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Memorandum

TO: Megan Costa, SOCPA
Sam Gordon, Town of DeWitt
Jeanie Gleisner, CNYRPDB

FROM: Meghan Vitale

DATE: April 20, 2017

RE: Jamesville Hamlet Transportation Assessment
Technical Memorandum #3: Assessment of alternatives

CC: John Reichert, NYSDOT

The Syracuse Metropolitan Transportation Council (SMTC) has agreed to assist municipalities within our Metropolitan Planning Area (MPA) with transportation-related elements of their comprehensive planning processes under a "Comprehensive Plan Assistance Block" as requested by the Syracuse-Onondaga County Planning Agency (SOCPA). The information summarized here is intended to assist the Town of DeWitt and the Central New York Regional Planning and Development Board (CNYRPDB) with the development of the Jamesville Hamlet Master Plan.

This Technical Memorandum summarizes our assessment of alternatives for the Jamesville Hamlet area. This is the third, and final, Tech Memo for the study, and this memo draws on the information previously presented in Tech Memo 1 (inventory of facilities and accident analysis) and Tech Memo 2 (existing and future baseline traffic operations).

School zone/speed limit signage

The Town of DeWitt expressed interest in school zone signage near the Jamesville Elementary School on Route 173 west of the hamlet.

The current speed limit on Route 173 through the hamlet area is 30 mph. Approaching the hamlet from the west, the speed limit decreases from 50 mph to 30 mph just past the driveway to Jamesville Community Church, which is about 1,800 feet west of the entrance to Jamesville Elementary School (and about 3,300 feet, or 0.6 mile, west of South Street).

Based on information provided by staff from the NYSDOT Region 3 Traffic and Safety group, the NYSDOT does not sign "school zones," but does sign speed reductions near schools where this is warranted. An individual school and/or the school district would need to make a formal request, in writing, to the NYSDOT to evaluate the appropriateness of a speed reduction. If a request is found to be appropriate, the typical action is to lower the speed limit by 10 mph near the school (which in this case would lower

the speed limit to 20 mph). The school/district should provide justification for their request. Although a rigorous quantitative analysis is not required to provide justification, any data the school/district can provide regarding the number of students walking to school would be helpful in the evaluation process. Speed limits will not be lowered solely to accommodate traffic created by parent pick-up/drop-off.

Examples of schools located on state-owned roadways in Onondaga County include (but are not limited to):

- Liverpool Elementary and Liverpool Middle School on Route 370 in the Town of Salina. The speed limit is reduced from 30 mph to 20 mph about 400-500 feet in advance of the driveway in both directions.
- Willowfield Elementary on Route 31 in the Town of Clay. The speed limit is 40 mph with no reduction near the school driveway (although the school driveway is a signalized intersection on Route 31).
- Brewerton Elementary on Route 11 in the Town of Cicero. The speed limit is reduced from 35 mph to 25 mph about 400-500 feet in advance of the driveway in both directions.

Roundabouts

Roundabouts tend to reduce the number of collisions at intersections, improve traffic flow, and can provide traffic calming. Using screening criteria developed from the National Cooperative Highway Research Program (NCHRP) Report 672 *Roundabouts: An Informational Guide*, the SMTC investigated the feasibility of a roundabout in the hamlet of Jamesville. The screening criteria included site features, traffic flow features, accident history, and other general information about the intersections of Route 173/South Street and Route 173/North Street (see Attachment A). The total entering traffic volume at Route 173/South Street is below the threshold for a mini-roundabout, while the total entering traffic volume at Route 173/North Street falls within the typical range for a single-lane roundabout. However, both locations present significant physical limitations. The close proximity of a signalized intersection (North Street) is a concern at the South Street intersection. At North Street, the presence of the railroad tracks within the functional area of the intersection and the significant grade on the westbound approach would create design and operational challenges. Given these concerns, roundabout concepts were not pursued at the study area intersections.

On-street parking

There are two areas adjacent to Route 173 that are currently used for parking. Both of these parking areas are within the State right-of-way and present operational challenges.

As noted in Tech Memo 2, there are six striped, perpendicular parking spaces on the south side of Route 173 between South Street and the railroad tracks (in front of the bakery/carpet store building). These parking spaces slope up away from the road toward the sidewalk. Observations by SMTC staff indicated that the spaces are underutilized during peak hours.

There is also an area on the north side of Route 173 from South Street to a point about 200 feet to the west that is used for perpendicular parking. A portion of this area (at the western end) is paved, with striping for five spaces, while most of the remainder of this area is gravel with no striping. There is concrete gutter along this segment between the travel lane and the "parking area." There are also driveways in the center of this area.

Because the parking spaces in both of these areas are perpendicular to Route 173, drivers typically park nose-in, and then must back-out into a travel lane. This is an undesirable condition that can impede traffic flow and create safety concerns.

Public parking in the State right-of-way is allowed under State law, but the NYSDOT Region 3 Traffic Safety and Mobility group would need to review any plans for changes to the existing parking configuration (or any proposed additional parking) within the State right-of-way and, if approved, a Highway Work Permit would need to be issued. The NYSDOT indicated that parallel parking is preferred over perpendicular parking along a State highway, but each case must be reviewed on an individual basis.

SMTC staff conducted a desktop review of on-street parking along State highways in some villages in the region. This was not a comprehensive review of parking on State highways in the region, but provides some examples. Table 1 below lists the findings of this research.

Table 1: Examples of parking on State highways in villages in Onondaga County

Village	State Highway	Type of Parking	Metered	Striped	Curbing
Cazenovia	Route 20	Parallel	No	Yes	Yes
Marcellus	Route 174	Parallel, perpendicular*	No	Yes	Yes
Skaneateles	Route 20	Parallel	Yes	Yes	Yes

*There are 11 striped, perpendicular parking spaces on the south side of Route 174 between South Street and North Street in the Village of Marcellus.

Development of future concepts

SMTC examined a "future base" scenario and five additional future concepts for the hamlet of Jamesville. All future concepts assume a mixed-use redevelopment of the former Alpha Cement plant site as described in Tech Memo 2. However, each concept includes a different means of access to the cement plant site, modifications to the Town Square driveway and the South Street/Sunoco driveway intersection on Route 173, and changes to the parking areas adjacent to Route 173. Figure 1 shows the location of the cement plant in relation to the "hamlet core" area, the elementary school, and the Town Square plaza.

Figures 2 through 5 show the expected traffic volumes at the study area intersections for each future concept. Figures 6 through 9 illustrate potential changes to the intersection configurations and on-street parking areas in the hamlet core for each future concept. The features of each concept are described on the next page, and summarized in Table 2.

- *Future Base:* Access to the cement plant site from Route 173 is provided through the existing Town Square driveway and at Ogle Road. The existing Sunoco driveway remains unchanged, and no new trips are added at this driveway. No changes to existing parking areas adjacent to Route 173.

- *Concept 1a:* Access to the cement plant site from Route 173 is provided at a new driveway west of the Jamesville Elementary School and at Ogle Road, but no through trips (from Route 173 to Ogle Road) are assumed. Access to Town Square and Sunoco remain unchanged; no new trips are assumed to use these driveways. The existing perpendicular parking areas on the north side of Route 173 just west of the Sunoco driveway and on the south side of Route 173 between South Street and North Street are both converted to parallel parking, and additional parallel parking is created on the south side of Route 173 west of South Street.

- *Concept 1b:* A new local road is assumed that will intersect Route 173 west of the Jamesville Elementary School and connect to Ogle Road, providing access to the cement plant site and a new option for through trips. Remaining features are the same as Concept 1a.

  This is the only alternative that assumed that some existing trips would be diverted through the former cement plant site on a new local road. SMTC staff added this new local road connection[2] to our existing 2014 travel demand model to determine how many existing trips might utilize this new road connection instead of North Street. The travel demand model indicated that approximately 80 trips would use the new road to travel northbound during the morning peak hour and southbound during the evening peak hour. The model indicated that no trips would use the new road to travel southbound during the morning peak hour, and approximately 20 trips would travel northbound on the new road in the evening peak hour. SMTC staff used this information about existing trip diversions, along with the new trips generated by development on the cement plant site, to develop the turning movement volumes at the Route 173/new access road intersection and the Jamesville Toll Road/Ogle Road intersection under this alternative.

- *Concept 2:* The existing Town Square driveway is closed and these trips are consolidated to the South Street/Sunoco driveway intersection, along with new trips to the cement plant site. Stop signs are installed on Route 173 at South Street/Sunoco driveway to make this an all-way stop-controlled intersection. Access to the cement plant site is also provided at Ogle Road, but no through trip diversions are assumed. Parallel parking is added consistent with Concepts 1a and 1b.

- *Concept 3a:* South Street/Sunoco driveway intersection on Route 173 is signalized, with the signal operating on the same controller as the signal at the Route 173/North Street intersection. The existing Town Square driveway is closed and these trips are consolidated to the South Street/Sunoco intersection, along with new trips to the cement plant site. Access to the cement plant site is also provided at Ogle Road, but no through trip diversions are assumed. Parallel parking is added on both sides of Route 173 west of South Street, but the existing parking area between South Street and

[2] The new road was assumed to have a "local" functional class and a speed limit of 30 mph, and is 1.04 miles based on the assumed intersection point on Route 173 and connection to Ogle Road.

North Street is converted to an outdoor seating area, based on concerns expressed by the NYSDOT about parking between two closely-spaced signals.

- *Concept 3b*: Same as Concept 3a, but with channelization of the entering and exiting traffic on the Sunoco driveway.

Table 2: Summary of features in future concepts

Concept	Former cement plant site access	Town Square driveway	Sunoco driveway/ South St. intersection	Route 173 on-street parking
Future Base	Via Town Square driveway and Ogle Road; no through trips	No change to design; new trips to/from cement plant site	No change in design or traffic volume	Perpendicular
1a	Via new access road west of elementary school and at Ogle Road; no through trips	Narrowed to one ingress and one egress lane; left turn volume increase due to turn restriction at Sunoco driveway	Right-in/right-out only access	Parallel
1b	Via new public road connecting Ogle Road to Route 173, west of elementary school (allows through trips)	Narrowed to one ingress and one egress lane; left turn volume increase due to turn restriction at Sunoco driveway	Right-in/right-out only access	Parallel
2	Via Sunoco driveway and at Ogle Road; no through trips	Closed	Full access, with four-way stop control	Parallel
3a	Via Sunoco driveway and at Ogle Road; no through trips	Closed	Full access, with new signal	Parallel, but with no parking between South Street and North Street
3b	Via Sunoco driveway and at Ogle Road; no through trips	Closed	Full access, with new signal and channelization for ingress/egress on driveway	Parallel, but with no parking between South Street and North Street

Operational analysis for future concepts

Tables 3 and 4 summarize the capacity analysis results (delay and Level of Service [LOS]) at each of the study area intersections under the existing conditions, future base conditions, and all future concepts for the morning and evening peak hours, respectively. This analysis was completed with Synchro software. The Synchro reports are included in Attachment B.

Table 3: Summary of Existing and Future capacity analysis results, AM peak hour

		Level of Service (delay, in seconds)						
Intersection			**Future**	**Future Concepts**				
Approach	Movement	**Existing**	**Base**	**1a**	**1b**	**2**	**3a**	**3b**
Route 173/South Street/Sunoco driveway								
Eastbound	Left/(through/right)*	A(8)	A(8)	A(8)	A(8)	B(14)	C(21)	C(21)
Westbound	Left/(through/right)*	A(8)	A(8)	A(8)	A(8)	C(23)	A(5)	A(5)
	Right	---	---	---	---	---	---	A(1)
Northbound	Left/through/right	B(14)	B(14)	B(14)	B(13)	B(12)	B(10)	B(10)
Southbound	Left/through/right	C(20)	C(21)	C(21)	C(18)	B(11)	B(18)	B(18)
OVERALL		na	na	na	na	B(11)	B(12)	B(12)
Route 173/North Street								
Eastbound	Left	B(12)	B(12)	B(12)	A(9)	B(13)	A(7)	A(7)
	Through	A(6)	A(6)	A(6)	A(6)	A(7)	A(2)	A(2)
Westbound	Through	C(22)	C(22)	C(22)	C(21)	C(23)	C(22)	C(22)
	Right	A(4)	A(4)	A(4)	A(3)	A(4)	A(4)	A(4)
Southbound	Left	C(26)	C(26)	C(26)	C(26)	C(25)	C(30)	C(30)
	Right	A(8)	A(8)	A(8)	A(8)	A(7)	A(8)	A(8)
OVERALL		B(11)	B(12)	B(12)	B(11)	B(12)	B(11)	B(11)
Route 173/Solvay Road								
Eastbound	Left	B(11)	B(11)	B(11)	B(11)	B(11)	B(11)	B(11)
Southbound	Left/right	D(30)	D(31)	D(31)	D(31)	D(31)	D(31)	D(31)
Route 173/Route 91								
Westbound	Left	A(8)	A(8)	A(8)	A(8)	A(8)	A(8)	A(8)
Northbound	Left/right	F(127)	F(142)	F(142)	F(142)	F(142)	F(142)	F(142)
Jamesville Toll Road/Ogle Road								
Westbound	Left	**	A(7)	A(7)	A(7)	A(7)	A(7)	A(7)
Northbound	Left/right	**	A(9)	A(9)	A(9)	A(9)	A(9)	A(9)
Route 173/New access road								
Eastbound	Left	---	---	A(8)	A(8)	---	---	---
Southbound	Left/right	---	---	B(13)	B(14)	---	---	---

Notes:

LOS = Level of service. Delay is the average delay per vehicle, in seconds.

* Movements shown in parentheses are only applicable in the Future Concepts 2, 3a, and 3b

**Existing turning movement count not available. Future turning movements estimated based on hourly traffic volume data for Jamesville Toll Road and trip generation for former cement plant site.

--- Intersection or lane group does not exist under this scenario.

na = The Highway Capacity Manual methodology does not provide an overall intersection delay and LOS for two-way stop-controlled intersections.

