	3%	0%	2%	0%	3%	0%	0%	2%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	1090	0	0	662	0	0	195	0	0	172	218
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	13.0		4.0	13.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	9.0	24.0		8.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	14.0	49.0		8.0	43.0		33.0	33.0		33.0	33.0	33.0
Total Split (%)	15.6%	54.4%		8.9%	47.8%		36.7%	36.7%		36.7%	36.7%	36.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0			4.0			4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?												
Recall Mode	None	None		None	C-Max		None	None		None	None	None
Act Effct Green (s)	61.5	61.5			51.6			20.5			20.5	20.5
Actuated g/C Ratio	0.68	0.68			0.57			0.23			0.23	0.23
v/c Ratio	0.24	0.77			0.52			0.78			0.53	0.41
Control Delay	7.3	16.0			27.4			53.1			35.4	6.0
Queue Delay	0.0	2.0			0.3			0.0			0.0	0.0
Total Delay	7.3	18.0			27.7			53.1			35.4	6.0
LOS	A	B			C			D			D	A
Approach Delay		16.9			27.7			53.1			19.0	
Approach LOS		B			C			D			B	
90th %ile Green (s)	7.9	53.5		0.0	41.6		28.5	28.5		28.5	28.5	28.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Gap	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
70th %ile Green (s)	6.1	58.0		0.0	47.9		24.0	24.0		24.0	24.0	24.0
70th %ile Term Code	Gap	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
50th %ile Green (s)	5.1	61.3		0.0	52.2		20.7	20.7		20.7	20.7	20.7
50th %ile Term Code	Gap	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
30th %ile Green (s)	5.0	64.8		0.0	55.8		17.2	17.2		17.2	17.2	17.2
30th %ile Term Code	Min	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
10th %ile Green (s)	5.0	69.7		0.0	60.7		12.3	12.3		12.3	12.3	12.3
10th %ile Term Code	Min	Coord		Skip	Coord		Gap	Gap		Hold	Hold	Hold
Queue Length 50th (ft)	20	358			96			104			86	0
Queue Length 95th (ft)	47	#799			248			128			98	49
Internal Link Dist (ft)		577			184			473			144	
Turn Bay Length (ft)												100
Base Capacity (vph)	540	1423			1265			352			456	656
Starvation Cap Reductn	0	194			184			0			0	0
Spillback Cap Reductn	0	92			0			0			0	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.21	0.89			0.61			0.55			0.38	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 30 (33%), Referenced to phase 6:WBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 23.1		Intersection LOS: C	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: Jesup Road/Parker Harding Plaza & Post Road West (US 1)





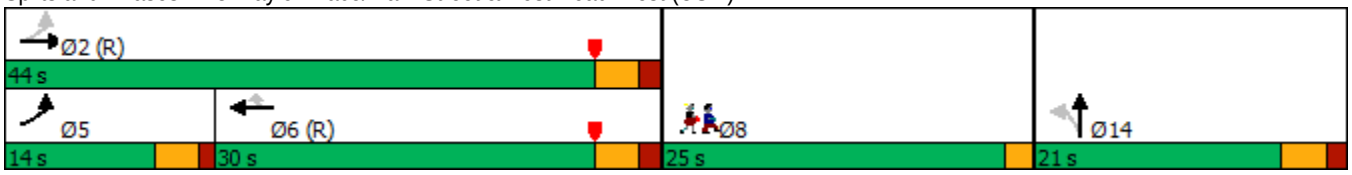
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	123	847	0	0	625	150	0	50	20	0	0	0
Future Volume (vph)	123	847	0	0	625	150	0	50	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	12	12	11	12	12	13	12	12	12	12
Satd. Flow (prot)	1668	1739	0	0	3388	1568	0	1824	0	0	0	0
Flt Permitted	0.331											
Satd. Flow (perm)	581	1739	0	0	3388	1131	0	1824	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						179		29				
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		264			99			221			659	
Travel Time (s)		7.2			2.7			5.0			18.0	
Confl. Peds. (#/hr)	76		6	6		76						63
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.77	0.96	0.80	0.80	0.93	0.84	0.50	0.78	0.53	0.80	0.80	0.80
Heavy Vehicles (%)	1%	2%	0%	0%	3%	3%	0%	0%	6%	0%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	882	0	0	672	179	0	102	0	0	0	0
Turn Type	pm+pt	NA			NA	Perm		NA				
Protected Phases	5	2			6			14				
Permitted Phases	2					6	14					
Detector Phase	5	2			6	6	14	14				
Switch Phase												
Minimum Initial (s)	6.0	19.0			19.0	19.0	9.0	9.0				
Minimum Split (s)	10.0	23.5			23.5	23.5	15.5	15.5				
Total Split (s)	14.0	44.0			30.0	30.0	21.0	21.0				
Total Split (%)	15.6%	48.9%			33.3%	33.3%	23.3%	23.3%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.5			1.5	1.5	1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.5			4.5	4.5		4.5				
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?												
Recall Mode	None	C-Max			C-Max	C-Max	None	None				
Act Effct Green (s)	65.6	66.0			53.0	53.0		9.8				
Actuated g/C Ratio	0.73	0.73			0.59	0.59		0.11				
v/c Ratio	0.31	0.69			0.34	0.24		0.46				
Control Delay	4.7	13.5			17.1	7.9		34.1				
Queue Delay	0.8	2.7			0.7	0.5		0.0				
Total Delay	5.5	16.2			17.8	8.4		34.1				
LOS	A	B			B	A		C				
Approach Delay		14.6			15.8			34.1				
Approach LOS		B			B			C				
90th %ile Green (s)	12.4	46.9			30.5	30.5	12.1	12.1				
90th %ile Term Code	Gap	Coord			Coord	Coord	Gap	Gap				
70th %ile Green (s)	10.0	49.3			35.3	35.3	9.7	9.7				
70th %ile Term Code	Gap	Coord			Coord	Coord	Gap	Gap				

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	4.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	28%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	20.0
90th %ile Term Code	Ped
70th %ile Green (s)	20.0
70th %ile Term Code	Ped

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Green (s)	6.3	72.0			61.7	61.7	9.0	9.0				
50th %ile Term Code	Gap	Coord			Coord	Coord	Min	Min				
30th %ile Green (s)	6.0	72.0			62.0	62.0	9.0	9.0				
30th %ile Term Code	Min	Coord			Coord	Coord	Min	Min				
10th %ile Green (s)	6.0	85.5			75.5	75.5	0.0	0.0				
10th %ile Term Code	Min	Coord			Coord	Coord	Skip	Skip				
Queue Length 50th (ft)	1	9			91	11		40				
Queue Length 95th (ft)	m44	#762			172	47		71				
Internal Link Dist (ft)		184			19			141			579	
Turn Bay Length (ft)												
Base Capacity (vph)	550	1276			1995	739		358				
Starvation Cap Reductn	188	272			923	284		0				
Spillback Cap Reductn	0	127			142	0		2				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.44	0.88			0.63	0.39		0.29				

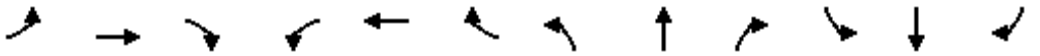
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 50 (56%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 16.1		Intersection LOS: B	
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: Taylor Place/Main Street & Post Road West (US 1)



Lane Group	Ø8
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



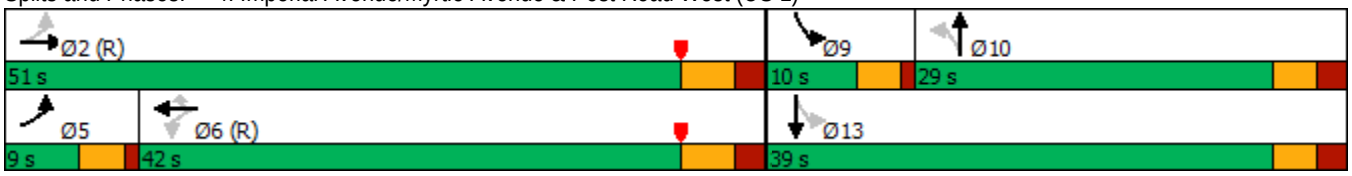
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	797	10	90	634	200	31	120	150	220	80	30
Future Volume (vph)	40	797	10	90	634	200	31	120	150	220	80	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	12	13	12	14	12	12	12	12
Grade (%)		0%			-4%			0%			0%	
Storage Length (ft)	0		185	0		150	0		0	60		0
Storage Lanes	0		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2971	0	0	3525	1653	0	1604	0	1656	1781	0
Flt Permitted		0.698			0.673			0.961		0.270		
Satd. Flow (perm)	0	2085	0	0	2389	1653	0	1547	0	471	1781	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		287			718			629			396	
Travel Time (s)		7.8			19.6			17.2			10.8	
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.46	0.96	0.88	0.85	0.93	0.85	0.93	0.78	0.78	0.88	0.83	0.50
Heavy Vehicles (%)	19%	12%	7%	2%	4%	3%	9%	2%	31%	9%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	928	0	0	788	235	0	379	0	250	156	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			10		9	13	
Permitted Phases	2			6		6	10			13		
Detector Phase	5	2		6	6	6	10	10		9	13	
Switch Phase												
Minimum Initial (s)	5.0	14.0		6.3	6.3	6.3	7.0	7.0		5.0	7.0	
Minimum Split (s)	9.0	19.7		25.7	25.7	25.7	29.1	29.1		9.0	18.4	
Total Split (s)	9.0	51.0		42.0	42.0	42.0	29.0	29.0		10.0	39.0	
Total Split (%)	10.0%	56.7%		46.7%	46.7%	46.7%	32.2%	32.2%		11.1%	43.3%	
Yellow Time (s)	3.0	3.6		3.6	3.6	3.6	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	2.1		2.1	2.1	2.1	2.1	2.1		1.0	2.1	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		5.7			5.7	5.7		5.1		4.0	5.1	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	Min	C-Max		C-Max	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)		45.9			36.9	36.9		23.3		34.4	33.3	
Actuated g/C Ratio		0.51			0.41	0.41		0.26		0.38	0.37	
v/c Ratio		0.85			0.81	0.35		0.95		0.97	0.24	
Control Delay		28.9			15.8	7.9		67.8		74.3	20.5	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		28.9			15.8	7.9		67.8		74.3	20.5	
LOS		C			B	A		E		E	C	
Approach Delay		28.9			14.0			67.8			53.6	
Approach LOS		C			B			E			D	
90th %ile Green (s)	5.0	45.3		36.3	36.3	36.3	23.9	23.9		6.0	33.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Coord		Coord	Coord	Coord	Ped	Ped		Max	Hold	
70th %ile Green (s)	5.0	45.3		36.3	36.3	36.3	23.9	23.9		6.0	33.9	
70th %ile Term Code	Max	Coord		Coord	Coord	Coord	Max	Max		Max	Hold	
50th %ile Green (s)	5.0	45.3		36.3	36.3	36.3	23.9	23.9		6.0	33.9	
50th %ile Term Code	Max	Coord		Coord	Coord	Coord	Max	Max		Max	Hold	
30th %ile Green (s)	5.0	45.3		36.3	36.3	36.3	23.9	23.9		6.0	33.9	
30th %ile Term Code	Max	Coord		Coord	Coord	Coord	Max	Max		Max	Hold	
10th %ile Green (s)	5.0	48.1		39.1	39.1	39.1	21.1	21.1		6.0	31.1	
10th %ile Term Code	Min	Coord		Coord	Coord	Coord	Gap	Gap		Max	Hold	
Queue Length 50th (ft)		90			56	31		210		100	59	
Queue Length 95th (ft)		#375			#83	50		#297		#232	95	
Internal Link Dist (ft)		207			638			549			316	
Turn Bay Length (ft)						150				60		
Base Capacity (vph)		1094			978	676		410		259	670	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.85			0.81	0.35		0.92		0.97	0.23	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 45 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 32.4	Intersection LOS: C
Intersection Capacity Utilization 91.0%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Imperial Avenue/Myrtle Avenue & Post Road West (US 1)