Table 4: Summary of Existing and Future capacity analysis results, PM peak hour

		Level of Service (delay, in seconds)						
Intersection			**Future**	**Future Concepts**				
Approach	Movement	**Existing**	**Base**	**1a**	**1b**	**2**	**3a**	**3b**
Route 173/South Street/Sunoco driveway								
Eastbound	Left/(through/right)*	A(8)	A(8)	A(8)	A(8)	D(30)	E(60)	E(71)
Westbound	Left/(through/right)*	A(9)	A(9)	A(9)	A(9)	F(123)	B(14)	A(9)
	Right	---	---	---	---	---	---	A(1)
Northbound	Left/through/right	D(30)	E(35)	E(43)	D(32)	B(13)	C(21)	C(21)
Southbound	Left/through/right	F(72)	F(93)	F(88)	F(61)	B(14)	E(59)	E(59)
OVERALL		na	na	na	na	B(14)	C(34)	C(35)
Route 173/North Street								
Eastbound	Left	C(23)	C(24)	C(24)	C(22)	C(24)	A(6)	A(5)
	Through	B(19)	B(19)	B(19)	B(19)	B(20)	A(5)	A(6)
Westbound	Through	D(39)	D(42)	D(42)	D(40)	D(43)	C(34)	C(31)
	Right	A(1)	A(1)	A(1)	A(1)	A(1)	A(1)	A(1)
Southbound	Left	C(28)	C(29)	C(29)	C(29)	C(28)	D(55)	E(64)
	Right	A(3)	A(3)	A(3)	A(3)	A(3)	B(12)	B(13)
OVERALL		B(20)	C(21)	C(21)	C(21)	C(21)	C(25)	C(28)
Route 173/Solvay Road								
Eastbound	Left	A(8)	A(9)	A(9)	A(8)	A(8)	A(8)	A(8)
Southbound	Left/right	F(69)	F(85)	F(85)	F(85)	F(85)	F(85)	F(85)
Route 173/Route 91								
Westbound	Left	B(10)	B(10)	B(10)	B(10)	B(10)	A(10)	A(10)
Northbound	Left/right	E(38)	E(44)	E(44)	E(45)	E(44)	E(44)	E(44)
Jamesville Toll Road/Ogle Road								
Westbound	Left	**	A(8)	A(8)	A(8)	A(8)	A(8)	A(8)
Northbound	Left/right	**	B(10)	B(10)	B(11)	B(10)	B(10)	B(10)
Route 173/New access road								
Eastbound	Left	---	---	A(8)	A(8)	---	---	---
Southbound	Left/right	---	---	C(18)	C(15)	---	---	---

Notes:

LOS = Level of service. Delay is the average delay per vehicle, in seconds.

* Movements shown in parentheses are only applicable in the Future Alternative 3 scenario

**Existing turning movement count not available. Future turning movements estimated based on hourly traffic volume data for Jamesville Toll Road and trip generation for former cement plant site.

--- Intersection or lane group does not exist under this scenario.

na = The Highway Capacity Manual methodology does not provide an overall intersection delay and LOS for two-way stop-controlled intersections.

Most of the turning movements at the study area intersections currently operate at LOS C or better, with the signal at Route 173/North Street operating at an overall LOS B, during both peak hours. There are a few unsignalized side-street movements that currently operate at LOS E or F. Under Future Base conditions, with development of the cement plant site, relatively little change in delay is expected for individual turning movements at North Street, South Street, or Solvay Road/Route 91.

However, this analysis did not include the intersection of the Town Square driveway with Route 173, due to its location in close proximity to the eastbound Route 173 approach at North Street. (Synchro software is not able to analyze this configuration.) SMTC observations of the existing operations at this intersection (described in detail in Tech Memo 2) indicated that this intersection currently functions well because the volume of traffic using the driveway is very low. Left turns at the Town Square driveway – especially left-turns exiting onto Route 173 – are, in essence, controlled by the signal at North Street, with one vehicle able to "sneak out" of the driveway at the end of the green time on Route 173 during each cycle of the signal. This situation severely limits the capacity of the Town Square driveway approach to Route 173, and it is likely that an increase in volume, such as that associated with the redevelopment of the cement plant, could result in significant queuing on this approach.

Due to concerns over the future operation of the Town Square driveway if it is used to provide access to the cement plant site redevelopment from Route 173, alternative access scenarios were investigated, i.e. Concepts 1a, 1b, 2, 3a, and 3b. All future scenarios also include access to and from the north end of the cement plant site via Ogle Road.

The analysis indicates that the new intersection on Route 173 would operate well both without or with through trips (i.e. Concepts 1a and 1b, respectively), and there would be little impact to remaining intersections in the study area. With both of these concepts, the Sunoco driveway was limited to right-in/right-out only movements per the Town's request. This forces all left-turn movements to be made at the Town Square driveway, and the left-turn capacity at the Town Square driveway is constrained by the queues on Route 173 eastbound. Adding left-turn movements at the Town Square driveway is not recommended.

Concept 2 does not include a new access road on Route 173 at the western edge of the hamlet, but instead consolidates all access to developments in the hamlet core on the north side of Route 173 – including access to the cement plant site – through the existing Sunoco driveway. This alternative assumes that the existing Town Square driveway would be closed, and the intersection of Route 173/South Street/Sunoco driveway would become a four-way stop. Consideration of this configuration was requested by the Town; however, it should be noted that all-way stop control is typically used where traffic volumes are well-balanced across all the approaches at an intersection. This location has significantly higher volumes on the Route 173 approaches than on the South Street and Sunoco driveway approaches (even under future conditions with the cement plant site redevelopment). The analysis as a four-way stop indicates that delay for traffic on Route 173 would increase substantially at the South Street intersection during the evening peak hour, with the eastbound and westbound approaches operating at LOS D and F (although the LOS on the South Street and driveway approaches at this intersection would improve from D/F to B). Queuing on the westbound Route 173 approach is also a concern with this concept, especially with the proximity of the railroad tracks. Additionally, the queue of

vehicles exiting at the Sunoco driveway may interfere with the movement of patrons at the gas pumps, since the gas canopy is so close to Route 173.

Concepts 3a and 3b were analyzed with the same traffic volumes as Concept 2, but with an additional signal at South Street/Sunoco driveway. Due to the proximity of this new signal to the existing signal at North Street, the two signals were analyzed on a single controller. This allows the two signals to operate in tandem, serving all movements at the two intersections within one cycle of the signal and minimizing the number of vehicles that become "trapped" between the two intersections. The analysis indicates that these two signals will operate well during the morning peak hour with an overall LOS B and all movements operating at LOS C or better at both intersections. During the evening peak hour the intersections are expected to operate at LOS C overall, with some individual movements operating at LOS D or E. Concept 3a raises concerns about conflicts between the queue of vehicles exiting the Sunoco driveway and patrons using the gas pumps (similar to Concept 2). To address these conflicts, Concept 3b provides separation between the movement of vehicles around the gas pumps and the vehicles entering/exiting the driveway; however, in order to avoid the gas canopy, this driveway would intersect Route 173 at an acute angle, which presents its own operational concerns. Further examination of the geometry of the Sunoco site would be necessary to determine if this option is feasible. NYSDOT would also need to examine the signal timing in detail to determine if this could be implemented without creating significant queueing (the potential for queuing across the railroad tracks is a concern).

The potential operational benefits and issues associated with each of the concept plans are summarized in Table 5.

Based on the results of this operational analysis and feedback from the NYSDOT, the only intersection modification that is recommended at this time is the narrowing of the Town Square driveway. The other potential intersection modifications (turn restrictions, conversion to all-way stop control, or additional signalization) all create additional operational concerns within the constrained hamlet core area. At this time, it does not appear that access to the former cement plant site (assuming mixed-use redevelopment of the site) should be provided through the existing driveways in the hamlet core area. The capacity analysis indicates that a new roadway intersecting Route 173 west of the elementary school would function well – either as a driveway or a public roadway with access for through trips – without placing additional burden on the intersections in the hamlet core.

Table 5: Potential operational benefits and issues associated with each concept plan

Concept	Benefits	Issues
Future Base	• Individual developments maintain their own access points	• Town Square driveway is overly wide; lane usage unclear • Left-turns at Town Square (especially exiting) are difficult and capacity is very limited
1a/1b	• Removes left-turn conflicts at Sunoco driveway • Narrowed Town Square driveway clarifies lane usage • May be able to create new parking along Town Square driveway	• Forces more left-turns to use the Town Square driveway, which will likely create queuing and capacity issues
2	• Removes all conflicts at Town Square driveway • Allows for relocation of Trolley Building	• LOS F on Rt 173 WB at South Street in PM peak hour; potential for queuing across railroad tracks • Queuing on Sunoco driveway likely to conflict with patrons at gas pumps • Significantly higher traffic on Route 173 compared to side streets indicates that location is unlikely to meet criteria for all-way stop control
3a	• Removes all conflicts at Town Square driveway • Allows for relocation of Trolley Building	• EB and SB approaches at South St/Sunoco intersection operate at LOS E during PM peak hour • Queuing on Sunoco driveway likely to conflict with patrons at gas pumps
3b	• Removes all conflicts at Town Square driveway • Allows for relocation of Trolley Building • Separates traffic flow at gas pumps from traffic entering/exiting driveway	• Some LOS E on individual movements at signalized intersections • Angle of new driveway intersection with Route 173 is not ideal

Bicycle and pedestrian infrastructure

In addition to the access concepts described above, the SMTC also developed concepts for the cross-section of Route 173 to accommodate bicyclists along with the on-street parking already discussed. These cross-section concepts could be implemented separate from or in conjunction with the access concepts previously described.

Figure 10 shows the existing pavement striping and lane usage along Route 173 between South Street and North Street. Figure 11 shows the proposed future striping, incorporating bike lanes where possible along with on-street parking and the narrowed Town Square driveway. Figures 12-15 illustrate the existing cross-section of Route 173 and the proposed future cross-section.

The conceptual cross sections include 5-foot wide bike lanes, which is the minimum width specified by the American Association of State Highway and Transportation Officials (AASHTO) for bike lanes adjacent to a parking lane or a vertical surface (such as a curb). Travel lanes have generally been narrowed to 10 feet in these concepts in order to provide a parking lane and/or bike lane wherever feasible (with the exception of the eastbound travel lane at the railroad and east of North Street, where a wider outside travel lane of 11 to 12 feet is provided as a shared travel lane, due to the constrained existing cross-section). The NYSDOT Highway Design Manual indicates a minimum lane width of 11 feet in designing low speed (less than 50 mph) urban arterials, or 10 feet for "highly restricted areas with no or little truck traffic (0 to 2%)." A 2016 classification count on Route 173 indicated that heavy vehicles make up about 3 percent of the traffic in this area, and recent SMTC turning movement counts showed heavy vehicle percentages of 2.1% to 3.2% on the eastbound and westbound approaches to the study intersections on Route 173. However, it is noted that the eastbound travel lanes on Route 173 adjacent to the Town Square driveway are currently only 10 feet wide. A more detailed engineering analysis, with turning templates, would be necessary to determine if the narrower lanes would create any operational concerns, particularly for the southbound right- and left-turn movements from North Street. The desire for minimum lane widths should be balanced against the desire to create a multi-modal roadway and sense of place within the hamlet core.

Note that a bike lane is only provided in the westbound direction from North Street to the railroad tracks. Although it is generally preferable to provide a bike lane in both directions, the AASHTO Guide for the Development of Bicycle Facilities (2012) provides an exception for bike lanes to be placed in the uphill direction and sharrows in the downhill direction for roads with "appreciable grades" that may "result in bicycle speeds similar to typical motor vehicle speeds" in the downhill direction. The existing pavement width in this segment is too narrow to provide bike lanes in both directions without moving existing curbs. Therefore, a bike lane is shown on the concept in the westbound direction only, since this this an uphill grade approaching the railroad. The sight distance for vehicles making a left-turn from eastbound Route 173 at North Street should be evaluated to make sure that westbound bicyclists are visible approaching this intersection.

Existing sidewalks and crosswalks were inventoried and described in detail in Tech Memos 1 and 2. The concept plans all include an additional crosswalk on the westbound Route 173 approach at South Street. Currently, there is only a crosswalk on the eastbound approach at this intersection. Since the traffic on Route 173 at South Street does not stop at this intersection, the crosswalk on Route 173 is considered an "uncontrolled crosswalk." The NYSDOT has inventoried the location of uncontrolled crosswalks on State highways in urban areas, and will be implementing enhancements at these locations in accordance with their Pedestrian Safety Action Plan. Implementation will occur in phases, but an exact timeframe is not available yet.

The Town would need to submit a request to the NYSDOT to add another crosswalk. However, it is noted that during the course of this study, the NYSDOT expressed concerns about adding new uncontrolled crosswalks. Requests for new crosswalks typically include pedestrian counts, accident history, and a list of nearby pedestrian generators. Current data do not show a pedestrian safety issue[3], and only one pedestrian was observed crossing at this intersection during the morning and evening peak period traffic counts conducted by the SMTC in 2016 (see Table 1 in Tech Memo 2). However, the addition of a crosswalk on the westbound approach in combination with an improved streetscape, on-street parking, and bicycle lanes would create a more pedestrian-friendly context than the current condition in the hamlet core. A municipality may try to "make the case" for a crosswalk using community input (for example, a survey of residents, employees, and/or business patrons indicating a desire to walk more, and that the current lack of facilities prevents this). New curb ramps would be needed (and would need to be fully ADA-compliant), and a request would likely be viewed more favorably if the Town is able to construct the curb ramps.

The proposed striping and streetscaping plan includes new areas of parallel parking along Route 173. Although all of these locations should be examined in more detail, the parking area on the south side of Route 173, between South Street and the railroad tracks, presents some unique concerns. Since the existing sidewalk is at a higher elevation than the road, the buffer area between the parking spaces and the sidewalk will have a pronounced grade. The concept plan shows this area with rocky fill and shrubbery, to discourage people from traversing this area. Access to the parking spaces is provided via the sidewalk at either end of this three-space parking area. This design will need further evaluation to determine if an accessible route can be provided from the accessible parking space, as shown, to the sidewalk adjacent to the building.

Summary

This is the third, and final, tech memo completed for the Jamesville Hamlet Transportation Assessment. Drawing on information previously presented in Tech Memo 1 (inventory of facilities and accident analysis) and Tech Memo 2 (existing and future baseline traffic operations), as well as input from the Town of DeWitt and the NYSDOT, the SMTC has developed and evaluated a variety of possible concepts for improving traffic flow, accommodating bicyclists and pedestrians, improving on-street parking, and generally improving the sense of place in the Jamesville hamlet.

The analysis results and feedback from the NYSDOT indicate that, at this time, significant changes to the intersection configuration in the hamlet core area are not feasible. As the Town considers future potential to redevelop the former Alpha cement plant site, the possibility of providing access via a driveway or new public roadway intersecting Route 173 west of the hamlet core should be considered as an alternative to providing access through an existing driveway in the hamlet core area. The proximity of the intersections in the hamlet core, along with other physical impediments such as the railroad and steep grades, constrains the capacity of this area to accommodate significantly more trips.

[3] Table 1 in Tech Memo 2 provides a count of accidents by type for the study area intersections, from November 1, 2010, through October 31, 2015. There were no accidents involving a pedestrian at the Route 173/South Street intersection in that time period. This analysis found no non-intersection pedestrian collisions in the study area within the 5-year time period examined.

However, bicycle accommodations, parallel parking along Route 173, an additional crosswalk, and streetscaping improvements could be pursued without modifications to the intersection operations. This tech memo has presented a conceptual plan for these improvements which, implemented together, would create a stronger sense of place and enhance the experience of pedestrians and cyclists in the Jamesville hamlet area. The improvements shown on the concept plan (Figure 11) are within the State's right-of-way on Route 173, so the Town will need to work closely with the NYSDOT, as well as local business owners, to implement any changes.