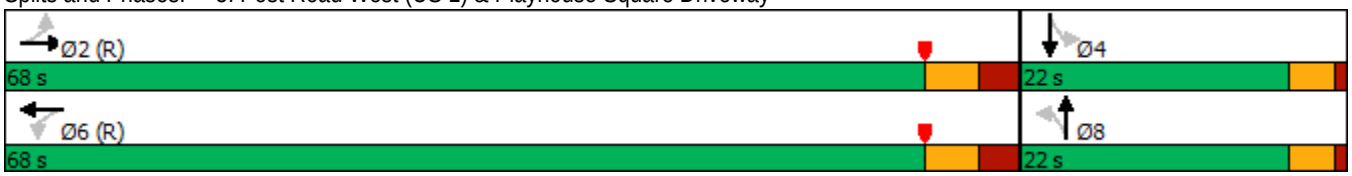
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1107	20	10	823	80	10	0	0	100	0	81
Future Volume (vph)	60	1107	20	10	823	80	10	0	0	100	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	11	13	12	16	12	12	16	12
Satd. Flow (prot)	0	3421	0	0	3341	0	0	1461	0	0	1958	0
Flt Permitted		0.826			0.888			0.612			0.804	
Satd. Flow (perm)	0	2834	0	0	2970	0	0	939	0	0	1621	0
Right Turn on Red			No			No			Yes			Yes
Satd. Flow (RTOR)											41	
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		718			679			170			193	
Travel Time (s)		19.6			18.5			3.9			5.3	
Confl. Peds. (#/hr)	5		8	8		5	3		1	1		3
Peak Hour Factor	0.89	0.94	0.58	0.38	0.97	0.91	0.63	0.80	0.25	0.67	0.85	0.85
Heavy Vehicles (%)	2%	1%	7%	33%	2%	0%	40%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1279	0	0	962	0	0	16	0	0	244	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		9.0	9.0		9.0	9.0	
Minimum Split (s)	21.4	21.4		21.4	21.4		22.0	22.0		22.0	22.0	
Total Split (s)	68.0	68.0		68.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	75.6%	75.6%		75.6%	75.6%		24.4%	24.4%		24.4%	24.4%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.8	2.8		2.8	2.8		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.4			6.4			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effct Green (s)		64.2			64.2			15.4			15.4	
Actuated g/C Ratio		0.71			0.71			0.17			0.17	
v/c Ratio		0.63			0.45			0.10			0.79	
Control Delay		5.5			16.3			31.4			47.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		5.5			16.3			31.4			47.6	
LOS		A			B			C			D	
Approach Delay		5.5			16.3			31.4			47.6	
Approach LOS		A			B			C			D	
90th %ile Green (s)	61.6	61.6		61.6	61.6		18.0	18.0		18.0	18.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Ped	Ped		Max	Max	
70th %ile Green (s)	61.6	61.6		61.6	61.6		18.0	18.0		18.0	18.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	62.7	62.7		62.7	62.7		16.9	16.9		16.9	16.9	

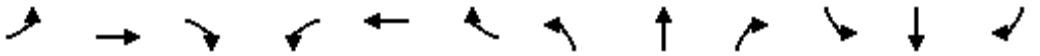
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	65.6	65.6		65.6	65.6		14.0	14.0		14.0	14.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	69.7	69.7		69.7	69.7		9.9	9.9		9.9	9.9	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)		93			258			8			109	
Queue Length 95th (ft)		m181			310			22			176	
Internal Link Dist (ft)		638			599			90			113	
Turn Bay Length (ft)												
Base Capacity (vph)		2022			2119			187			357	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.63			0.45			0.09			0.68	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 55 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 14.0 Intersection LOS: B
Intersection Capacity Utilization 82.7% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Post Road West (US 1) & Playhouse Square Driveway





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	1065	61	141	718	90	123	220	100	170	200	112
Future Volume (vph)	101	1065	61	141	718	90	123	220	100	170	200	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	11	11	12	11	11	12
Storage Length (ft)	140		0	120		0	110		0	180		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1694	3403	0	1728	3342	0	1711	1698	0	1728	1720	0
Flt Permitted	0.161			0.138			0.321			0.297		
Satd. Flow (perm)	286	3403	0	251	3342	0	575	1698	0	538	1720	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		679			454			1260			941	
Travel Time (s)		18.5			12.4			24.5			18.3	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.79	0.97	0.58	0.86	0.96	0.75	0.89	0.81	0.80	0.85	0.81	0.84
Heavy Vehicles (%)	3%	1%	0%	1%	2%	0%	2%	3%	1%	1%	0%	1%
Bus Blockages (#/hr)	0	0	2	0	0	2	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	1203	0	164	868	0	138	397	0	200	380	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		9	14		13	10	
Permitted Phases	2			6			14			10		
Detector Phase	5	2		1	6		9	14		13	10	
Switch Phase												
Minimum Initial (s)	4.2	15.0		4.2	15.0		6.8	5.0		5.0	5.0	
Minimum Split (s)	11.0	35.0		11.0	35.0		11.0	33.0		9.2	33.0	
Total Split (s)	11.0	35.0		11.0	35.0		11.0	33.0		11.0	33.0	
Total Split (%)	12.2%	38.9%		12.2%	38.9%		12.2%	36.7%		12.2%	36.7%	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	3.8	2.0		3.8	2.0		1.2	2.0		1.2	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.8	6.0		6.8	6.0		4.2	6.0		4.2	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min		None	Ped		None	Ped	
Act Effct Green (s)	32.4	29.0		32.4	29.0		35.6	27.0		35.6	27.0	
Actuated g/C Ratio	0.36	0.32		0.36	0.32		0.40	0.30		0.40	0.30	
v/c Ratio	0.76	1.10		1.03	0.81		0.44	0.78		0.66	0.74	
Control Delay	38.1	80.9		104.5	30.4		20.4	41.3		29.2	38.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.1	80.9		104.5	30.4		20.4	41.3		29.2	38.3	
LOS	D	F		F	C		C	D		C	D	
Approach Delay		76.8			42.2			35.9			35.2	
Approach LOS		E			D			D			D	
90th %ile Green (s)	4.2	29.0		4.2	29.0		6.8	27.0		6.8	27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Max	Max	
70th %ile Green (s)	4.2	29.0		4.2	29.0		6.8	27.0		6.8	27.0	
70th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Max	Max	
50th %ile Green (s)	4.2	29.0		4.2	29.0		6.8	27.0		6.8	27.0	
50th %ile Term Code	Max	Coord		Max	Coord		Max	Ped		Max	Ped	
30th %ile Green (s)	4.2	29.0		4.2	29.0		6.8	27.0		6.8	27.0	
30th %ile Term Code	Max	Coord		Max	Coord		Max	Ped		Max	Ped	
10th %ile Green (s)	4.2	29.0		4.2	29.0		6.8	27.0		6.8	27.0	
10th %ile Term Code	Max	Coord		Max	Coord		Max	Ped		Max	Ped	
Queue Length 50th (ft)	38	~408		~42	241		46	205		69	193	
Queue Length 95th (ft)	m#75	#542		#172	316		82	272		109	258	
Internal Link Dist (ft)		599			374			1180			861	
Turn Bay Length (ft)	140			120			110			180		
Base Capacity (vph)	168	1096		159	1076		313	509		302	516	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.76	1.10		1.03	0.81		0.44	0.78		0.66	0.74	