Jamesville Hamlet Transportation Assessment
Technical Memorandum #3
Figure 1: Study area for future concepts
Jamesville Toll Rd
Ogle Rd
former Alpha cement plant
Solvay Rd
Jamesville Elementary School
Town Square Plaza
North St
Hamlet Core
Route 173
South St
N
These concepts are for presentation purposes only. The SMTC does not guarantee the accuracy or completeness of these concepts.
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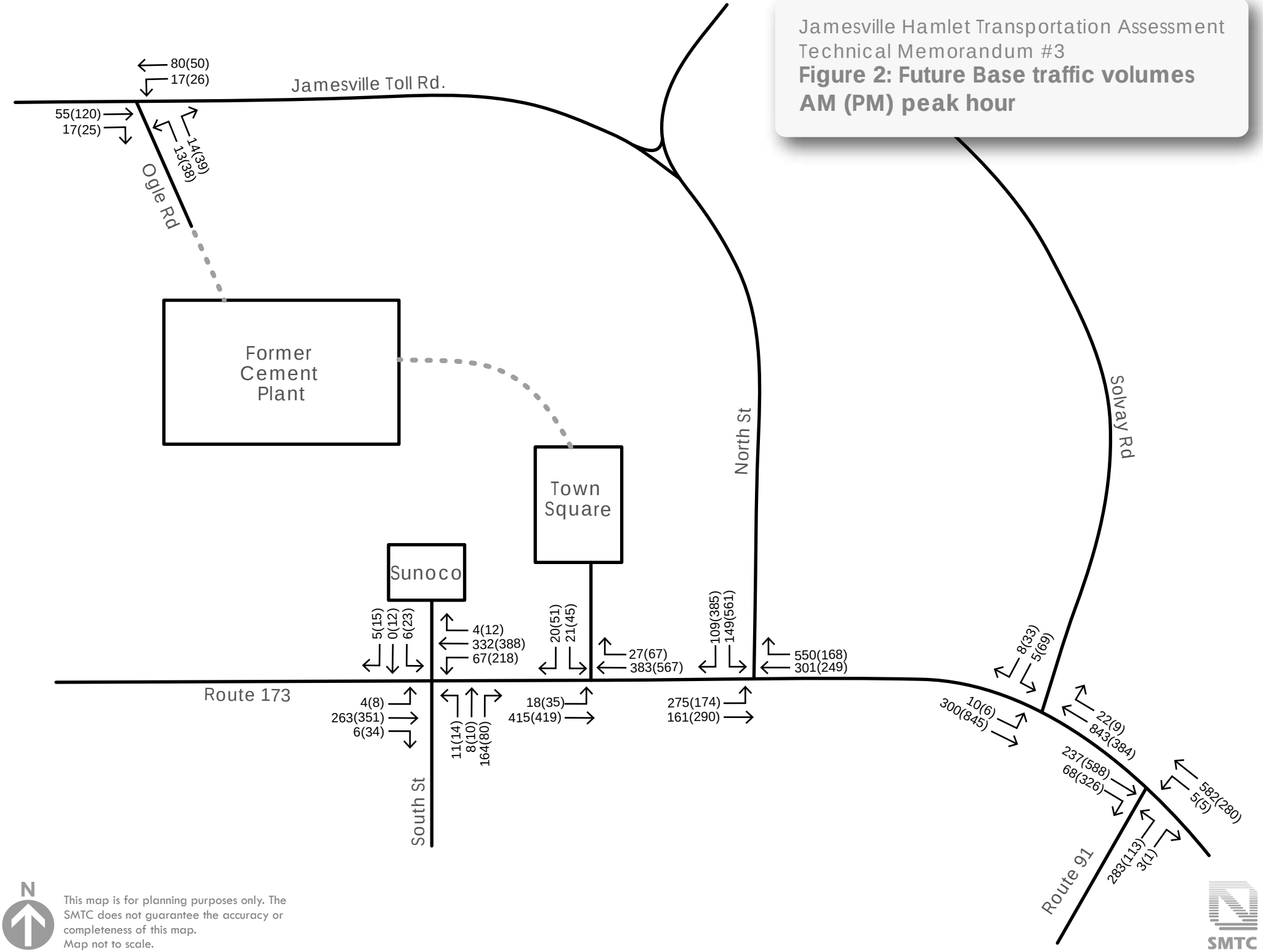
Jamesville Hamlet Transportation Assessment
Technical Memorandum #3

Figure 2: Future Base traffic volumes AM (PM) peak hour



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Map not to scale.

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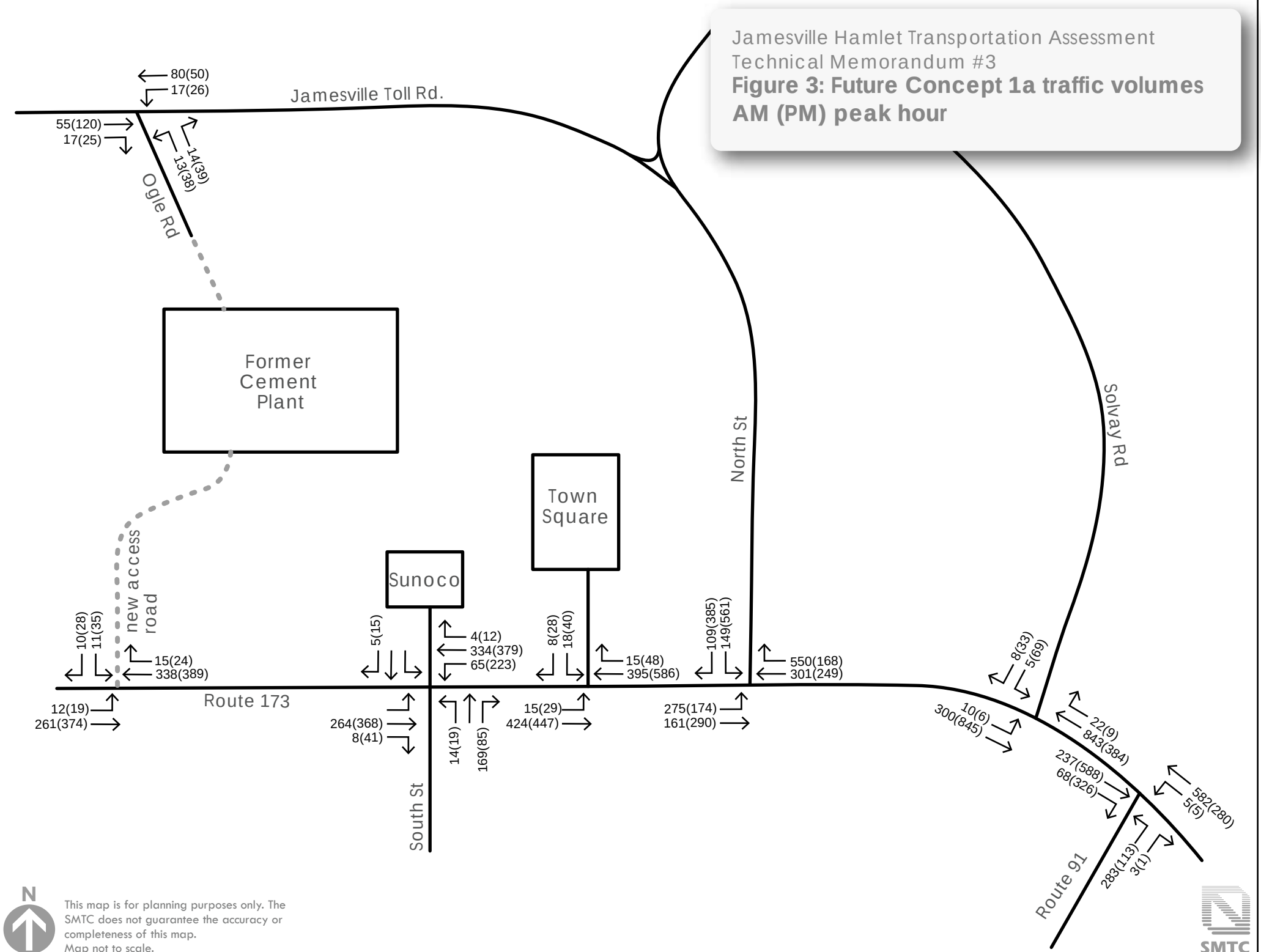
Jamesville Hamlet Transportation Assessment
Technical Memorandum #3

Figure 3: Future Concept 1a traffic volumes AM (PM) peak hour



Jamesville Hamlet Transportation Assessment
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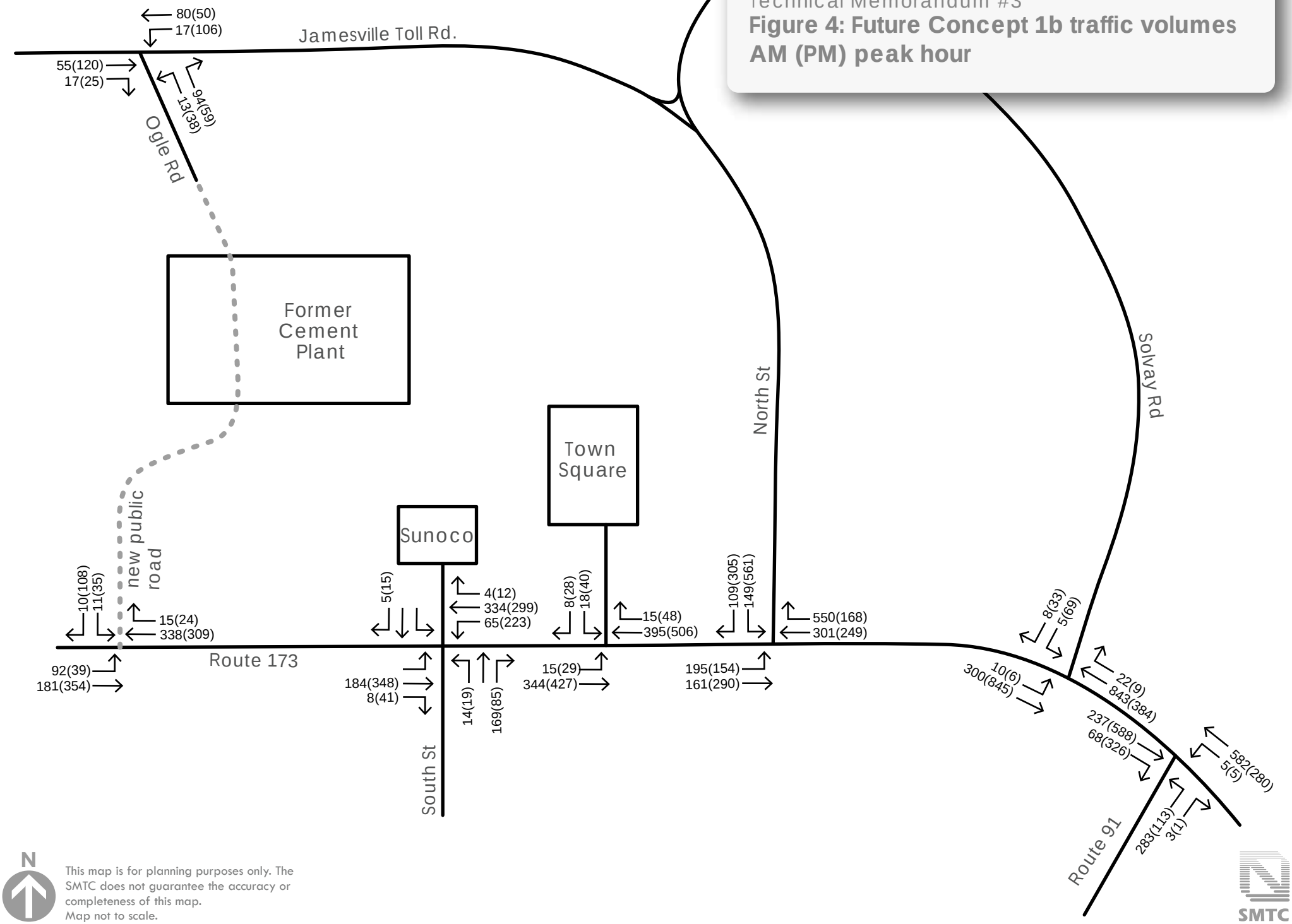
Figure 4: Future Concept 1b traffic volumes AM (PM) peak hour



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Map not to scale.

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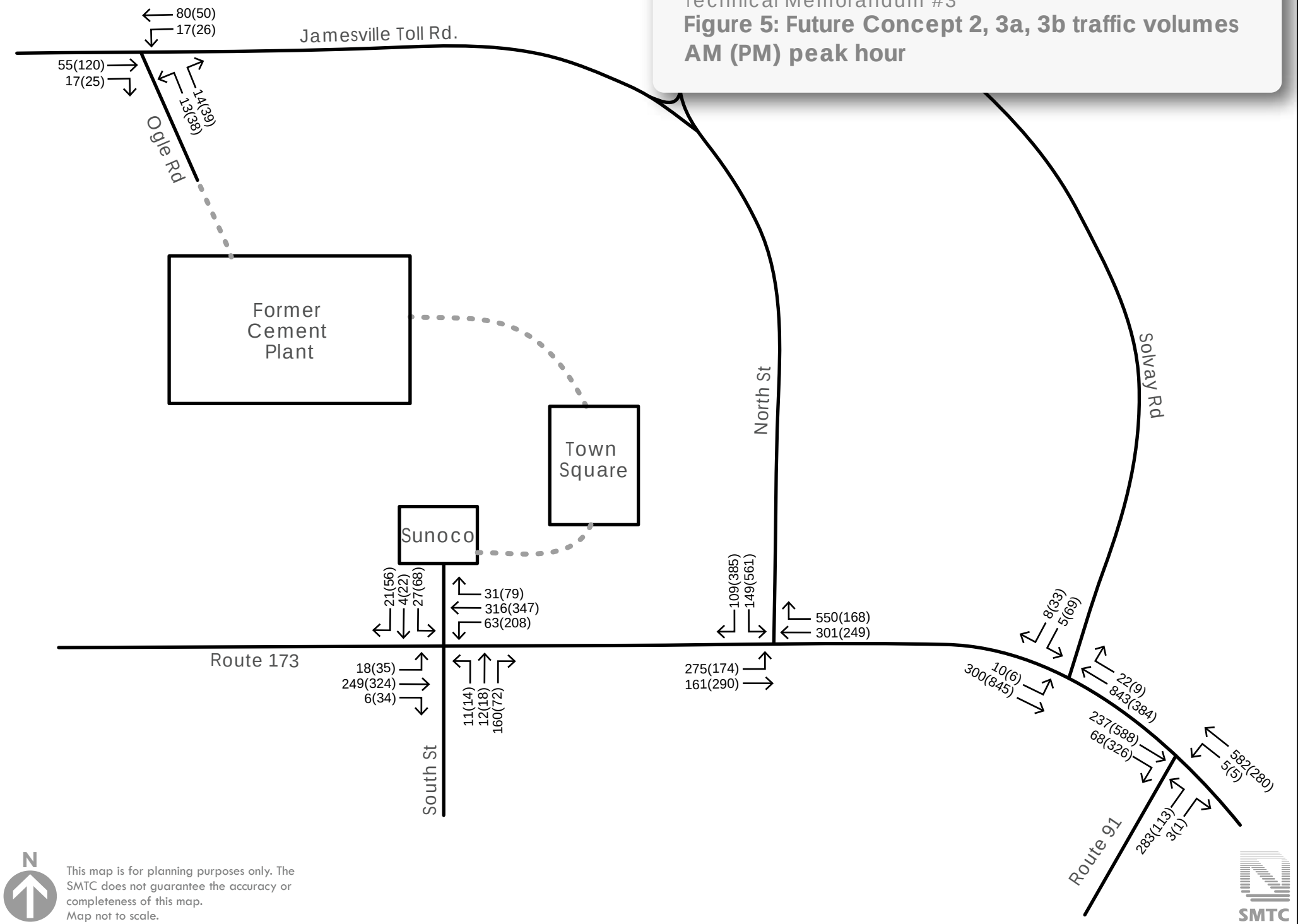
Figure 5: Future Concept 2, 3a, 3b traffic volumes AM (PM) peak hour



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Map not to scale.