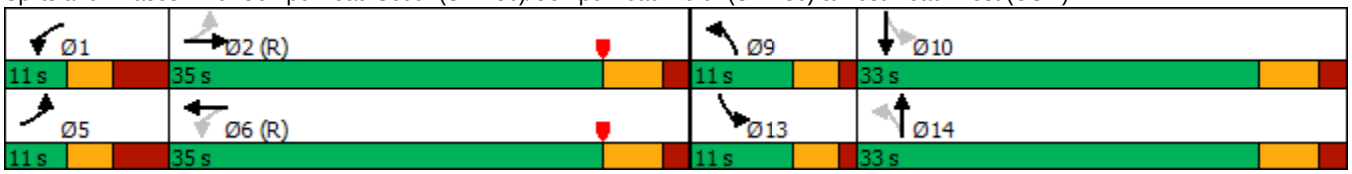
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 70 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 53.3		Intersection LOS: D	
Intersection Capacity Utilization 90.3%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Compo Road South (SR 136)/Compo Road North (SR 136) & Post Road West (US 1)

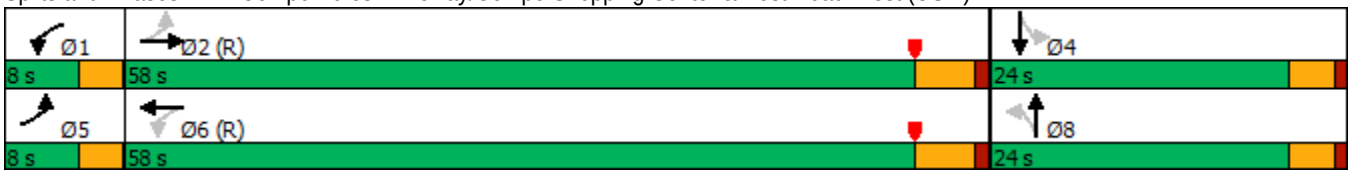


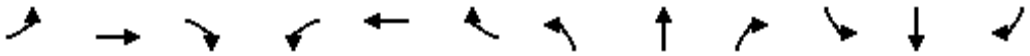
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1075	60	60	799	60	40	20	30	50	10	50
Future Volume (vph)	70	1075	60	60	799	60	40	20	30	50	10	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	11	12	12	14	12	12	16	12
Storage Length (ft)	140		0	80		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	3390	0	1685	3374	0	0	1897	0	0	1947	0
Flt Permitted	0.289			0.176				0.718			0.793	
Satd. Flow (perm)	531	3390	0	312	3374	0	0	1384	0	0	1574	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			17			24			46	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		454			381			155			251	
Travel Time (s)		12.4			10.4			4.2			6.8	
Confl. Peds. (#/hr)	2		3	3		2	15					15
Peak Hour Factor	0.64	0.89	0.79	0.84	0.96	0.83	0.75	0.75	0.78	0.90	0.50	0.73
Heavy Vehicles (%)	0%	2%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	1284	0	71	904	0	0	118	0	0	144	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	6.1	20.0		6.1	20.0		24.0	24.0		24.0	24.0	
Total Split (s)	8.0	58.0		8.0	58.0		24.0	24.0		24.0	24.0	
Total Split (%)	8.9%	64.4%		8.9%	64.4%		26.7%	26.7%		26.7%	26.7%	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.1	1.0		0.1	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.1	5.0		3.1	5.0			4.0			4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	68.8	62.9		68.4	62.7			11.8			11.8	
Actuated g/C Ratio	0.76	0.70		0.76	0.70			0.13			0.13	
v/c Ratio	0.23	0.54		0.23	0.38			0.58			0.59	
Control Delay	1.4	5.3		4.8	7.1			39.7			33.5	
Queue Delay	0.0	0.2		0.0	0.0			0.0			0.0	
Total Delay	1.4	5.4		4.8	7.1			39.7			33.5	
LOS	A	A		A	A			D			C	
Approach Delay		5.1			7.0			39.7			33.5	
Approach LOS		A			A			D			C	
90th %ile Green (s)	4.9	53.0		4.9	53.0		20.0	20.0		20.0	20.0	
90th %ile Term Code	Max	Coord		Max	Coord		Ped	Ped		Ped	Ped	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
70th %ile Green (s)	5.6	60.1		5.1	59.6		12.7	12.7		12.7	12.7	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Gap	Gap	
50th %ile Green (s)	5.0	62.6		4.6	62.2		10.7	10.7		10.7	10.7	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	4.5	64.9		4.3	64.7		8.7	8.7		8.7	8.7	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	74.0		0.0	74.0		7.0	7.0		7.0	7.0	
10th %ile Term Code	Skip	Coord		Skip	Coord		Min	Min		Min	Min	
Queue Length 50th (ft)	6	88		6	95			51			53	
Queue Length 95th (ft)	m7	m97		21	181			75			42	
Internal Link Dist (ft)		374			301			75			171	
Turn Bay Length (ft)	140			80								
Base Capacity (vph)	474	2373		312	2355			326			385	
Starvation Cap Reductn	0	327		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.23	0.63		0.23	0.38			0.36			0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 80 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 57.7%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

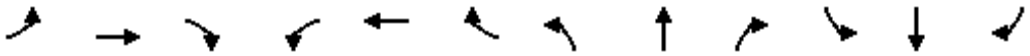
Splits and Phases: 7: Compo Acres Driveway/Compo Shopping Center & Post Road West (US 1)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1295	10	10	909	170	10	10	30	0	0	0
Future Volume (vph)	20	1295	10	10	909	170	10	10	30	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3565	0	0	3460	0	0	1783	0	0	0	0
Flt Permitted		0.999			0.999			0.989				
Satd. Flow (perm)	0	3565	0	0	3460	0	0	1783	0	0	0	0
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		381			619			336			318	
Travel Time (s)		10.4			16.9			7.6			8.7	
Confl. Peds. (#/hr)	1		5	5		1						
Peak Hour Factor	0.58	0.94	0.63	0.50	0.97	0.89	0.55	0.32	1.00	0.80	0.80	0.25
Heavy Vehicles (%)	0%	1%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1428	0	0	1148	0	0	79	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

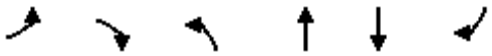
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.3%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1295	10	10	909	170	10	10	30	0	0	0
Future Volume (Veh/h)	20	1295	10	10	909	170	10	10	30	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.58	0.94	0.63	0.50	0.97	0.89	0.55	0.32	1.00	0.80	0.80	0.25
Hourly flow rate (vph)	34	1378	16	20	937	191	18	31	30	0	0	0
Pedestrians								5			1	
Lane Width (ft)								12.0			0.0	
Walking Speed (ft/s)								4.0			4.0	
Percent Blockage								0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		381										
pX, platoon unblocked				0.82			0.82	0.82	0.82	0.82	0.82	
vC, conflicting volume	1129			1399			1968	2628	702	1876	2540	565
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1129			1036			1733	2544	181	1621	2436	565
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			96			59	0	96	0	100	100
cM capacity (veh/h)	626			551			43	20	680	0	24	473

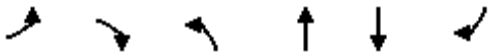
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	723	705	488	660	79
Volume Left	34	0	20	0	18
Volume Right	0	16	0	191	30
cSH	626	1700	551	1700	40
Volume to Capacity	0.05	0.41	0.04	0.39	1.99
Queue Length 95th (ft)	4	0	3	0	211
Control Delay (s)	1.5	0.0	1.0	0.0	680.0
Lane LOS	A		A		F
Approach Delay (s)	0.8		0.4		680.0
Approach LOS					F

Intersection Summary				
Average Delay	20.8			
Intersection Capacity Utilization	60.3%	ICU Level of Service		B
Analysis Period (min)	15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	40	62	52	621	499	41
Future Volume (vph)	40	62	52	621	499	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	12	12	16	12
Satd. Flow (prot)	1756	0	0	1681	2034	0
Flt Permitted	0.979			0.995		
Satd. Flow (perm)	1756	0	0	1681	2034	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	720			689	451	
Travel Time (s)	19.6			15.7	10.3	
Confl. Peds. (#/hr)			5			5
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.60	0.72	0.61	0.77	0.90	0.67
Heavy Vehicles (%)	0%	2%	3%	1%	5%	0%
Parking (#/hr)				0		0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	153	0	0	891	615	0
Sign Control	Stop			Free	Free	

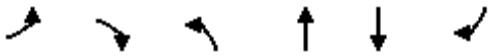
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	62	52	621	499	41
Future Volume (Veh/h)	40	62	52	621	499	41
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.60	0.72	0.61	0.77	0.90	0.67
Hourly flow rate (vph)	67	86	85	806	554	61
Pedestrians	5					
Lane Width (ft)	13.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1566	590	620			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1566	590	620			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	40	83	91			
cM capacity (veh/h)	112	506	951			

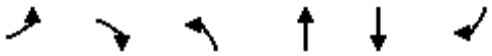
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	153	891	615
Volume Left	67	85	0
Volume Right	86	0	61
cSH	200	951	1700
Volume to Capacity	0.77	0.09	0.36
Queue Length 95th (ft)	130	7	0
Control Delay (s)	65.3	2.3	0.0
Lane LOS	F	A	
Approach Delay (s)	65.3	2.3	0.0
Approach LOS	F		

Intersection Summary			
Average Delay	7.3		
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	10	0	653	551	0
Future Volume (vph)	0	10	0	653	551	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	11	12
Satd. Flow (prot)	1863	0	0	1693	1749	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1693	1749	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	382			399	413	
Travel Time (s)	8.7			9.1	9.4	
Confl. Peds. (#/hr)			3			3
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.25	0.38	0.92	0.81	0.89	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	5%	0%
Parking (#/hr)				0		0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	806	619	0
Sign Control	Stop			Free	Free	

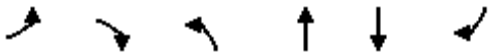
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	10	0	653	551	0
Future Volume (Veh/h)	0	10	0	653	551	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.38	0.92	0.81	0.89	0.92
Hourly flow rate (vph)	0	26	0	806	619	0
Pedestrians	3					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1428	622	622			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1428	622	622			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	100			
cM capacity (veh/h)	150	489	965			

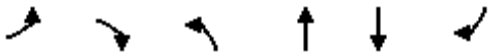
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	26	806	619
Volume Left	0	0	0
Volume Right	26	0	0
cSH	489	1700	1700
Volume to Capacity	0.05	0.47	0.36
Queue Length 95th (ft)	4	0	0
Control Delay (s)	12.8	0.0	0.0
Lane LOS	B		
Approach Delay (s)	12.8	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	210	643	511	40
Future Volume (vph)	0	0	210	643	511	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	12	16	12
Storage Length (ft)	0	0	90			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	0	0	1577	1881	2045	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1577	1881	2045	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	465			367	399	
Travel Time (s)	10.6			8.3	9.1	
Confl. Peds. (#/hr)			5			5
Peak Hour Factor	0.89	0.92	0.82	0.83	0.88	0.84
Heavy Vehicles (%)	2%	2%	3%	1%	4%	7%
Parking (#/hr)						0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	256	775	629	0
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	210	643	511	40
Future Volume (Veh/h)	0	0	210	643	511	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.92	0.82	0.83	0.88	0.84
Hourly flow rate (vph)	0	0	256	775	581	48
Pedestrians	5					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1897	610	634			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1897	610	634			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	73			
cM capacity (veh/h)	56	494	944			

Direction, Lane #	NB 1	NB 2	SB 1
Volume Total	256	775	629
Volume Left	256	0	0
Volume Right	0	0	48
cSH	944	1700	1700
Volume to Capacity	0.27	0.46	0.37
Queue Length 95th (ft)	28	0	0
Control Delay (s)	10.2	0.0	0.0
Lane LOS	B		
Approach Delay (s)	2.5		0.0
Approach LOS			

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		

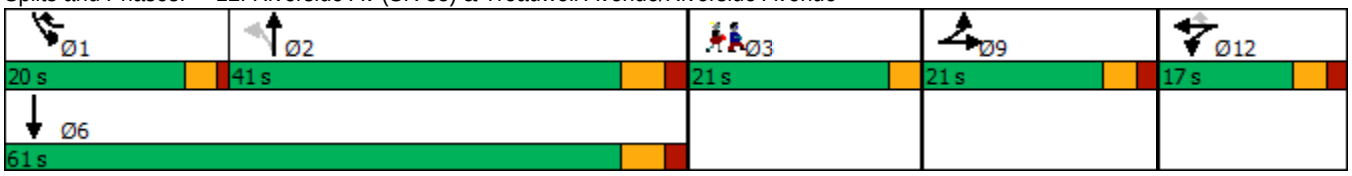
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	200	23	33	90	154	2	609	74	245	536	40
Future Volume (vph)	20	200	23	33	90	154	2	609	74	245	536	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	11	12	12	12	12	10	12	12
Storage Length (ft)	0		0	0		300	0		0	180		0
Storage Lanes	0		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2093	0	0	1781	1568	0	1835	0	1636	1825	0
Flt Permitted		0.996			0.987			0.998		0.950		
Satd. Flow (perm)	0	2092	0	0	1778	1533	0	1831	0	1634	1825	0
Right Turn on Red			No			No			No			Yes
Satd. Flow (RTOR)											4	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1250			990			1098			1022	
Travel Time (s)		34.1			27.0			25.0			23.2	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.83	0.83	0.80	0.80	0.78	0.79	0.80	0.85	0.80	0.84	0.93	0.91
Heavy Vehicles (%)	0%	1%	0%	4%	1%	3%	0%	2%	0%	3%	3%	0%
Parking (#/hr)			0									
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	294	0	0	156	195	0	812	0	292	620	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA		Prot	NA	
Protected Phases	9	9		12	12	1		2		1	6	
Permitted Phases						12	2					
Detector Phase	9	9		12	12	1	2	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		7.0	7.0	6.0	15.0	15.0		6.0	15.0	
Minimum Split (s)	12.0	12.0		12.0	12.0	10.0	22.0	22.0		10.0	21.0	
Total Split (s)	21.0	21.0		17.0	17.0	20.0	41.0	41.0		20.0	61.0	
Total Split (%)	17.5%	17.5%		14.2%	14.2%	16.7%	34.2%	34.2%		16.7%	50.8%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	4.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	1.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	4.0		6.0		4.0	6.0	
Lead/Lag						Lead	Lag	Lag		Lead		
Lead-Lag Optimize?						Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Min	Min		None	Min	
Act Effct Green (s)		16.1			11.6	28.7		35.2		16.1	55.3	
Actuated g/C Ratio		0.16			0.11	0.28		0.34		0.16	0.54	
v/c Ratio		0.90			0.78	0.45		1.29		1.14	0.63	
Control Delay		73.3			71.0	33.0		174.1		139.8	21.4	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		73.3			71.0	33.0		174.1		139.8	21.4	
LOS		E			E	C		F		F	C	
Approach Delay		73.3			49.9			174.1			59.3	
Approach LOS		E			D			F			E	
90th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	21.0
Total Split (%)	18%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	17.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Max	
70th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
70th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
50th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
50th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
30th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
30th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
10th %ile Green (s)	16.0	16.0		9.9	9.9	16.0	35.0	35.0		16.0	55.0	
10th %ile Term Code	Max	Max		Gap	Gap	Max	Max	Max		Max	Hold	
Queue Length 50th (ft)		183			96	93		~645		~211	246	
Queue Length 95th (ft)		#371			#192	169		#1024		#424	523	
Internal Link Dist (ft)		1170			910			1018			942	
Turn Bay Length (ft)						300				180		
Base Capacity (vph)		328			209	434		628		256	985	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.90			0.75	0.45		1.29		1.14	0.63	

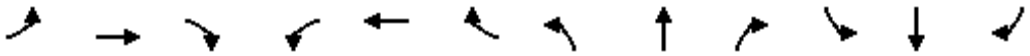
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 102.6			
Natural Cycle: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.29			
Intersection Signal Delay: 99.0		Intersection LOS: F	
Intersection Capacity Utilization 101.2%		ICU Level of Service G	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 119			
70th %ile Actuated Cycle: 99			
50th %ile Actuated Cycle: 99			
30th %ile Actuated Cycle: 99			
10th %ile Actuated Cycle: 96.9			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 12: Riverside Av (SR 33) & Treadwell Avenue/Riverside Avenue



Lane Group	Ø3
90th %ile Term Code	Ped
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	509	20	330	639	175	10	229	216	133	271	51
Future Volume (vph)	82	509	20	330	639	175	10	229	216	133	271	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	16	12	12	11	12	12	14	12
Grade (%)		-3%			0%			0%			0%	
Satd. Flow (prot)	1710	1887	0	1787	2052	0	0	1413	0	0	1903	0
Flt Permitted	0.129			0.117				0.970			0.592	
Satd. Flow (perm)	232	1887	0	220	2052	0	0	1373	0	0	1139	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		682			657			610			1340	
Travel Time (s)		18.6			17.9			13.9			30.5	
Confl. Peds. (#/hr)	2		7	7		2	20		27	27		20
Peak Hour Factor	0.79	0.93	0.50	0.88	0.90	0.84	0.50	0.89	0.88	0.86	0.85	0.85
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	0%	2%	0%	2%	4%	0%
Parking (#/hr)								10				
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	587	0	375	918	0	0	522	0	0	534	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	8.1	22.1		8.1	22.1		28.5	28.5		28.5	28.5	
Total Split (s)	9.0	34.5		17.0	42.5		47.0	47.0		47.0	47.0	
Total Split (%)	9.1%	35.0%		17.3%	43.1%		47.7%	47.7%		47.7%	47.7%	
Yellow Time (s)	3.0	3.6		3.0	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	0.1	0.5		0.1	0.5		2.9	2.9		2.9	2.9	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.1	4.1		3.1	4.1			6.5			6.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	37.3	30.4		48.4	40.2			40.5			40.5	
Actuated g/C Ratio	0.38	0.31		0.49	0.41			0.41			0.41	
v/c Ratio	0.59	1.01		1.14	1.10			0.93			1.14	
Control Delay	30.0	74.8		119.4	91.4			52.6			115.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	30.0	74.8		119.4	91.4			52.6			115.8	
LOS	C	E		F	F			D			F	
Approach Delay		68.0			99.5			52.6			115.8	
Approach LOS		E			F			D			F	
90th %ile Green (s)	5.9	30.4		13.9	38.4		40.5	40.5		40.5	40.5	
90th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
70th %ile Green (s)	5.9	30.4		13.9	38.4		40.5	40.5		40.5	40.5	
70th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	

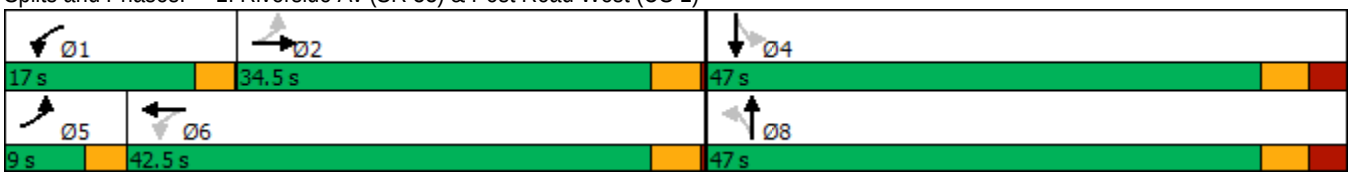
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Green (s)	5.9	30.4		13.9	38.4		40.5	40.5		40.5	40.5	
50th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
30th %ile Green (s)	5.9	30.4		13.9	38.4		40.5	40.5		40.5	40.5	
30th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
10th %ile Green (s)	0.0	30.4		13.9	47.4		40.5	40.5		40.5	40.5	
10th %ile Term Code	Skip	Max		Max	Hold		Hold	Hold		Max	Max	
Queue Length 50th (ft)	34	~372		~225	~680			304			~394	
Queue Length 95th (ft)	55	#596		#392	#915			#505			#545	
Internal Link Dist (ft)		602			577			530			1260	
Turn Bay Length (ft)												
Base Capacity (vph)	176	582		329	837			564			468	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.59	1.01		1.14	1.10			0.93			1.14	