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Figure 6: Concepts 1a & 1b

Town Square

Sunoco gas station

North St

Jamesville Hardware

Route 173

South St

STOP

Building with multiple businesses

Legend

Parcels

NYSDOT highway boundary (right-of-way)

0 20 40 80 Ft

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Figure 7: Concept 2

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Figure 8: Concept 3a

Town Square

Sunoco gas station

Trolley Building

North St

Jamesville Hardware

Route 173

South St

Building with multiple businesses

Legend

Parcels

NYSDOT highway boundary (right-of-way)

0 20 40 80 Ft

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Figure 9: Concept 3b

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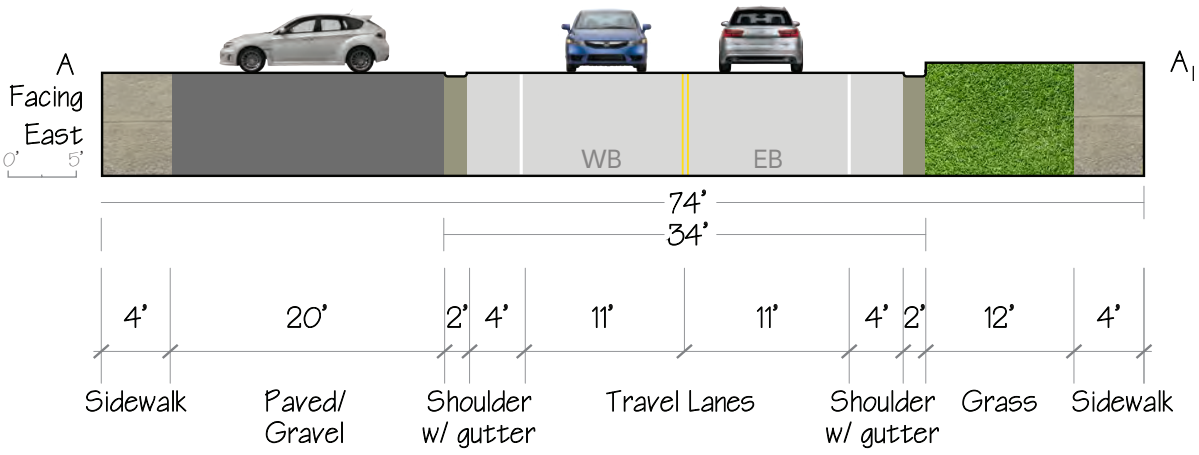
Figure 10: Hamlet core area, existing pavement striping

Jamesville Hamlet Transportation Assessment
Technical Memorandum #3

Figure 11: Hamlet core area, proposed striping and streetscaping plan

Figure 12: Route 173 at South St. Cross-Section

Existing Conditions



Proposed

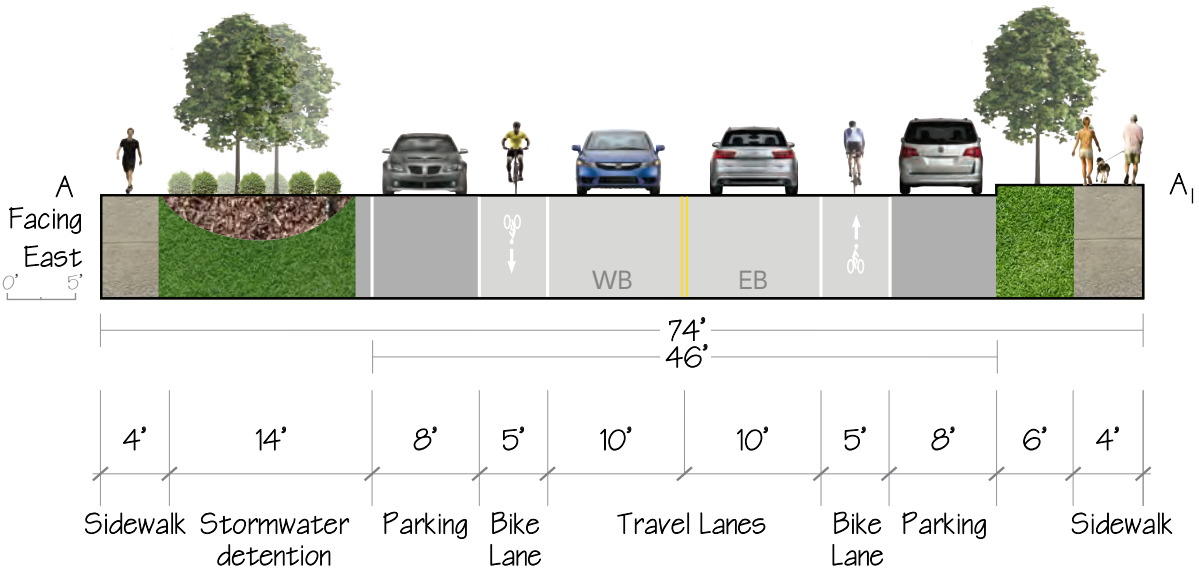
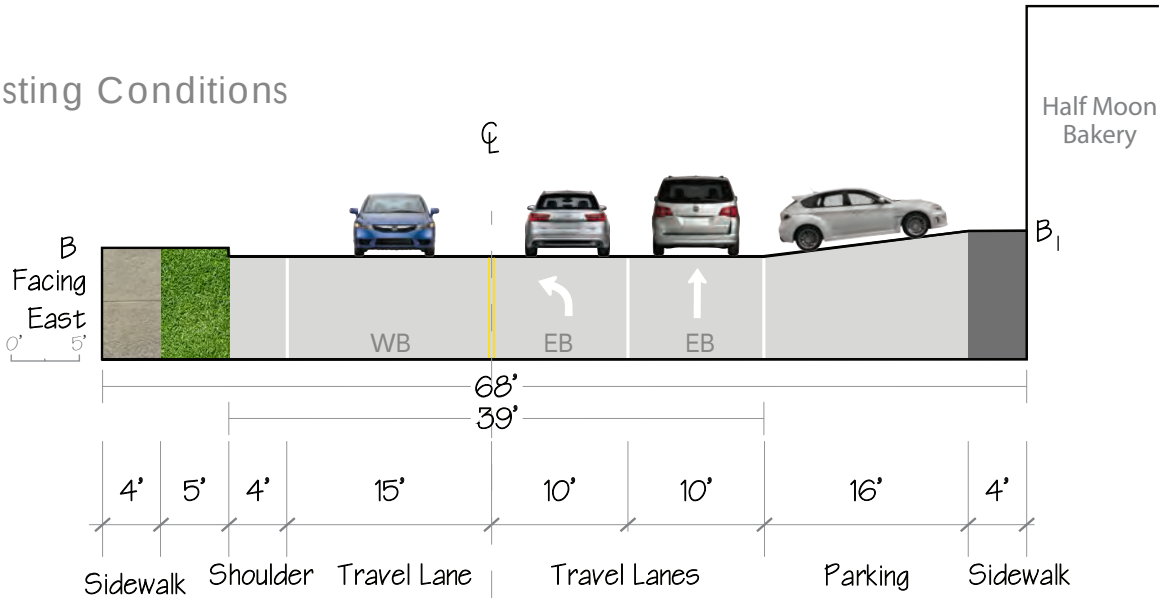


Figure 13: Route 173 at Town Square Cross-Section

Existing Conditions



Proposed

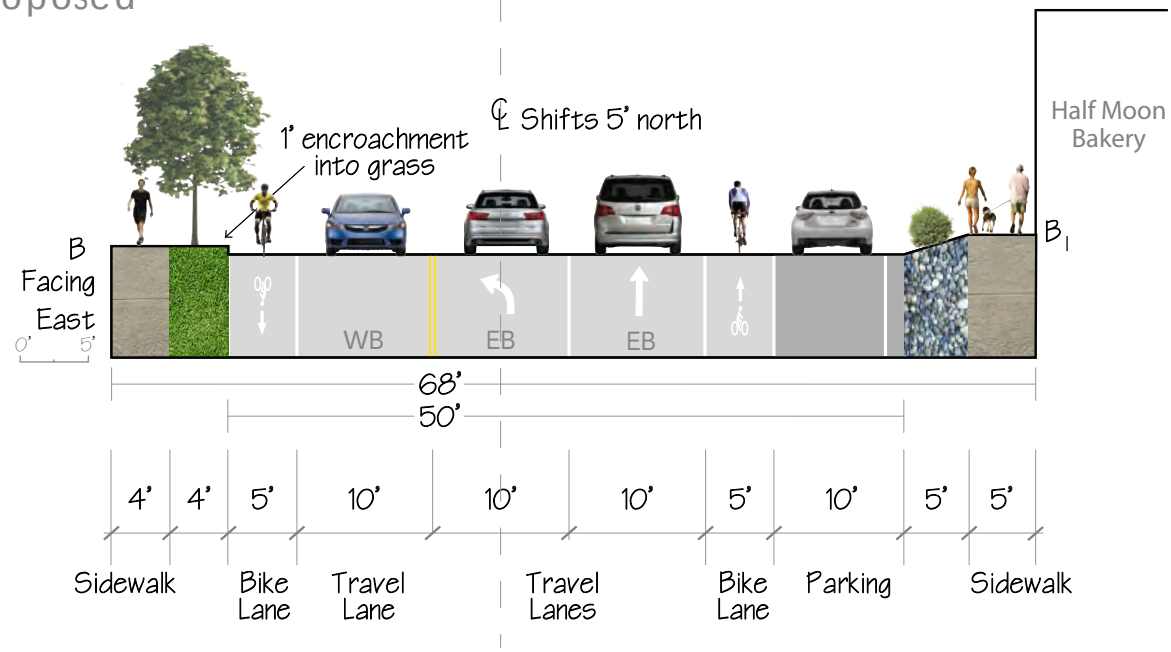
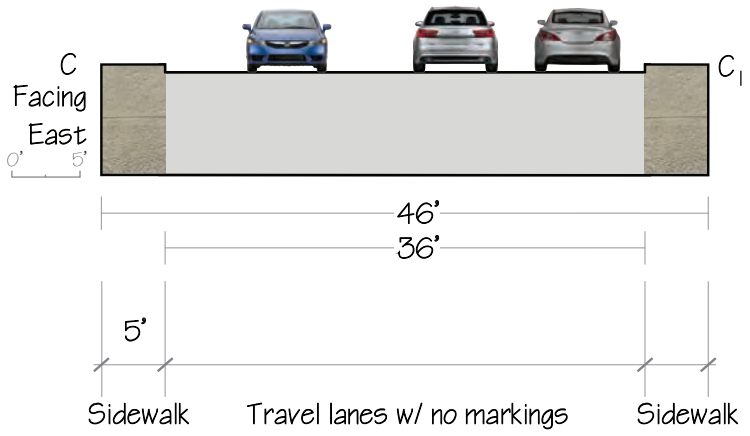


Figure 14: Route 173 at Railroad Cross-Section

Existing Conditions



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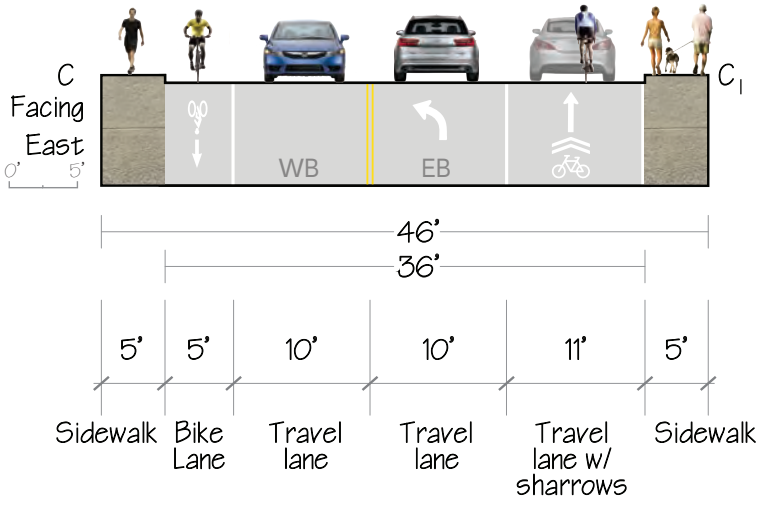
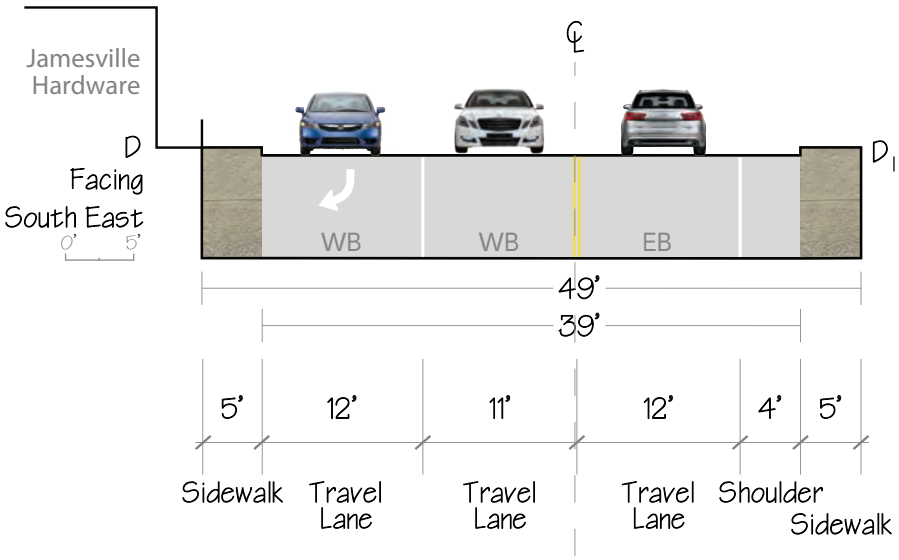
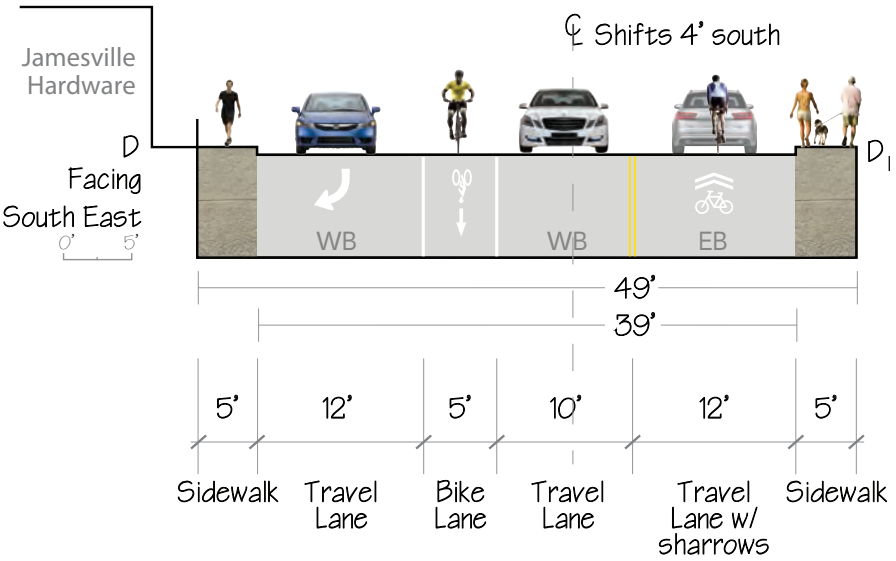