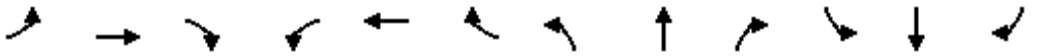
Intersection Summary			
Area Type:	Other		
Cycle Length: 98.5			
Actuated Cycle Length: 98.5			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.14			
Intersection Signal Delay: 87.2		Intersection LOS: F	
Intersection Capacity Utilization 118.4%		ICU Level of Service H	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 98.5			
70th %ile Actuated Cycle: 98.5			
50th %ile Actuated Cycle: 98.5			
30th %ile Actuated Cycle: 98.5			
10th %ile Actuated Cycle: 98.5			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Riverside Av (SR 33) & Post Road West (US 1)



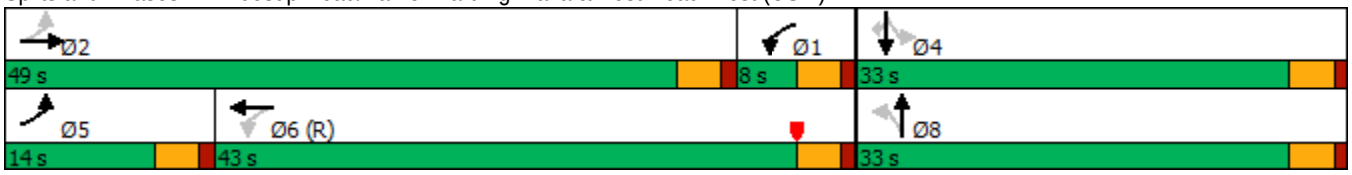


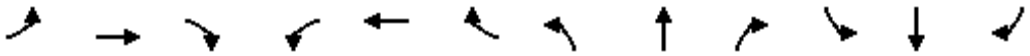
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	637	100	40	842	60	91	10	10	90	50	211
Future Volume (vph)	121	637	100	40	842	60	91	10	10	90	50	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	16	12	12	10	12	12	15	12	12	10	12
Storage Length (ft)	0		0	0		0	0		0	0		100
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1728	2023	0	0	3285	0	0	1919	0	0	1682	1615
Flt Permitted	0.174				0.858			0.550			0.757	
Satd. Flow (perm)	316	2023	0	0	2825	0	0	1088	0	0	1256	1587
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			10			13				237
Link Speed (mph)		25			25			25			30	
Link Distance (ft)		657			264			553			224	
Travel Time (s)		17.9			7.2			15.1			5.1	
Confl. Peds. (#/hr)	13		31	31		13	4		72	72		4
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.88	0.95	0.80	0.64	0.87	0.80	0.93	0.56	0.38	0.79	0.65	0.89
Heavy Vehicles (%)	1%	2%	4%	0%	1%	0%	1%	0%	0%	4%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	2	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	796	0	0	1106	0	0	142	0	0	191	237
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	13.0		4.0	13.0		8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	9.0	24.0		8.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	14.0	49.0		8.0	43.0		33.0	33.0		33.0	33.0	33.0
Total Split (%)	15.6%	54.4%		8.9%	47.8%		36.7%	36.7%		36.7%	36.7%	36.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0			4.0			4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?												
Recall Mode	None	None		None	C-Max		None	None		None	None	None
Act Effct Green (s)	62.2	62.2			51.9			19.8			19.8	19.8
Actuated g/C Ratio	0.69	0.69			0.58			0.22			0.22	0.22
v/c Ratio	0.44	0.57			0.68			0.57			0.69	0.44
Control Delay	10.2	10.0			21.3			36.2			44.7	6.3
Queue Delay	0.0	0.5			0.2			0.0			0.0	0.0
Total Delay	10.2	10.5			21.6			36.2			44.7	6.3
LOS	B	B			C			D			D	A
Approach Delay		10.5			21.6			36.2			23.4	
Approach LOS		B			C			D			C	
90th %ile Green (s)	9.4	54.1		0.0	40.7		27.9	27.9		27.9	27.9	27.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Gap	Coord		Skip	Coord		Hold	Hold		Gap	Gap	Gap
70th %ile Green (s)	6.6	59.2		0.0	48.6		22.8	22.8		22.8	22.8	22.8
70th %ile Term Code	Gap	Coord		Skip	Coord		Hold	Hold		Gap	Gap	Gap
50th %ile Green (s)	5.5	62.3		0.0	52.8		19.7	19.7		19.7	19.7	19.7
50th %ile Term Code	Gap	Coord		Skip	Coord		Hold	Hold		Gap	Gap	Gap
30th %ile Green (s)	5.0	65.5		0.0	56.5		16.5	16.5		16.5	16.5	16.5
30th %ile Term Code	Min	Coord		Skip	Coord		Hold	Hold		Gap	Gap	Gap
10th %ile Green (s)	5.0	70.1		0.0	61.1		11.9	11.9		11.9	11.9	11.9
10th %ile Term Code	Min	Coord		Skip	Coord		Hold	Hold		Gap	Gap	Gap
Queue Length 50th (ft)	23	193			74			66			101	0
Queue Length 95th (ft)	55	388			288			61			103	49
Internal Link Dist (ft)		577			184			473			144	
Turn Bay Length (ft)												100
Base Capacity (vph)	375	1403			1634			359			404	672
Starvation Cap Reductn	0	243			112			0			0	0
Spillback Cap Reductn	0	75			0			0			0	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.37	0.69			0.73			0.40			0.47	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 30 (33%), Referenced to phase 6:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 18.7		Intersection LOS: B	
Intersection Capacity Utilization 92.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 2: Jesup Road/Parker Harding Plaza & Post Road West (US 1)





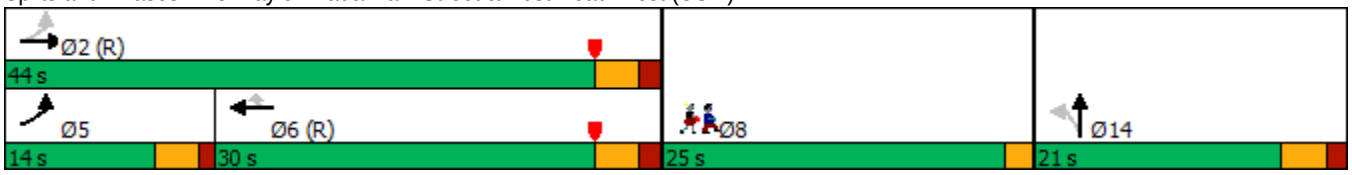
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	656	0	0	932	170	10	40	40	0	0	0
Future Volume (vph)	81	656	0	0	932	170	10	40	40	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	12	12	11	12	12	13	12	12	12	12
Satd. Flow (prot)	1685	1739	0	0	3455	1599	0	1829	0	0	0	0
Flt Permitted	0.191							0.987				
Satd. Flow (perm)	339	1739	0	0	3455	1014	0	1829	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						193		35				
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		264			99			221			659	
Travel Time (s)		7.2			2.7			5.0			18.0	
Confl. Peds. (#/hr)	102		12	12		102						123
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.68	0.95	0.80	0.25	0.92	0.88	0.25	0.84	0.64	0.80	0.80	0.80
Heavy Vehicles (%)	0%	2%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	691	0	0	1013	193	0	151	0	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA				
Protected Phases	5	2			6			14				
Permitted Phases	2					6	14					
Detector Phase	5	2			6	6	14	14				
Switch Phase												
Minimum Initial (s)	6.0	19.0			19.0	19.0	9.0	9.0				
Minimum Split (s)	10.0	23.5			23.5	23.5	15.5	15.5				
Total Split (s)	14.0	44.0			30.0	30.0	21.0	21.0				
Total Split (%)	15.6%	48.9%			33.3%	33.3%	23.3%	23.3%				
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.5			1.5	1.5	1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.5			4.5	4.5		4.5				
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?												
Recall Mode	None	C-Max			C-Max	C-Max	None	None				
Act Effct Green (s)	61.6	61.1			49.6	49.6		11.1				
Actuated g/C Ratio	0.68	0.68			0.55	0.55		0.12				
v/c Ratio	0.35	0.59			0.53	0.30		0.59				
Control Delay	8.7	13.3			28.5	14.4		37.8				
Queue Delay	0.0	0.6			2.5	0.6		2.3				
Total Delay	8.7	14.0			31.0	15.0		40.1				
LOS	A	B			C	B		D				
Approach Delay		13.2			28.5			40.1				
Approach LOS		B			C			D				
90th %ile Green (s)	10.8	43.9			29.1	29.1	15.1	15.1				
90th %ile Term Code	Gap	Coord			Coord	Coord	Gap	Gap				
70th %ile Green (s)	8.8	46.8			34.0	34.0	12.2	12.2				
70th %ile Term Code	Gap	Coord			Coord	Coord	Gap	Gap				

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	4.0
Minimum Split (s)	22.0
Total Split (s)	25.0
Total Split (%)	28%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	20.0
90th %ile Term Code	Ped
70th %ile Green (s)	20.0
70th %ile Term Code	Ped

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Green (s)	6.0	70.8			60.8	60.8	10.2	10.2				
50th %ile Term Code	Min	Coord			Coord	Coord	Gap	Gap				
30th %ile Green (s)	6.0	72.0			62.0	62.0	9.0	9.0				
30th %ile Term Code	Min	Coord			Coord	Coord	Min	Min				
10th %ile Green (s)	6.0	72.0			62.0	62.0	9.0	9.0				
10th %ile Term Code	Min	Coord			Coord	Coord	Min	Min				
Queue Length 50th (ft)	12	74			236	37		64				
Queue Length 95th (ft)	35	#551			#386	96		108				
Internal Link Dist (ft)		184			19			141			579	
Turn Bay Length (ft)												
Base Capacity (vph)	383	1180			1903	645		363				
Starvation Cap Reductn	0	192			732	212		0				
Spillback Cap Reductn	0	144			100	0		115				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.31	0.70			0.87	0.45		0.61				