Figure 15: Route 173 east of North Street Cross-Section

Existing Conditions



Proposed



Attachment A: Roundabout screening

	Intersection	Route 173 and South Street	Route 173 and North Street
GENERAL	Municipality	Town of DeWitt	Town of DeWitt
	Road Owner(s)	NYSDOT (173)/ OCDOT (South St)	NYSDOT (173)/ OCDOT (North St)
	Purpose	Safety & aesthetics	Safety & aesthetics
	Signalized?	No	Yes
	Previously studied?	No	No
	Turning Movement Count Available?	Yes	Yes
SITE FEATURES	Distance to nearest signalized intersection (other than subject intersection)	200 Feet	1.4 Miles
	Adjacent to coordinated signal system?	No	No
	RR crossing, school zone or other bottleneck immediately adjacent?	RR crossing	RR crossing
	Steep slopes?	No	Yes
	Right-of-way limitations?	Driveway/Parking Spaces	Driveway/Parking Spaces
	High-use bus stop?	No	No
TRAFFIC FLOW FEATURES	Total entering volume (daily)	11,060	17,800
	Approximate % of entering vehicles from major street	34% from Route 173 EB; 48% from Route 173 WB	27% from Route 173 EB; 38% from Route 173 WB
	Heavy vehicle percentages (>2 axles)	3%	3%
	High pedestrian volume (known or expected)?	No	No

OTHER INFO	Other known plans or improvements at/near intersection?	None known	None known
	Coordination w/other municipalities or agencies?	Not Applicable	Not Applicable
	Other environmental factors present	Stream nearby	Stream nearby
ACCIDENTS	Total number of accidents at intersection (5 years)	11	13
	Total number of injury accidents at/near intersection (5 years)	ALL: 0 SERIOUS: 0	ALL: 2 SERIOUS: 0
	Total number of fatalities at/near intersection (5 years)	1	0
	Total number of pedestrian/cyclist accidents at/near intersection (5 years)	1 Bike (near intersection)	0
	Accidents / MEV	0.54	0.40
	Comparison to statewide accident rates	2.08 times greater	2.67 times greater
	Preliminary Roundabout sizing	Mini (<15,000 AADT)	Single-Lane (<25,000 AADT)

Attachment B: Synchro reports

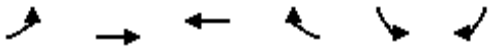
Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	251	6	65	322	4	11	8	161	6	0	5
Future Vol, veh/h	4	251	6	65	322	4	11	8	161	6	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	90	90	90	83	83	83	55	55	55
Heavy Vehicles, %	0	2	17	22	4	0	0	0	3	0	0	20
Mvmt Flow	5	295	7	72	358	4	13	10	194	11	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	362	0	0	302	0	0	817	815	299	914	816	360
Stage 1	-	-	-	-	-	-	308	308	-	504	504	-
Stage 2	-	-	-	-	-	-	509	507	-	410	312	-
Critical Hdwy	4.1	-	-	4.32	-	-	7.1	6.5	6.23	7.1	6.5	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.398	-	-	3.5	4	3.327	3.5	4	3.48
Pot Cap-1 Maneuver	1208	-	-	1153	-	-	298	314	738	256	314	646
Stage 1	-	-	-	-	-	-	706	664	-	554	544	-
Stage 2	-	-	-	-	-	-	550	543	-	623	661	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1208	-	-	1153	-	-	275	288	738	172	288	646
Mov Cap-2 Maneuver	-	-	-	-	-	-	275	288	-	172	288	-
Stage 1	-	-	-	-	-	-	702	661	-	551	502	-
Stage 2	-	-	-	-	-	-	500	501	-	450	658	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	13.7	20.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	630	1208	-	-	1153	-	-	258
HCM Lane V/C Ratio	0.344	0.004	-	-	0.063	-	-	0.078
HCM Control Delay (s)	13.7	8	0	-	8.3	0	-	20.1
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.5	0	-	-	0.2	-	-	0.2

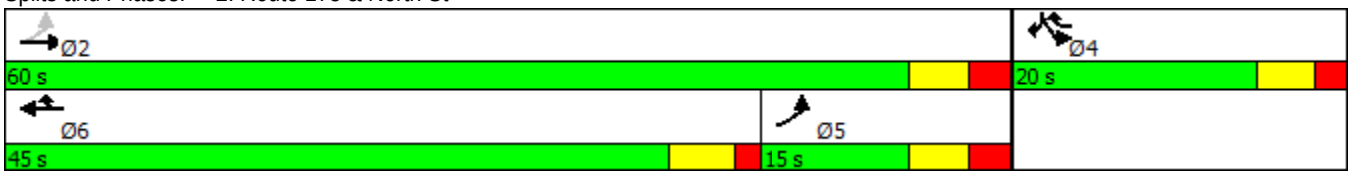


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	275	152	289	550	149	109
Future Volume (vph)	275	152	289	550	149	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1620	1689	1733	1568	1711	1406
Flt Permitted	0.492				0.950	
Satd. Flow (perm)	839	1689	1733	1568	1711	1406
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				413		127
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.91	0.91	0.87	0.87	0.86	0.86
Heavy Vehicles (%)	4%	5%	6%	3%	2%	11%
Adj. Flow (vph)	302	167	332	632	173	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	302	167	332	632	173	127
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	23.5		11.5	11.5
Total Split (s)	15.0	60.0	45.0		20.0	20.0
Total Split (%)	18.8%	75.0%	56.3%		25.0%	25.0%
Maximum Green (s)	8.8	53.8	39.5		14.5	14.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.5	2.5		2.0	2.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	29.7	29.7	16.0	32.1	10.4	10.4
Actuated g/C Ratio	0.57	0.57	0.31	0.61	0.20	0.20
v/c Ratio	0.51	0.17	0.63	0.56	0.51	0.33
Control Delay	12.1	6.2	21.8	3.8	26.1	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.1	6.2	21.8	3.8	26.1	7.6
LOS	B	A	C	A	C	A
Approach Delay		10.0	10.0		18.2	
Approach LOS		A	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 52.3			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 11.4		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	5	8	10	291	831	22
Future Vol, veh/h	5	8	10	291	831	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	97	97	84	84
Heavy Vehicles, %	80	63	30	2	3	13
Mvmt Flow	9	15	10	300	989	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1323	1002	1015	0	-	0
Stage 1	1002	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Critical Hdwy	7.2	6.83	4.4	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	4.22	3.867	2.47	-	-	-
Pot Cap-1 Maneuver	119	227	585	-	-	-
Stage 1	258	-	-	-	-	-
Stage 2	589	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	117	227	585	-	-	-
Mov Cap-2 Maneuver	117	-	-	-	-	-
Stage 1	258	-	-	-	-	-
Stage 2	577	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	30.2	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	585	-	167
HCM Lane V/C Ratio	-	-	0.018	-	0.144
HCM Control Delay (s)	-	-	11.3	0	30.2
HCM Lane LOS	-	-	B	A	D
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	30.3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	230	66	5	573	280	3
Future Vol, veh/h	230	66	5	573	280	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	84	84	91	91
Heavy Vehicles, %	2	5	0	3	4	2
Mvmt Flow	237	68	6	682	308	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	305	0	965	271
Stage 1	-	-	-	-	271	-
Stage 2	-	-	-	-	694	-
Critical Hdwy	-	-	4.1	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.2	-	3.536	3.318
Pot Cap-1 Maneuver	-	-	1267	-	~ 280	768
Stage 1	-	-	-	-	770	-
Stage 2	-	-	-	-	492	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1267	-	~ 278	768
Mov Cap-2 Maneuver	-	-	-	-	~ 278	-
Stage 1	-	-	-	-	770	-
Stage 2	-	-	-	-	488	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.1	126.7
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	280	1267	-	-	-
HCM Lane V/C Ratio	1.111	0.005	-	-	-
HCM Control Delay (s)	126.7	7.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	12.9	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

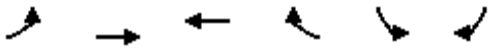
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	263	6	67	332	4	11	8	164	6	0	5
Future Vol, veh/h	4	263	6	67	332	4	11	8	164	6	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	90	90	90	83	83	83	55	55	55
Heavy Vehicles, %	0	2	17	22	4	0	0	0	3	0	0	20
Mvmt Flow	5	309	7	74	369	4	13	10	198	11	0	9

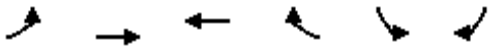
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	373	0	0	316	0	0	847	844	313	946	846	371
Stage 1	-	-	-	-	-	-	322	322	-	520	520	-
Stage 2	-	-	-	-	-	-	525	522	-	426	326	-
Critical Hdwy	4.1	-	-	4.32	-	-	7.1	6.5	6.23	7.1	6.5	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.398	-	-	3.5	4	3.327	3.5	4	3.48
Pot Cap-1 Maneuver	1197	-	-	1139	-	-	284	302	725	243	301	637
Stage 1	-	-	-	-	-	-	694	655	-	543	535	-
Stage 2	-	-	-	-	-	-	540	534	-	610	652	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1197	-	-	1139	-	-	261	276	725	161	275	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	261	276	-	161	275	-
Stage 1	-	-	-	-	-	-	691	652	-	540	491	-
Stage 2	-	-	-	-	-	-	489	490	-	435	649	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	14.1	21.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	615	1197	-	-	1139	-	-	244
HCM Lane V/C Ratio	0.359	0.004	-	-	0.065	-	-	0.082
HCM Control Delay (s)	14.1	8	0	-	8.4	0	-	21.1
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.6	0	-	-	0.2	-	-	0.3



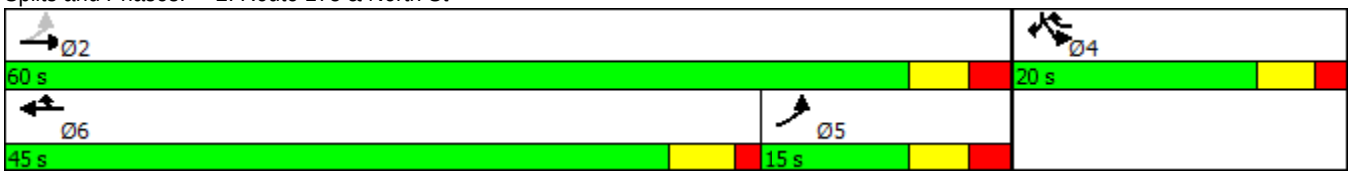
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	275	161	301	550	149	109
Future Volume (vph)	275	161	301	550	149	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1620	1689	1733	1568	1711	1406
Flt Permitted	0.477				0.950	
Satd. Flow (perm)	813	1689	1733	1568	1711	1406
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				404		127
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.91	0.91	0.87	0.87	0.86	0.86
Heavy Vehicles (%)	4%	5%	6%	3%	2%	11%
Adj. Flow (vph)	302	177	346	632	173	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	302	177	346	632	173	127
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	23.5		11.5	11.5
Total Split (s)	15.0	60.0	45.0		20.0	20.0
Total Split (%)	18.8%	75.0%	56.3%		25.0%	25.0%
Maximum Green (s)	8.8	53.8	39.5		14.5	14.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.5	2.5		2.0	2.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	30.2	30.2	16.5	32.7	10.5	10.5
Actuated g/C Ratio	0.57	0.57	0.31	0.62	0.20	0.20
v/c Ratio	0.51	0.18	0.64	0.56	0.51	0.33
Control Delay	12.4	6.2	22.0	3.9	26.4	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.4	6.2	22.0	3.9	26.4	7.6
LOS	B	A	C	A	C	A
Approach Delay		10.1	10.3		18.5	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 52.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	5	8	10	300	843	22
Future Vol, veh/h	5	8	10	300	843	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	97	97	84	84
Heavy Vehicles, %	80	63	30	2	3	13
Mvmt Flow	9	15	10	309	1004	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1347	1017	1030	0	-	0
Stage 1	1017	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	7.2	6.83	4.4	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	4.22	3.867	2.47	-	-	-
Pot Cap-1 Maneuver	115	222	577	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	113	222	577	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	571	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	31.1	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	577	-	162
HCM Lane V/C Ratio	-	-	0.018	-	0.149
HCM Control Delay (s)	-	-	11.4	0	31.1
HCM Lane LOS	-	-	B	A	D
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	33.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	237	68	5	582	283	3
Future Vol, veh/h	237	68	5	582	283	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	84	84	91	91
Heavy Vehicles, %	2	5	0	3	4	2
Mvmt Flow	244	70	6	693	311	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	314	0	984	279
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	705	-
Critical Hdwy	-	-	4.1	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.2	-	3.536	3.318
Pot Cap-1 Maneuver	-	-	1258	-	~ 273	760
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	486	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1258	-	~ 271	760
Mov Cap-2 Maneuver	-	-	-	-	~ 271	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	482	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.1	141.6
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	273	1258	-	-	-
HCM Lane V/C Ratio	1.151	0.005	-	-	-
HCM Control Delay (s)	141.6	7.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	13.7	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	55	17	17	80	13	14
Future Vol, veh/h	55	17	17	80	13	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	18	18	87	14	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	78	0	193	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1520	-	796	994
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1520	-	786	994
Mov Cap-2 Maneuver	-	-	-	-	786	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	882	-	-	1520	-
HCM Lane V/C Ratio	0.033	-	-	0.012	-
HCM Control Delay (s)	9.2	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

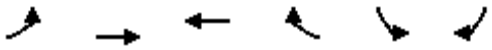
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	260	8	65	334	4	14	8	161	6	0	5
Future Vol, veh/h	4	260	8	65	334	4	14	8	161	6	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	90	90	90	83	83	83	55	55	55
Heavy Vehicles, %	0	2	17	22	4	0	0	0	3	0	0	20
Mvmt Flow	5	306	9	72	371	4	17	10	194	11	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	376	0	0	315	0	0	838	840	311	940	-	373
Stage 1	-	-	-	-	-	-	320	320	-	518	-	-
Stage 2	-	-	-	-	-	-	518	520	-	422	-	-
Critical Hdwy	4.1	-	-	4.32	-	-	7.1	6.5	6.23	7.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	-	-
Follow-up Hdwy	2.2	-	-	2.398	-	-	3.5	4	3.327	3.5	-	3.48
Pot Cap-1 Maneuver	1194	-	-	1140	-	-	288	304	727	246	0	635
Stage 1	-	-	-	-	-	-	696	656	-	544	0	-
Stage 2	-	-	-	-	-	-	544	535	-	613	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1194	-	-	1140	-	-	266	278	727	164	-	635
Mov Cap-2 Maneuver	-	-	-	-	-	-	266	278	-	164	-	-
Stage 1	-	-	-	-	-	-	693	653	-	541	-	-
Stage 2	-	-	-	-	-	-	493	492	-	441	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	14.3	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	604	1194	-	-	1140	-	-	635
HCM Lane V/C Ratio	0.365	0.004	-	-	0.063	-	-	0.014
HCM Control Delay (s)	14.3	8	0	-	8.4	-	-	10.8
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	1.7	0	-	-	0.2	-	-	0

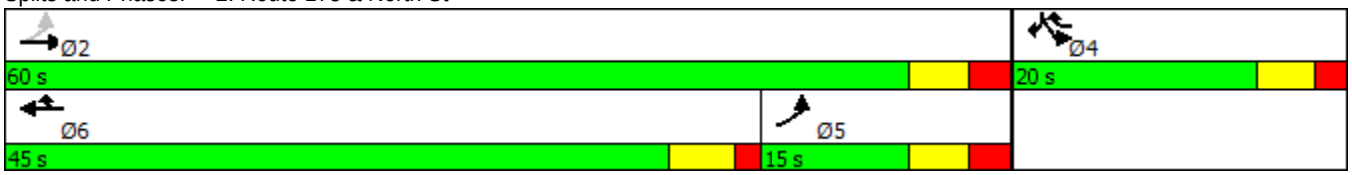


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	275	161	301	550	149	109
Future Volume (vph)	275	161	301	550	149	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1620	1689	1733	1568	1711	1406
Flt Permitted	0.477				0.950	
Satd. Flow (perm)	813	1689	1733	1568	1711	1406
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				404		127
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.91	0.91	0.87	0.87	0.86	0.86
Heavy Vehicles (%)	4%	5%	6%	3%	2%	11%
Adj. Flow (vph)	302	177	346	632	173	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	302	177	346	632	173	127
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	23.5		11.5	11.5
Total Split (s)	15.0	60.0	45.0		20.0	20.0
Total Split (%)	18.8%	75.0%	56.3%		25.0%	25.0%
Maximum Green (s)	8.8	53.8	39.5		14.5	14.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.5	2.5		2.0	2.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	30.2	30.2	16.5	32.7	10.5	10.5
Actuated g/C Ratio	0.57	0.57	0.31	0.62	0.20	0.20
v/c Ratio	0.51	0.18	0.64	0.56	0.51	0.33
Control Delay	12.4	6.2	22.0	3.9	26.4	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.4	6.2	22.0	3.9	26.4	7.6
LOS	B	A	C	A	C	A
Approach Delay		10.1	10.3		18.5	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 52.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	5	8	10	300	843	22
Future Vol, veh/h	5	8	10	300	843	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	97	97	84	84
Heavy Vehicles, %	80	63	30	2	3	13
Mvmt Flow	9	15	10	309	1004	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1347	1017	1030	0	-	0
Stage 1	1017	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	7.2	6.83	4.4	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	4.22	3.867	2.47	-	-	-
Pot Cap-1 Maneuver	115	222	577	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	113	222	577	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	571	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	31.1	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	577	-	162
HCM Lane V/C Ratio	-	-	0.018	-	0.149
HCM Control Delay (s)	-	-	11.4	0	31.1
HCM Lane LOS	-	-	B	A	D
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	33.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	237	68	5	582	283	3
Future Vol, veh/h	237	68	5	582	283	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	84	84	91	91
Heavy Vehicles, %	2	5	0	3	4	2
Mvmt Flow	244	70	6	693	311	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	314	0	984	279
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	705	-
Critical Hdwy	-	-	4.1	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.2	-	3.536	3.318
Pot Cap-1 Maneuver	-	-	1258	-	~ 273	760
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	486	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1258	-	~ 271	760
Mov Cap-2 Maneuver	-	-	-	-	~ 271	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	482	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.1	141.6
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	273	1258	-	-	-
HCM Lane V/C Ratio	1.151	0.005	-	-	-
HCM Control Delay (s)	141.6	7.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	13.7	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	55	17	17	80	13	14
Future Vol, veh/h	55	17	17	80	13	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	18	18	87	14	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	78	0	193	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1520	-	796	994
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1520	-	786	994
Mov Cap-2 Maneuver	-	-	-	-	786	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	882	-	-	1520	-
HCM Lane V/C Ratio	0.033	-	-	0.012	-
HCM Control Delay (s)	9.2	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	261	338	15	11	10
Future Vol, veh/h	12	261	338	15	11	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	307	376	17	14	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	392	0	-	0	719	384
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1167	-	-	-	395	664
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	725	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1167	-	-	-	389	664
Mov Cap-2 Maneuver	-	-	-	-	389	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	715	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1167	-	-	-	485
HCM Lane V/C Ratio	0.012	-	-	-	0.054
HCM Control Delay (s)	8.1	0	-	-	12.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

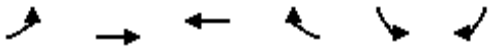
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	180	8	65	334	4	14	8	161	6	0	5
Future Vol, veh/h	4	180	8	65	334	4	14	8	161	6	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	90	90	90	83	83	83	55	55	55
Heavy Vehicles, %	0	2	17	22	4	0	0	0	3	0	0	20
Mvmt Flow	5	212	9	72	371	4	17	10	194	11	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	376	0	0	221	0	0	748	746	216	846	749	373
Stage 1	-	-	-	-	-	-	226	226	-	518	518	-
Stage 2	-	-	-	-	-	-	522	520	-	328	231	-
Critical Hdwy	4.1	-	-	4.32	-	-	7.1	6.5	6.23	7.1	6.5	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.398	-	-	3.5	4	3.327	3.5	4	3.48
Pot Cap-1 Maneuver	1194	-	-	1238	-	-	331	344	821	284	343	635
Stage 1	-	-	-	-	-	-	781	721	-	544	536	-
Stage 2	-	-	-	-	-	-	542	535	-	689	717	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1194	-	-	1238	-	-	307	317	821	199	316	635
Mov Cap-2 Maneuver	-	-	-	-	-	-	307	317	-	199	316	-
Stage 1	-	-	-	-	-	-	777	717	-	541	496	-
Stage 2	-	-	-	-	-	-	495	495	-	517	713	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.3	12.7	18.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	686	1194	-	-	1238	-	-	289
HCM Lane V/C Ratio	0.321	0.004	-	-	0.058	-	-	0.069
HCM Control Delay (s)	12.7	8	0	-	8.1	0	-	18.4
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.4	0	-	-	0.2	-	-	0.2

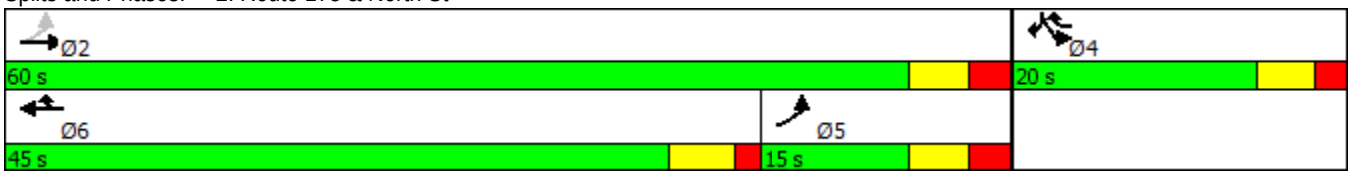


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	195	161	301	550	149	109
Future Volume (vph)	195	161	301	550	149	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1620	1689	1733	1568	1711	1406
Flt Permitted	0.482				0.950	
Satd. Flow (perm)	822	1689	1733	1568	1711	1406
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				544		127
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.91	0.91	0.87	0.87	0.86	0.86
Heavy Vehicles (%)	4%	5%	6%	3%	2%	11%
Adj. Flow (vph)	214	177	346	632	173	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	214	177	346	632	173	127
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	23.5		11.5	11.5
Total Split (s)	15.0	60.0	45.0		20.0	20.0
Total Split (%)	18.8%	75.0%	56.3%		25.0%	25.0%
Maximum Green (s)	8.8	53.8	39.5		14.5	14.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.5	2.5		2.0	2.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	29.4	29.4	16.5	32.6	10.4	10.4
Actuated g/C Ratio	0.57	0.57	0.32	0.63	0.20	0.20
v/c Ratio	0.37	0.19	0.63	0.53	0.51	0.33
Control Delay	9.4	6.2	21.2	2.6	26.1	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	6.2	21.2	2.6	26.1	7.6
LOS	A	A	C	A	C	A
Approach Delay		7.9	9.2		18.3	
Approach LOS		A	A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 52			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 54.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	5	8	10	300	843	22
Future Vol, veh/h	5	8	10	300	843	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	97	97	84	84
Heavy Vehicles, %	80	63	30	2	3	13
Mvmt Flow	9	15	10	309	1004	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1347	1017	1030	0	-	0
Stage 1	1017	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	7.2	6.83	4.4	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	4.22	3.867	2.47	-	-	-
Pot Cap-1 Maneuver	115	222	577	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	113	222	577	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	571	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	31.1	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	577	-	162
HCM Lane V/C Ratio	-	-	0.018	-	0.149
HCM Control Delay (s)	-	-	11.4	0	31.1
HCM Lane LOS	-	-	B	A	D
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	33.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	237	68	5	582	283	3
Future Vol, veh/h	237	68	5	582	283	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	84	84	91	91
Heavy Vehicles, %	2	5	0	3	4	2
Mvmt Flow	244	70	6	693	311	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	314	0	984	279
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	705	-
Critical Hdwy	-	-	4.1	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.2	-	3.536	3.318
Pot Cap-1 Maneuver	-	-	1258	-	~ 273	760
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	486	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1258	-	~ 271	760
Mov Cap-2 Maneuver	-	-	-	-	~ 271	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	482	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.1	141.6
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	273	1258	-	-	-
HCM Lane V/C Ratio	1.151	0.005	-	-	-
HCM Control Delay (s)	141.6	7.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	13.7	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	55	17	17	80	13	94
Future Vol, veh/h	55	17	17	80	13	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	18	18	87	14	102

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	78	0	193	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1520	-	796	994
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1520	-	786	994
Mov Cap-2 Maneuver	-	-	-	-	786	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NE
HCM Control Delay, s	0	1.3	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	963	-	-	1520	-
HCM Lane V/C Ratio	0.121	-	-	0.012	-
HCM Control Delay (s)	9.3	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	92	181	338	15	11	10
Future Vol, veh/h	92	181	338	15	11	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	213	376	17	14	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	392	0	-	0	813	384
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	429	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1167	-	-	-	348	664
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	657	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1167	-	-	-	311	664
Mov Cap-2 Maneuver	-	-	-	-	311	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	588	-

Approach	EB	WB	SB
HCM Control Delay, s	2.8	0	14.2
HCM LOS			B

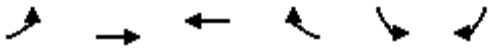
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1167	-	-	-	416
HCM Lane V/C Ratio	0.093	-	-	-	0.063
HCM Control Delay (s)	8.4	0	-	-	14.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.2

Intersection	
Intersection Delay, s/veh	17
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	18	249	6	0	63	316	31	0	11	12	160
Future Vol, veh/h	0	18	249	6	0	63	316	31	0	11	12	160
Peak Hour Factor	0.92	0.85	0.85	0.85	0.92	0.90	0.90	0.90	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	0	2	17	2	22	4	0	2	0	0	3
Mvmt Flow	0	21	293	7	0	70	351	34	0	13	14	193
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	14.3	22.6	11.9
HCM LOS	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	7%	15%	52%
Vol Thru, %	7%	91%	77%	8%
Vol Right, %	87%	2%	8%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	183	273	410	52
LT Vol	11	18	63	27
Through Vol	12	249	316	4
RT Vol	160	6	31	21
Lane Flow Rate	220	321	456	95
Geometry Grp	1	1	1	1
Degree of Util (X)	0.351	0.501	0.725	0.171
Departure Headway (Hd)	5.727	5.61	5.733	6.512
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	622	636	629	554
Service Time	3.821	3.692	3.807	4.512
HCM Lane V/C Ratio	0.354	0.505	0.725	0.171
HCM Control Delay	11.9	14.3	22.6	10.9
HCM Lane LOS	B	B	C	B
HCM 95th-tile Q	1.6	2.8	6.1	0.6

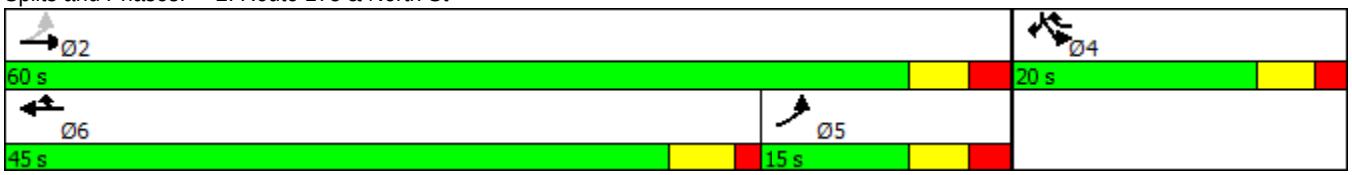


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	275	161	301	550	149	109
Future Volume (vph)	275	161	301	550	149	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1620	1689	1733	1568	1711	1406
Flt Permitted	0.468				0.950	
Satd. Flow (perm)	798	1689	1733	1568	1711	1406
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				399		127
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.91	0.91	0.87	0.87	0.86	0.86
Heavy Vehicles (%)	4%	5%	6%	3%	2%	11%
Adj. Flow (vph)	302	177	346	632	173	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	302	177	346	632	173	127
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	23.5		11.5	11.5
Total Split (s)	15.0	60.0	45.0		20.0	20.0
Total Split (%)	18.8%	75.0%	56.3%		25.0%	25.0%
Maximum Green (s)	8.8	53.8	39.5		14.5	14.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.5	2.5	2.5		3.0	3.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	30.8	30.8	16.8	34.4	11.9	11.9
Actuated g/C Ratio	0.56	0.56	0.31	0.63	0.22	0.22
v/c Ratio	0.53	0.19	0.65	0.56	0.47	0.31
Control Delay	13.3	6.6	23.0	3.8	25.1	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.3	6.6	23.0	3.8	25.1	7.3
LOS	B	A	C	A	C	A
Approach Delay		10.8	10.6		17.5	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 54.8			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 11.9		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	5	8	10	300	843	22
Future Vol, veh/h	5	8	10	300	843	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	97	97	84	84
Heavy Vehicles, %	80	63	30	2	3	13
Mvmt Flow	9	15	10	309	1004	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1347	1017	1030	0	-	0
Stage 1	1017	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	7.2	6.83	4.4	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	4.22	3.867	2.47	-	-	-
Pot Cap-1 Maneuver	115	222	577	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	113	222	577	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	571	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	31.1	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	577	-	162
HCM Lane V/C Ratio	-	-	0.018	-	0.149
HCM Control Delay (s)	-	-	11.4	0	31.1
HCM Lane LOS	-	-	B	A	D
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	33.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	237	68	5	582	283	3
Future Vol, veh/h	237	68	5	582	283	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	84	84	91	91
Heavy Vehicles, %	2	5	0	3	4	2
Mvmt Flow	244	70	6	693	311	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	314	0	984	279
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	705	-
Critical Hdwy	-	-	4.1	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.2	-	3.536	3.318
Pot Cap-1 Maneuver	-	-	1258	-	~ 273	760
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	486	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1258	-	~ 271	760
Mov Cap-2 Maneuver	-	-	-	-	~ 271	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	482	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.1	141.6
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	273	1258	-	-	-
HCM Lane V/C Ratio	1.151	0.005	-	-	-
HCM Control Delay (s)	141.6	7.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	13.7	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	55	17	17	80	13	14
Future Vol, veh/h	55	17	17	80	13	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	18	18	87	14	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	78	0	193	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1520	-	796	994
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1520	-	786	994
Mov Cap-2 Maneuver	-	-	-	-	786	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	9.2
HCM LOS			A