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 40 (44%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 23.6	Intersection LOS: C
Intersection Capacity Utilization 54.8%	ICU Level of Service A
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Taylor Place/Main Street & Post Road West (US 1)



Lane Group	Ø8
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	625	30	100	950	250	41	120	120	270	120	51
Future Volume (vph)	31	625	30	100	950	250	41	120	120	270	120	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	11	12	13	12	14	12	12	12	12
Grade (%)		0%			-4%			0%			0%	
Storage Length (ft)	0		185	0		150	0		0	60		0
Storage Lanes	0		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3258	0	0	3631	1669	0	1872	0	1787	1785	0
Flt Permitted		0.704			0.741			0.894		0.312		
Satd. Flow (perm)	0	2301	0	0	2702	1599	0	1686	0	584	1785	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		287			718			629			396	
Travel Time (s)		7.8			19.6			17.2			10.8	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Confl. Bikes (#/hr)			2						2			4
Peak Hour Factor	0.67	0.89	0.50	0.82	0.85	0.80	0.68	0.89	0.81	0.88	0.80	0.62
Heavy Vehicles (%)	0%	2%	0%	0%	1%	2%	0%	0%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	808	0	0	1240	313	0	343	0	307	232	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			10		9	13	
Permitted Phases	2			6		6	10			13		
Detector Phase	5	2		6	6	6	10	10		9	13	
Switch Phase												
Minimum Initial (s)	5.0	14.0		9.3	9.3	9.3	7.0	7.0		5.0	7.0	
Minimum Split (s)	9.0	19.7		25.7	25.7	25.7	29.1	29.1		9.0	18.4	
Total Split (s)	9.0	51.0		42.0	42.0	42.0	29.0	29.0		10.0	39.0	
Total Split (%)	10.0%	56.7%		46.7%	46.7%	46.7%	32.2%	32.2%		11.1%	43.3%	
Yellow Time (s)	3.0	3.6		3.6	3.6	3.6	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	2.1		2.1	2.1	2.1	2.1	2.1		1.0	2.1	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		5.7			5.7	5.7		5.1		4.0	5.1	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Recall Mode	Min	C-Max		C-Max	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)		47.9			38.9	38.9		21.3		32.4	31.3	
Actuated g/C Ratio		0.53			0.43	0.43		0.24		0.36	0.35	
v/c Ratio		0.64			1.06	0.45		0.86		1.06	0.37	
Control Delay		19.6			61.6	13.2		54.1		96.3	23.3	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		19.6			61.6	13.2		54.1		96.3	23.3	
LOS		B			E	B		D		F	C	
Approach Delay		19.6			51.9			54.1			64.9	
Approach LOS		B			D			D			E	

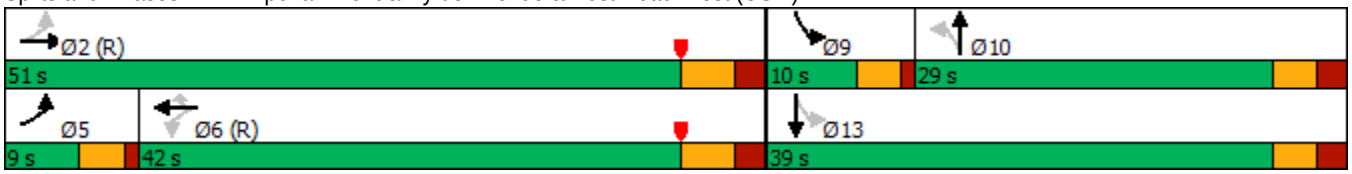
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Green (s)	5.0	45.3		36.3	36.3	36.3	23.9	23.9		6.0	33.9	
90th %ile Term Code	Max	Coord		Coord	Coord	Coord	Ped	Ped		Max	Hold	
70th %ile Green (s)	5.0	45.3		36.3	36.3	36.3	23.9	23.9		6.0	33.9	
70th %ile Term Code	Max	Coord		Coord	Coord	Coord	Max	Max		Max	Hold	
50th %ile Green (s)	5.0	46.0		37.0	37.0	37.0	23.2	23.2		6.0	33.2	
50th %ile Term Code	Min	Coord		Coord	Coord	Coord	Gap	Gap		Max	Hold	
30th %ile Green (s)	5.0	49.1		40.1	40.1	40.1	20.1	20.1		6.0	30.1	
30th %ile Term Code	Min	Coord		Coord	Coord	Coord	Gap	Gap		Max	Hold	
10th %ile Green (s)	5.0	53.7		44.7	44.7	44.7	15.5	15.5		6.0	25.5	
10th %ile Term Code	Min	Coord		Coord	Coord	Coord	Gap	Gap		Max	Hold	
Queue Length 50th (ft)		126			~413	37		182		~131	94	
Queue Length 95th (ft)		294			#505	97		#303		#283	131	
Internal Link Dist (ft)		207			638			549			316	
Turn Bay Length (ft)						150				60		
Base Capacity (vph)		1259			1166	690		447		290	672	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.64			1.06	0.45		0.77		1.06	0.35	

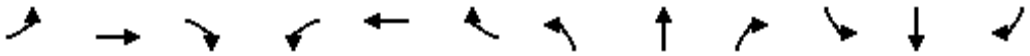
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 45 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 46.2		Intersection LOS: D	
Intersection Capacity Utilization 98.7%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Imperial Avenue/Myrtle Avenue & Post Road West (US 1)



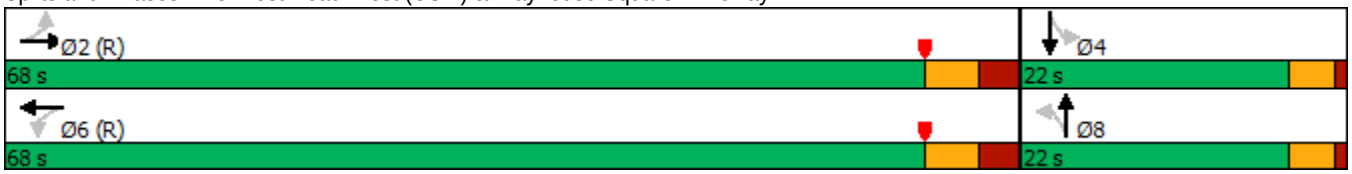


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	905	20	0	1190	90	0	0	0	90	0	110
Future Volume (vph)	70	905	20	0	1190	90	0	0	0	90	0	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	11	13	12	16	12	12	16	12
Satd. Flow (prot)	0	3393	0	0	3407	0	0	2153	0	0	1916	0
Flt Permitted		0.652									0.869	
Satd. Flow (perm)	0	2221	0	0	3407	0	0	2153	0	0	1694	0
Right Turn on Red			No			No			Yes			Yes
Satd. Flow (RTOR)											75	
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		718			679			170			193	
Travel Time (s)		19.6			18.5			3.9			5.3	
Confl. Peds. (#/hr)	7		7	7		7	1		5	5		1
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.78	0.91	0.70	0.25	0.88	0.77	0.50	0.80	0.75	0.88	0.25	0.72
Heavy Vehicles (%)	2%	2%	0%	0%	1%	1%	0%	0%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1114	0	0	1469	0	0	0	0	0	255	0
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		9.0	9.0		9.0	9.0	
Minimum Split (s)	21.4	21.4		21.4	21.4		22.0	22.0		22.0	22.0	
Total Split (s)	68.0	68.0		68.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	75.6%	75.6%		75.6%	75.6%		24.4%	24.4%		24.4%	24.4%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.8	2.8		2.8	2.8		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.4			6.4			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Act Effct Green (s)		65.1			65.1						14.5	
Actuated g/C Ratio		0.72			0.72						0.16	
v/c Ratio		0.69			0.60						0.76	
Control Delay		6.5			18.6						39.8	
Queue Delay		0.0			0.6						0.0	
Total Delay		6.5			19.2						39.8	
LOS		A			B						D	
Approach Delay		6.5			19.2						39.8	
Approach LOS		A			B						D	
90th %ile Green (s)	61.6	61.6		61.6	61.6		18.0	18.0		18.0	18.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Ped	Ped		Max	Max	
70th %ile Green (s)	61.6	61.6		61.6	61.6		18.0	18.0		18.0	18.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
50th %ile Green (s)	64.4	64.4		64.4	64.4		15.2	15.2		15.2	15.2	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	67.3	67.3		67.3	67.3		12.3	12.3		12.3	12.3	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	70.6	70.6		70.6	70.6		9.0	9.0		9.0	9.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Min	Min	
Queue Length 50th (ft)		93			438						98	
Queue Length 95th (ft)		m135			m431						14	
Internal Link Dist (ft)		638			599			90			113	
Turn Bay Length (ft)												
Base Capacity (vph)		1606			2464						398	
Starvation Cap Reductn		0			547						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.69			0.77						0.64	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 16.1		Intersection LOS: B	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Post Road West (US 1) & Playhouse Square Driveway



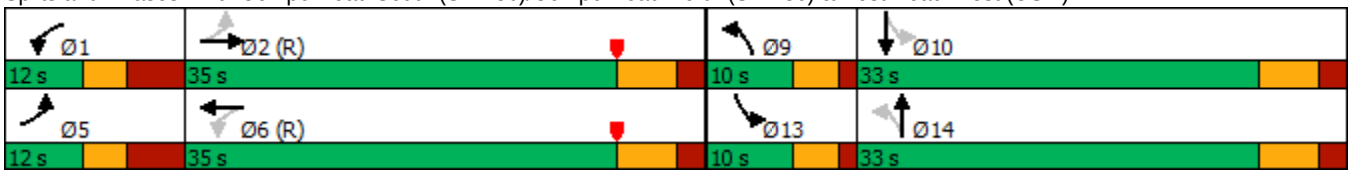
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	924	70	180	1050	100	140	210	130	191	230	100
Future Volume (vph)	81	924	70	180	1050	100	140	210	130	191	230	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	11	11	12	11	11	12
Storage Length (ft)	140		0	120		0	110		0	180		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	3401	0	1745	3369	0	1745	1673	0	1728	1689	0
Flt Permitted	0.138			0.123			0.251			0.257		
Satd. Flow (perm)	253	3401	0	226	3369	0	461	1673	0	467	1689	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		679			454			1260			941	
Travel Time (s)		18.5			12.4			24.5			18.3	
Confl. Peds. (#/hr)			50	2		50	1		50			50
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.74	0.87	0.94	0.73	0.90	0.74	0.80	0.87	0.86	0.88	0.85	0.80
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	1%	1%	1%	1%	3%
Bus Blockages (#/hr)	0	0	2	0	0	2	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	1136	0	247	1302	0	175	392	0	217	396	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		9	14		13	10	
Permitted Phases	2			6			14			10		
Detector Phase	5	2		1	6		9	14		13	10	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	5.0		5.0	5.0	
Minimum Split (s)	11.8	35.0		11.8	35.0		14.2	33.0		9.2	33.0	
Total Split (s)	12.0	35.0		12.0	35.0		10.0	33.0		10.0	33.0	
Total Split (%)	13.3%	38.9%		13.3%	38.9%		11.1%	36.7%		11.1%	36.7%	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	3.8	2.0		3.8	2.0		1.2	2.0		1.2	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.8	6.0		6.8	6.0		4.2	6.0		4.2	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	34.0	29.0		38.3	33.8		31.6	24.0		31.6	24.0	
Actuated g/C Ratio	0.38	0.32		0.43	0.38		0.35	0.27		0.35	0.27	
v/c Ratio	0.57	1.04		1.06	1.03		0.72	0.88		0.89	0.88	
Control Delay	21.9	61.7		104.0	57.1		37.0	53.2		58.0	53.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.9	61.7		104.0	57.1		37.0	53.2		58.0	53.1	
LOS	C	E		F	E		D	D		E	D	
Approach Delay		58.2			64.6			48.2			54.8	
Approach LOS		E			E			D			D	
90th %ile Green (s)	5.2	29.0		5.2	29.0		5.8	27.0		5.8	27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Max	Max	
70th %ile Green (s)	5.2	29.0		5.2	29.0		5.8	27.0		5.8	27.0	
70th %ile Term Code	Max	Coord		Max	Coord		Max	Max		Max	Max	
50th %ile Green (s)	6.4	29.0		6.4	29.0		5.8	25.8		5.8	25.8	
50th %ile Term Code	Max	Coord		Max	Coord		Max	Gap		Max	Gap	
30th %ile Green (s)	6.9	29.0		9.7	31.8		5.8	22.5		5.8	22.5	
30th %ile Term Code	Gap	Coord		Max	Coord		Max	Gap		Max	Gap	
10th %ile Green (s)	0.0	29.0		14.6	50.4		5.8	17.6		5.8	17.6	
10th %ile Term Code	Skip	Coord		Max	Coord		Max	Hold		Max	Gap	
Queue Length 50th (ft)	29	~376		~141	~482		63	207		80	209	
Queue Length 95th (ft)	m39	#468		#221	#598		92	#322		#171	#297	
Internal Link Dist (ft)		599			374			1180			861	
Turn Bay Length (ft)	140			120			110			180		
Base Capacity (vph)	192	1095		234	1266		244	501		245	506	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.57	1.04		1.06	1.03		0.72	0.78		0.89	0.78	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 70 (78%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 58.7		Intersection LOS: E	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Compo Road South (SR 136)/Compo Road North (SR 136) & Post Road West (US 1)



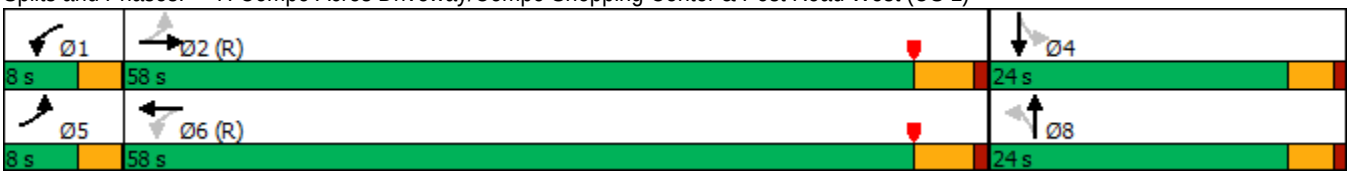
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	975	50	90	1110	100	50	20	40	80	10	60
Future Volume (vph)	100	975	50	90	1110	100	50	20	40	80	10	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	11	12	12	14	12	12	16	12
Storage Length (ft)	140		0	80		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	3429	0	1685	3403	0	0	1859	0	0	1923	0
Flt Permitted	0.152			0.200				0.779			0.702	
Satd. Flow (perm)	279	3429	0	355	3403	0	0	1460	0	0	1382	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			21			41			38	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		454			381			155			251	
Travel Time (s)		12.4			10.4			4.2			6.8	
Confl. Peds. (#/hr)	3		3	3		3	35		2	2		35
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.83	0.90	0.90	0.75	0.93	0.80	0.88	0.70	0.59	0.77	0.55	0.67
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	2	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	1139	0	120	1319	0	0	154	0	0	212	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	6.1	20.0		6.1	20.0		24.0	24.0		24.0	24.0	
Total Split (s)	8.0	58.0		8.0	58.0		24.0	24.0		24.0	24.0	
Total Split (%)	8.9%	64.4%		8.9%	64.4%		26.7%	26.7%		26.7%	26.7%	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.1	1.0		0.1	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	3.1	5.0		3.1	5.0			4.0			4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	64.3	57.3		64.3	57.3			15.5			15.5	
Actuated g/C Ratio	0.71	0.64		0.71	0.64			0.17			0.17	
v/c Ratio	0.43	0.52		0.37	0.61			0.54			0.79	
Control Delay	9.7	5.6		7.0	11.8			30.9			48.9	
Queue Delay	0.0	0.1		0.0	1.3			0.1			0.2	
Total Delay	9.7	5.7		7.0	13.1			30.9			49.1	
LOS	A	A		A	B			C			D	
Approach Delay		6.1			12.5			30.9			49.1	
Approach LOS		A			B			C			D	
90th %ile Green (s)	4.9	53.0		4.9	53.0		20.0	20.0		20.0	20.0	

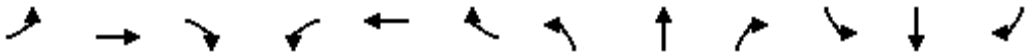
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Coord		Max	Coord		Ped	Ped		Max	Max	
70th %ile Green (s)	5.7	53.0		5.7	53.0		19.2	19.2		19.2	19.2	
70th %ile Term Code	Max	Coord		Max	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	5.6	56.0		5.6	56.0		16.3	16.3		16.3	16.3	
50th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	4.9	59.7		4.9	59.7		13.3	13.3		13.3	13.3	
30th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	4.1	64.9		4.1	64.9		8.9	8.9		8.9	8.9	
10th %ile Term Code	Gap	Coord		Gap	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (ft)	8	106		16	215			58			95	
Queue Length 95th (ft)	m10	m101		29	309			79			82	
Internal Link Dist (ft)		374			301			75			171	
Turn Bay Length (ft)	140			80								
Base Capacity (vph)	284	2187		331	2174			356			336	
Starvation Cap Reductn	0	256		0	0			0			0	
Spillback Cap Reductn	0	0		0	593			6			6	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.42	0.59		0.36	0.83			0.44			0.64	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 80 (89%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 13.3		Intersection LOS: B	
Intersection Capacity Utilization 65.8%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

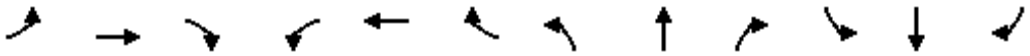
Splits and Phases: 7: Compo Acres Driveway/Compo Shopping Center & Post Road West (US 1)





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1155	10	10	1300	160	0	0	10	0	0	0
Future Volume (vph)	30	1155	10	10	1300	160	0	0	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3558	0	0	3500	0	0	1644	0	0	0	0
Flt Permitted		0.998			0.999							
Satd. Flow (perm)	0	3558	0	0	3500	0	0	1644	0	0	0	0
Link Speed (mph)		25			25			30			25	
Link Distance (ft)		381			619			336			318	
Travel Time (s)		10.4			16.9			7.6			8.7	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.65	0.88	0.31	0.31	0.92	0.74	0.25	0.25	0.35	0.50	0.80	0.25
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1391	0	0	1661	0	0	29	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

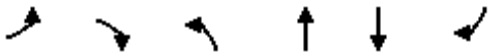
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1155	10	10	1300	160	0	0	10	0	0	0
Future Volume (Veh/h)	30	1155	10	10	1300	160	0	0	10	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.65	0.88	0.31	0.31	0.92	0.74	0.25	0.25	0.35	0.50	0.80	0.25
Hourly flow rate (vph)	46	1313	32	32	1413	216	0	0	29	0	0	0
Pedestrians								2				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								0				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		381										
pX, platoon unblocked				0.82			0.82	0.82	0.82	0.82	0.82	
vC, conflicting volume	1629			1347			2194	3116	674	2362	3024	814
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1629			992			2020	3141	175	2226	3029	814
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	89			94			100	100	96	100	100	100
cM capacity (veh/h)	404			579			25	8	694	17	9	325