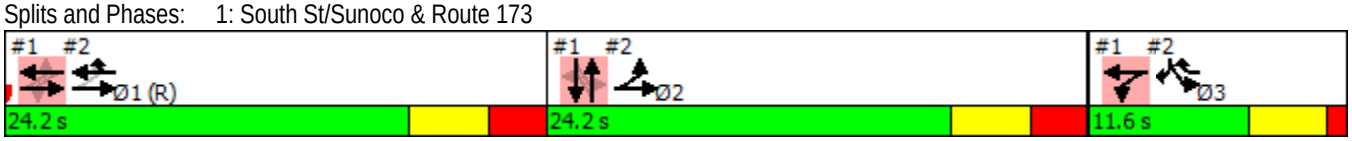
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	882	-	-	1520	-
HCM Lane V/C Ratio	0.033	-	-	0.012	-
HCM Control Delay (s)	9.2	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

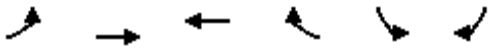
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	249	6	63	316	31	11	12	160	27	4	21
Future Volume (vph)	18	249	6	63	316	31	11	12	160	27	4	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	15	12	12	10	12	12	16	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.990			0.882			0.945	
Flt Protected		0.997			0.992			0.997			0.975	
Satd. Flow (prot)	0	1786	0	0	1928	0	0	1519	0	0	1836	0
Flt Permitted		0.952			0.916			0.973			0.664	
Satd. Flow (perm)	0	1706	0	0	1780	0	0	1483	0	0	1250	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			8			193			38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2112			139			182			107	
Travel Time (s)		48.0			3.2			4.1			2.4	
Peak Hour Factor	0.85	0.85	0.85	0.90	0.90	0.90	0.83	0.83	0.83	0.55	0.55	0.55
Heavy Vehicles (%)	0%	2%	17%	22%	4%	0%	0%	0%	3%	0%	0%	20%
Adj. Flow (vph)	21	293	7	70	351	34	13	14	193	49	7	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	321	0	0	455	0	0	220	0	0	94	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.00	0.88	1.00	1.00	1.09	1.00	1.00	0.85	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	0		20	0		20	20		20	20	
Trailing Detector (ft)	0	0		0	0		0	-10		0	-10	
Detector 1 Position(ft)	0	0		0	0		0	-10		0	-10	
Detector 1 Size(ft)	20	6		20	6		20	30		20	30	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	3.0		0.0	3.0	
Turn Type	Perm	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases		1		3	1 3			2			2	
Permitted Phases	1			1			2			2		
Detector Phase	1	1		3	1 3		2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		5.0			6.0	6.0		6.0	6.0	
Minimum Split (s)	24.2	24.2		9.5			24.2	24.2		24.2	24.2	
Total Split (s)	24.2	24.2		11.6			24.2	24.2		24.2	24.2	
Total Split (%)	40.3%	40.3%		19.3%			40.3%	40.3%		40.3%	40.3%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	18.0	18.0		7.1			18.0	18.0		18.0	18.0	
Yellow Time (s)	3.6	3.6		3.5			3.6	3.6		3.6	3.6	
All-Red Time (s)	2.6	2.6		1.0			2.6	2.6		2.6	2.6	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.2			6.2	
Lead/Lag	Lead	Lead					Lag	Lag		Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5		3.0			2.5	2.5		2.5	2.5	
Recall Mode	C-Min	C-Min		None			Min	Min		Min	Min	
Act Effct Green (s)		20.7			31.4			10.0			10.0	
Actuated g/C Ratio		0.34			0.52			0.17			0.17	
v/c Ratio		0.55			0.47			0.54			0.39	
Control Delay		21.3			4.3			10.0			18.2	
Queue Delay		0.0			0.5			0.0			0.0	
Total Delay		21.3			4.8			10.0			18.2	
LOS		C			A			B			B	
Approach Delay		21.3			4.8			10.0			18.2	
Approach LOS		C			A			B			B	

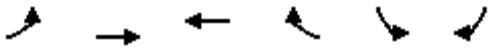
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 35.8 (60%), Referenced to phase 1:EBWB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.9		Intersection LOS: B	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: South St/Sunoco & Route 173





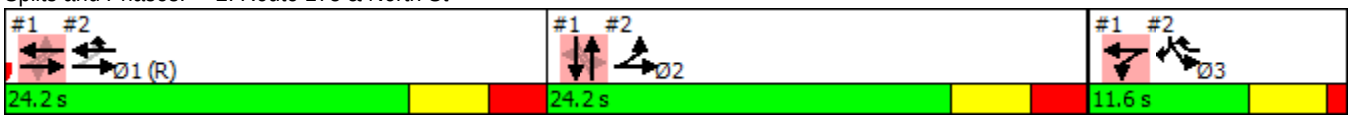
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	275	161	301	550	149	109
Future Volume (vph)	275	161	301	550	149	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1620	1689	1733	1568	1711	1406
Flt Permitted	0.469				0.950	
Satd. Flow (perm)	800	1689	1733	1568	1711	1406
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				458		127
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.91	0.91	0.87	0.87	0.86	0.86
Heavy Vehicles (%)	4%	5%	6%	3%	2%	11%
Adj. Flow (vph)	302	177	346	632	173	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	302	177	346	632	173	127
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	2	1 2	1	1 3	3	3
Permitted Phases	1 2					
Detector Phase	2	1 2	1	1 3	3	3
Switch Phase						
Minimum Initial (s)	6.0		6.0		5.0	5.0
Minimum Split (s)	24.2		24.2		9.5	9.5
Total Split (s)	24.2		24.2		11.6	11.6
Total Split (%)	40.3%		40.3%		19.3%	19.3%
Maximum Green (s)	18.0		18.0		7.1	7.1
Yellow Time (s)	3.6		3.6		3.5	3.5
All-Red Time (s)	2.6		2.6		1.0	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.2		6.2		4.5	4.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.5		2.5		3.0	3.0
Recall Mode	Min		C-Min		None	None
Act Effct Green (s)	30.7	36.9	20.7	37.6	12.4	12.4
Actuated g/C Ratio	0.51	0.62	0.34	0.63	0.21	0.21
v/c Ratio	0.55	0.17	0.58	0.55	0.49	0.32
Control Delay	7.1	2.0	22.3	4.4	29.7	8.0
Queue Delay	0.2	0.3	0.0	0.0	0.0	0.0
Total Delay	7.3	2.2	22.3	4.4	29.7	8.0
LOS	A	A	C	A	C	A
Approach Delay		5.5	10.7		20.5	
Approach LOS		A	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 35.8 (60%), Referenced to phase 1:EBWB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 59.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	5	8	10	300	843	22
Future Vol, veh/h	5	8	10	300	843	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	97	97	84	84
Heavy Vehicles, %	80	63	30	2	3	13
Mvmt Flow	9	15	10	309	1004	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1347	1017	1030	0	-	0
Stage 1	1017	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	7.2	6.83	4.4	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	4.22	3.867	2.47	-	-	-
Pot Cap-1 Maneuver	115	222	577	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	113	222	577	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	571	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	31.1	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	577	-	162
HCM Lane V/C Ratio	-	-	0.018	-	0.149
HCM Control Delay (s)	-	-	11.4	0	31.1
HCM Lane LOS	-	-	B	A	D
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	33.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	237	68	5	582	283	3
Future Vol, veh/h	237	68	5	582	283	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	84	84	91	91
Heavy Vehicles, %	2	5	0	3	4	2
Mvmt Flow	244	70	6	693	311	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	314	0	984	279
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	705	-
Critical Hdwy	-	-	4.1	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.2	-	3.536	3.318
Pot Cap-1 Maneuver	-	-	1258	-	~ 273	760
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	486	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1258	-	~ 271	760
Mov Cap-2 Maneuver	-	-	-	-	~ 271	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	482	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.1	141.6
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	273	1258	-	-	-
HCM Lane V/C Ratio	1.151	0.005	-	-	-
HCM Control Delay (s)	141.6	7.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	13.7	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	55	17	17	80	13	14
Future Vol, veh/h	55	17	17	80	13	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	18	18	87	14	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	78	0	193	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1520	-	796	994
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1520	-	786	994
Mov Cap-2 Maneuver	-	-	-	-	786	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	9.2
HCM LOS			A

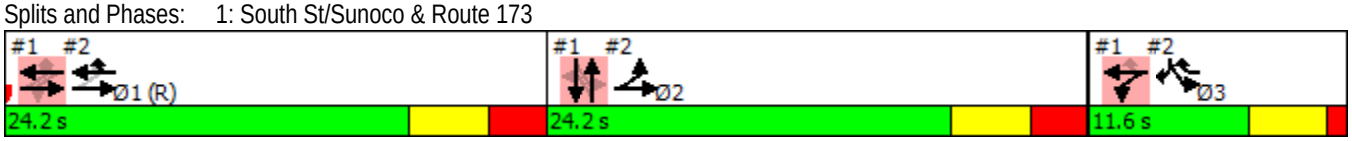
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	882	-	-	1520	-
HCM Lane V/C Ratio	0.033	-	-	0.012	-
HCM Control Delay (s)	9.2	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

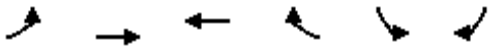
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	249	6	63	316	31	11	12	160	27	4	21
Future Volume (vph)	18	249	6	63	316	31	11	12	160	27	4	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	15	12	12	10	12	12	16	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997				0.850		0.882			0.945	
Flt Protected		0.997			0.992			0.997			0.975	
Satd. Flow (prot)	0	1786	0	0	1938	1615	0	1519	0	0	1836	0
Flt Permitted		0.955			0.910			0.973			0.664	
Satd. Flow (perm)	0	1711	0	0	1778	1615	0	1483	0	0	1250	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				58		193			38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2112			139			182			142	
Travel Time (s)		48.0			3.2			4.1			3.2	
Peak Hour Factor	0.85	0.85	0.85	0.90	0.90	0.90	0.83	0.83	0.83	0.55	0.55	0.55
Heavy Vehicles (%)	0%	2%	17%	22%	4%	0%	0%	0%	3%	0%	0%	20%
Adj. Flow (vph)	21	293	7	70	351	34	13	14	193	49	7	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	321	0	0	421	34	0	220	0	0	94	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.00	0.88	1.00	1.00	1.09	1.00	1.00	0.85	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0	1	1	1		1	1	
Detector Template	Left			Left		Right	Left			Left		
Leading Detector (ft)	20	0		20	0	20	20	20		20	20	
Trailing Detector (ft)	0	0		0	0	0	0	-10		0	-10	
Detector 1 Position(ft)	0	0		0	0	0	0	-10		0	-10	
Detector 1 Size(ft)	20	6		20	6	20	20	30		20	30	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	3.0		0.0	3.0	
Turn Type	Perm	NA		D.P+P	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		1		3	1 3			2			2	
Permitted Phases	1			1		1 3	2			2		
Detector Phase	1	1		3	1 3	1 3	2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		5.0			6.0	6.0		6.0	6.0	
Minimum Split (s)	24.2	24.2		9.5			24.2	24.2		24.2	24.2	
Total Split (s)	24.2	24.2		11.6			24.2	24.2		24.2	24.2	
Total Split (%)	40.3%	40.3%		19.3%			40.3%	40.3%		40.3%	40.3%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	18.0	18.0		7.1			18.0	18.0		18.0	18.0	
Yellow Time (s)	3.6	3.6		3.5			3.6	3.6		3.6	3.6	
All-Red Time (s)	2.6	2.6		1.0			2.6	2.6		2.6	2.6	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.2			6.2	
Lead/Lag	Lead	Lead					Lag	Lag		Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5		3.0			2.5	2.5		2.5	2.5	
Recall Mode	C-Min	C-Min		None			Min	Min		Min	Min	
Act Effct Green (s)		20.7			31.4	37.6		10.0			10.0	
Actuated g/C Ratio		0.34			0.52	0.63		0.17			0.17	
v/c Ratio		0.54			0.44	0.03		0.54			0.39	
Control Delay		21.3			4.2	0.5		10.0			18.2	
Queue Delay		0.0			0.5	0.5		0.0			0.0	
Total Delay		21.3			4.7	0.9		10.0			18.2	
LOS		C			A	A		B			B	
Approach Delay		21.3			4.4			10.0			18.2	
Approach LOS		C			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 35.8 (60%), Referenced to phase 1:EBWB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.7		Intersection LOS: B	
Intersection Capacity Utilization 60.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: South St/Sunoco & Route 173



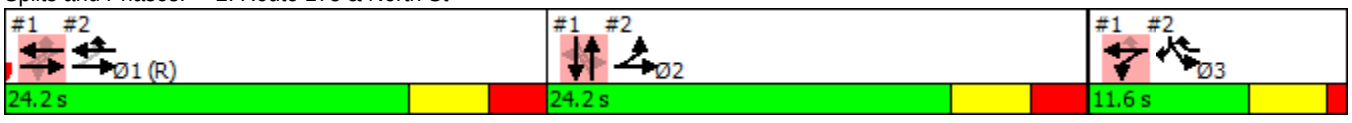


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	275	161	301	550	149	109
Future Volume (vph)	275	161	301	550	149	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1620	1689	1733	1568	1711	1406
Flt Permitted	0.469				0.950	
Satd. Flow (perm)	800	1689	1733	1568	1711	1406
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				458		127
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.91	0.91	0.87	0.87	0.86	0.86
Heavy Vehicles (%)	4%	5%	6%	3%	2%	11%
Adj. Flow (vph)	302	177	346	632	173	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	302	177	346	632	173	127
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	2	1 2	1	1 3	3	3
Permitted Phases	1 2					
Detector Phase	2	1 2	1	1 3	3	3
Switch Phase						
Minimum Initial (s)	6.0		6.0		5.0	5.0
Minimum Split (s)	24.2		24.2		9.5	9.5
Total Split (s)	24.2		24.2		11.6	11.6
Total Split (%)	40.3%		40.3%		19.3%	19.3%
Maximum Green (s)	18.0		18.0		7.1	7.1
Yellow Time (s)	3.6		3.6		3.5	3.5
All-Red Time (s)	2.6		2.6		1.0	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.2		6.2		4.5	4.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.5		2.5		3.0	3.0
Recall Mode	Min		C-Min		None	None
Act Effct Green (s)	30.7	36.9	20.7	37.6	12.4	12.4
Actuated g/C Ratio	0.51	0.62	0.34	0.63	0.21	0.21
v/c Ratio	0.55	0.17	0.58	0.55	0.49	0.32
Control Delay	7.2	2.0	22.3	4.4	29.7	8.0
Queue Delay	0.2	0.3	0.0	0.0	0.0	0.0
Total Delay	7.3	2.2	22.3	4.4	29.7	8.0
LOS	A	A	C	A	C	A
Approach Delay		5.5	10.7		20.5	
Approach LOS		A	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 35.8 (60%), Referenced to phase 1:EBWB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 59.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	5	8	10	300	843	22
Future Vol, veh/h	5	8	10	300	843	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	97	97	84	84
Heavy Vehicles, %	80	63	30	2	3	13
Mvmt Flow	9	15	10	309	1004	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1347	1017	1030	0	-	0
Stage 1	1017	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	7.2	6.83	4.4	-	-	-
Critical Hdwy Stg 1	6.2	-	-	-	-	-
Critical Hdwy Stg 2	6.2	-	-	-	-	-
Follow-up Hdwy	4.22	3.867	2.47	-	-	-
Pot Cap-1 Maneuver	115	222	577	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	113	222	577	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	571	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	31.1	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	577	-	162
HCM Lane V/C Ratio	-	-	0.018	-	0.149
HCM Control Delay (s)	-	-	11.4	0	31.1
HCM Lane LOS	-	-	B	A	D
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	33.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	237	68	5	582	283	3
Future Vol, veh/h	237	68	5	582	283	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	84	84	91	91
Heavy Vehicles, %	2	5	0	3	4	2
Mvmt Flow	244	70	6	693	311	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	314	0	984	279
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	705	-
Critical Hdwy	-	-	4.1	-	6.44	6.22
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.2	-	3.536	3.318
Pot Cap-1 Maneuver	-	-	1258	-	~ 273	760
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	486	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1258	-	~ 271	760
Mov Cap-2 Maneuver	-	-	-	-	~ 271	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	482	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.1	141.6
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	273	1258	-	-	-
HCM Lane V/C Ratio	1.151	0.005	-	-	-
HCM Control Delay (s)	141.6	7.9	0	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	13.7	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	55	17	17	80	13	14
Future Vol, veh/h	55	17	17	80	13	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	18	18	87	14	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	78	0	193	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1520	-	796	994
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1520	-	786	994
Mov Cap-2 Maneuver	-	-	-	-	786	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	882	-	-	1520	-
HCM Lane V/C Ratio	0.033	-	-	0.012	-
HCM Control Delay (s)	9.2	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

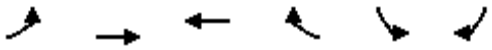
Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	332	34	211	360	12	14	10	75	23	12	15
Future Vol, veh/h	8	332	34	211	360	12	14	10	75	23	12	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	86	86	86	86	86	86	88	88	88
Heavy Vehicles, %	0	0	3	0	0	0	0	0	1	0	0	0
Mvmt Flow	10	410	42	245	419	14	16	12	87	26	14	17

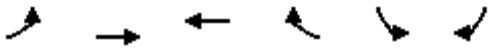
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	433	0	0	452	0	0	1383	1374	431	1416	1388	426
Stage 1	-	-	-	-	-	-	451	451	-	916	916	-
Stage 2	-	-	-	-	-	-	932	923	-	500	472	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1137	-	-	1119	-	-	122	147	626	116	144	633
Stage 1	-	-	-	-	-	-	592	574	-	329	354	-
Stage 2	-	-	-	-	-	-	322	351	-	557	562	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1137	-	-	1119	-	-	82	103	626	71	101	633
Mov Cap-2 Maneuver	-	-	-	-	-	-	82	103	-	71	101	-
Stage 1	-	-	-	-	-	-	585	567	-	325	252	-
Stage 2	-	-	-	-	-	-	211	250	-	464	555	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.3	30.2	71.6
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	255	1137	-	-	1119	-	-	107
HCM Lane V/C Ratio	0.451	0.009	-	-	0.219	-	-	0.531
HCM Control Delay (s)	30.2	8.2	0	-	9.1	0	-	71.6
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.2	0	-	-	0.8	-	-	2.4



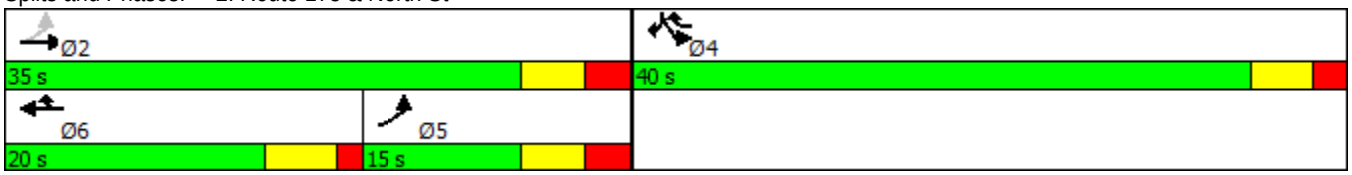
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	174	262	230	168	561	385
Future Volume (vph)	174	262	230	168	561	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1773	1818	1599	1728	1561
Flt Permitted	0.495				0.950	
Satd. Flow (perm)	878	1773	1818	1599	1728	1561
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				191		423
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.86	0.86	0.88	0.88	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	0%
Adj. Flow (vph)	202	305	261	191	616	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	305	261	191	616	423
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	11.5		11.5	11.5
Total Split (s)	15.0	35.0	20.0		40.0	40.0
Total Split (%)	20.0%	46.7%	26.7%		53.3%	53.3%
Maximum Green (s)	8.8	28.8	14.5		34.5	34.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.5	2.5		2.0	2.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	24.7	24.7	12.8	45.9	27.4	27.4
Actuated g/C Ratio	0.38	0.38	0.20	0.71	0.43	0.43
v/c Ratio	0.49	0.45	0.72	0.16	0.83	0.47
Control Delay	22.7	18.5	39.0	0.8	28.1	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.7	18.5	39.0	0.8	28.1	3.3
LOS	C	B	D	A	C	A
Approach Delay		20.2	22.9		18.0	
Approach LOS		C	C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 64.2			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 19.7		Intersection LOS: B	
Intersection Capacity Utilization 67.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	8.9

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	69	33	6	817	365	9
Future Vol, veh/h	69	33	6	817	365	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	92	92	91	91
Heavy Vehicles, %	0	3	0	1	0	33
Mvmt Flow	130	62	7	888	401	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1307	406	411	0	-	0
Stage 1	406	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Critical Hdwy	6.4	6.23	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.2	-	-	-
Pot Cap-1 Maneuver	178	643	1159	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	176	643	1159	-	-	-
Mov Cap-2 Maneuver	176	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	395	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	69	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	1159	-	230
HCM Lane V/C Ratio	-	-	0.006	-	0.837
HCM Control Delay (s)	-	-	8.1	0	69
HCM Lane LOS	-	-	A	A	F
HCM 95th %tile Q(veh)	-	-	0	-	6.5

Intersection	
Int Delay, s/veh	3.6

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	567	319	5	266	108	1
Future Vol, veh/h	567	319	5	266	108	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	91	91	83	83
Heavy Vehicles, %	1	0	0	0	2	0
Mvmt Flow	616	347	5	292	130	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	963	0	1093	790
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	303	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	723	-	237	393
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	749	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	723	-	235	393
Mov Cap-2 Maneuver	-	-	-	-	235	-
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	743	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	37.8
HCM LOS			E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	236	723	-	-	-
HCM Lane V/C Ratio	0.556	0.008	-	-	-
HCM Control Delay (s)	37.8	10	0	-	-
HCM Lane LOS	E	B	A	-	-
HCM 95th %tile Q(veh)	3.1	0	-	-	-

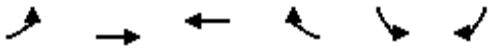
Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	351	34	218	388	12	14	10	80	23	12	15
Future Vol, veh/h	8	351	34	218	388	12	14	10	80	23	12	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	86	86	86	86	86	86	88	88	88
Heavy Vehicles, %	0	0	3	0	0	0	0	0	1	0	0	0
Mvmt Flow	10	433	42	253	451	14	16	12	93	26	14	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	465	0	0	475	0	0	1454	1446	454	1491	1460	458
Stage 1	-	-	-	-	-	-	474	474	-	965	965	-
Stage 2	-	-	-	-	-	-	980	972	-	526	495	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1107	-	-	1098	-	-	109	133	608	103	130	607
Stage 1	-	-	-	-	-	-	575	561	-	309	336	-
Stage 2	-	-	-	-	-	-	303	333	-	539	549	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1107	-	-	1098	-	-	71	91	608	60	88	607
Mov Cap-2 Maneuver	-	-	-	-	-	-	71	91	-	60	88	-
Stage 1	-	-	-	-	-	-	568	554	-	305	232	-
Stage 2	-	-	-	-	-	-	191	229	-	442	542	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.3	35	93.3
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	237	1107	-	-	1098	-	-	92
HCM Lane V/C Ratio	0.51	0.009	-	-	0.231	-	-	0.618
HCM Control Delay (s)	35	8.3	0	-	9.3	0	-	93.3
HCM Lane LOS	E	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.6	0	-	-	0.9	-	-	2.9

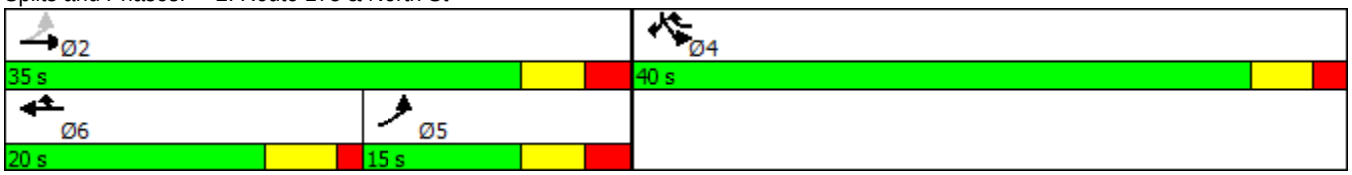


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	174	290	249	168	561	385
Future Volume (vph)	174	290	249	168	561	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1773	1818	1599	1728	1561
Flt Permitted	0.459				0.950	
Satd. Flow (perm)	814	1773	1818	1599	1728	1561
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				191		423
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.86	0.86	0.88	0.88	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	0%
Adj. Flow (vph)	202	337	283	191	616	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	337	283	191	616	423
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	11.5		11.5	11.5
Total Split (s)	15.0	35.0	20.0		40.0	40.0
Total Split (%)	20.0%	46.7%	26.7%		53.3%	53.3%
Maximum Green (s)	8.8	28.8	14.5		34.5	34.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.5	2.5		2.0	2.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	25.2	25.2	13.3	46.5	27.6	27.6
Actuated g/C Ratio	0.39	0.39	0.21	0.72	0.43	0.43
v/c Ratio	0.50	0.49	0.76	0.16	0.84	0.47
Control Delay	23.7	19.2	41.5	0.8	28.6	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	19.2	41.5	0.8	28.6	3.3
LOS	C	B	D	A	C	A
Approach Delay		20.9	25.1		18.3	
Approach LOS		C	C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 64.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	10.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	69	33	6	845	384	9
Future Vol, veh/h	69	33	6	845	384	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	92	92	91	91
Heavy Vehicles, %	0	3	0	1	0	33
Mvmt Flow	130	62	7	918	422	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1359	427	432	0	-	0
Stage 1	427	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Critical Hdwy	6.4	6.23	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.2	-	-	-
Pot Cap-1 Maneuver	165	625	1138	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	386	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	163	625	1138	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	381	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	84.7	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	1138	-	214
HCM Lane V/C Ratio	-	-	0.006	-	0.899
HCM Control Delay (s)	-	-	8.2	0	84.7
HCM Lane LOS	-	-	A	A	F
HCM 95th %tile Q(veh)	-	-	0	-	7.3

Intersection	
Int Delay, s/veh	6.8

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	588	326	5	280	113	1
Future Vol, veh/h	588	326	5	280	113	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	91	91	83	83
Heavy Vehicles, %	1	0	0	0	2	0
Mvmt Flow	639	354	5	308	136	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	993	0	1135	816
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	319	-
Critical Hdwy	-	-	4.1	-	7.12	6.2
Critical Hdwy Stg 1	-	-	-	-	6.12	-
Critical Hdwy Stg 2	-	-	-	-	6.12	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	704	-	179	380
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	693	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	704	-	178	380
Mov Cap-2 Maneuver	-	-	-	-	178	-
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	687	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	71.2
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	179	704	-	-	-
HCM Lane V/C Ratio	0.767	0.008	-	-	-
HCM Control Delay (s)	71.2	10.2	0	-	-
HCM Lane LOS	F	B	A	-	-
HCM 95th %tile Q(veh)	5	0	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	25	26	50	38	39
Future Vol, veh/h	120	25	26	50	38	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	27	28	54	41	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	158	0	255	144
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1422	-	734	903
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1422	-	719	903
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	896	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	802	-	-	1422	-
HCM Lane V/C Ratio	0.104	-	-	0.02	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

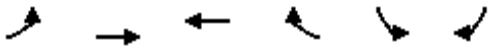
Intersection	
Int Delay, s/veh	9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	360	41	211	379	12	19	10	75	23	12	15
Future Vol, veh/h	8	360	41	211	379	12	19	10	75	23	12	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	86	86	86	86	86	86	88	88	88
Heavy Vehicles, %	0	0	3	0	0	0	0	0	1	0	0	0
Mvmt Flow	10	444	51	245	441	14	22	12	87	26	14	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	455	0	0	495	0	0	1444	1435	470	1477	1453	448
Stage 1	-	-	-	-	-	-	490	490	-	938	938	-
Stage 2	-	-	-	-	-	-	954	945	-	539	515	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1116	-	-	1079	-	-	111	135	596	105	132	615
Stage 1	-	-	-	-	-	-	564	552	-	320	346	-
Stage 2	-	-	-	-	-	-	313	343	-	530	538	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1116	-	-	1079	-	-	73	93	596	62