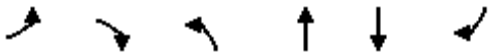
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	702	688	738	922	29
Volume Left	46	0	32	0	0
Volume Right	0	32	0	216	29
cSH	404	1700	579	1700	694
Volume to Capacity	0.11	0.41	0.06	0.54	0.04
Queue Length 95th (ft)	10	0	4	0	3
Control Delay (s)	3.6	0.0	1.5	0.0	10.4
Lane LOS	A		A		B
Approach Delay (s)	1.8		0.7		10.4
Approach LOS					B

Intersection Summary				
Average Delay	1.3			
Intersection Capacity Utilization	63.8%	ICU Level of Service		B
Analysis Period (min)	15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	40	31	445	641	10
Future Volume (vph)	0	40	31	445	641	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	12	12	12	16	12
Satd. Flow (prot)	1558	0	0	1587	2045	0
Flt Permitted				0.995		
Satd. Flow (perm)	1558	0	0	1587	2045	0
Link Speed (mph)	25			30	30	
Link Distance (ft)	720			689	451	
Travel Time (s)	19.6			15.7	10.3	
Confl. Peds. (#/hr)	2		5			5
Peak Hour Factor	0.25	0.60	0.54	0.84	0.87	0.50
Heavy Vehicles (%)	0%	9%	0%	8%	5%	0%
Parking (#/hr)				0		0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	67	0	0	587	757	0
Sign Control	Stop			Free	Free	

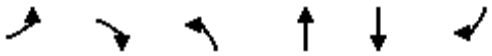
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	40	31	445	641	10
Future Volume (Veh/h)	0	40	31	445	641	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.60	0.54	0.84	0.87	0.50
Hourly flow rate (vph)	0	67	57	530	737	20
Pedestrians	5				2	
Lane Width (ft)	13.0				16.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1398	752	762			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1398	752	762			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	100	83	93			
cM capacity (veh/h)	145	397	856			

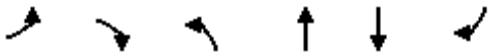
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	67	587	757
Volume Left	0	57	0
Volume Right	67	0	20
cSH	397	856	1700
Volume to Capacity	0.17	0.07	0.45
Queue Length 95th (ft)	15	5	0
Control Delay (s)	15.9	1.8	0.0
Lane LOS	C	A	
Approach Delay (s)	15.9	1.8	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	466	661	0
Future Volume (vph)	0	0	0	466	661	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	11	12
Satd. Flow (prot)	2153	0	0	1693	1801	0
Flt Permitted						
Satd. Flow (perm)	2153	0	0	1693	1801	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	382			399	413	
Travel Time (s)	8.7			9.1	9.4	
Confl. Peds. (#/hr)			4			4
Confl. Bikes (#/hr)		2				
Peak Hour Factor	0.25	0.25	0.92	0.91	0.88	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%
Parking (#/hr)				0		0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	512	751	0
Sign Control	Stop			Free	Free	

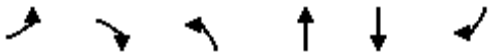
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	466	661	0
Future Volume (Veh/h)	0	0	0	466	661	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.92	0.91	0.88	0.92
Hourly flow rate (vph)	0	0	0	512	751	0
Pedestrians	4					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1267	755	755			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1267	755	755			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	187	410	861			

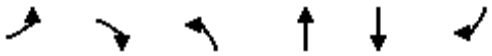
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	0	512	751
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.30	0.44
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	38.1%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	150	486	631	40
Future Volume (vph)	0	0	150	486	631	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	9	12	16	12
Storage Length (ft)	0	0	90			0
Storage Lanes	0	0	1			0
Taper Length (ft)	25		25			
Satd. Flow (prot)	0	0	1608	1881	2097	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1608	1881	2097	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	465			367	399	
Travel Time (s)	10.6			8.3	9.1	
Confl. Peds. (#/hr)			7			7
Peak Hour Factor	0.89	0.92	0.86	0.92	0.86	0.82
Heavy Vehicles (%)	0%	0%	1%	1%	2%	0%
Parking (#/hr)						0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	174	528	783	0
Sign Control	Stop			Free	Free	

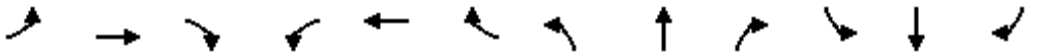
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	150	486	631	40
Future Volume (Veh/h)	0	0	150	486	631	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.92	0.86	0.92	0.86	0.82
Hourly flow rate (vph)	0	0	174	528	734	49
Pedestrians	7					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1642	766	790			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1642	766	790			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	79			
cM capacity (veh/h)	88	406	835			

Direction, Lane #	NB 1	NB 2	SB 1
Volume Total	174	528	783
Volume Left	174	0	0
Volume Right	0	0	49
cSH	835	1700	1700
Volume to Capacity	0.21	0.31	0.46
Queue Length 95th (ft)	20	0	0
Control Delay (s)	10.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	2.6		0.0
Approach LOS			

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	130	31	41	110	144	13	432	41	245	616	30
Future Volume (vph)	20	130	31	41	110	144	13	432	41	245	616	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	11	12	12	12	12	10	12	12
Storage Length (ft)	0		0	0		300	0		0	180		0
Storage Lanes	0		0	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2057	0	0	1791	1599	0	1812	0	1652	1847	0
Flt Permitted		0.993			0.986			0.938		0.950		
Satd. Flow (perm)	0	2054	0	0	1786	1554	0	1703	0	1646	1847	0
Right Turn on Red			No			No			No			Yes
Satd. Flow (RTOR)											2	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		1250			990			1098			1022	
Travel Time (s)		34.1			27.0			25.0			23.2	
Confl. Peds. (#/hr)	3		3	3		3	4		2	2		4
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.54	0.77	0.63	0.78	0.79	0.75	0.45	0.88	0.58	0.89	0.85	0.95
Heavy Vehicles (%)	0%	1%	0%	4%	0%	1%	11%	2%	4%	2%	2%	5%
Parking (#/hr)			0									
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	0	0	192	192	0	591	0	275	757	0
Turn Type	Split	NA		Split	NA	pm+ov	Perm	NA		Prot	NA	
Protected Phases	4	4		12	12	1		2		1	6	
Permitted Phases						12	2					
Detector Phase	4	4		12	12	1	2	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		7.0	7.0	6.0	15.0	15.0		6.0	15.0	
Minimum Split (s)	12.0	12.0		12.0	12.0	10.0	22.0	22.0		10.0	21.0	
Total Split (s)	21.0	21.0		17.0	17.0	20.0	41.0	41.0		20.0	61.0	
Total Split (%)	17.5%	17.5%		14.2%	14.2%	16.7%	34.2%	34.2%		16.7%	50.8%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	4.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	1.0	2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		5.0			5.0	4.0		6.0		4.0	6.0	
Lead/Lag	Lag	Lag				Lead	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes				Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Min	Min		None	Min	
Act Effct Green (s)		15.6			12.1	29.2		35.2		16.1	55.3	
Actuated g/C Ratio		0.15			0.12	0.28		0.34		0.16	0.54	
v/c Ratio		0.82			0.91	0.43		1.01		1.06	0.76	
Control Delay		64.4			89.4	32.3		75.0		116.6	26.1	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		64.4			89.4	32.3		75.0		116.6	26.1	
LOS		E			F	C		E		F	C	
Approach Delay		64.4			60.8			75.0			50.2	
Approach LOS		E			E			E			D	
90th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	

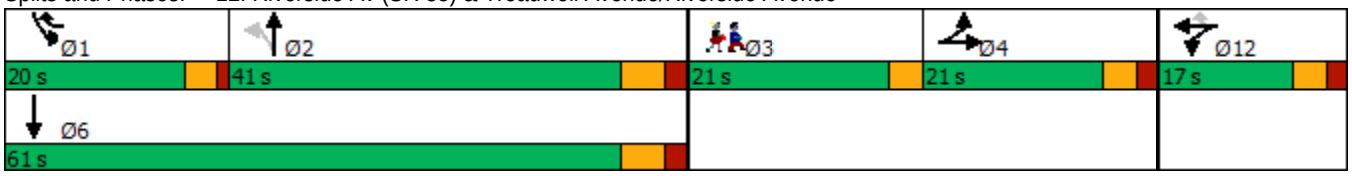
Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Parking (#/hr)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	4.0
Minimum Split (s)	20.0
Total Split (s)	21.0
Total Split (%)	18%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	17.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
90th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Max	
70th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
70th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
50th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
50th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
30th %ile Green (s)	16.0	16.0		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
30th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Hold	
10th %ile Green (s)	13.5	13.5		12.0	12.0	16.0	35.0	35.0		16.0	55.0	
10th %ile Term Code	Gap	Gap		Max	Max	Max	Max	Max		Max	Hold	
Queue Length 50th (ft)		156			121	91		365		~187	338	
Queue Length 95th (ft)		#270			#255	155		#741		#427	#640	
Internal Link Dist (ft)		1170			910			1018			942	
Turn Bay Length (ft)						300				180		
Base Capacity (vph)		323			211	449		585		259	998	
Starvation Cap Reductn		0			0	0		0		0	0	
Spillback Cap Reductn		0			0	0		0		0	0	
Storage Cap Reductn		0			0	0		0		0	0	
Reduced v/c Ratio		0.79			0.91	0.43		1.01		1.06	0.76	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 102.5
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 60.1 Intersection LOS: E
Intersection Capacity Utilization 90.9% ICU Level of Service E
Analysis Period (min) 15
90th %ile Actuated Cycle: 119
70th %ile Actuated Cycle: 99
50th %ile Actuated Cycle: 99
30th %ile Actuated Cycle: 99
10th %ile Actuated Cycle: 96.5
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Riverside Av (SR 33) & Treadwell Avenue/Riverside Avenue



Lane Group	Ø3
90th %ile Term Code	Ped
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary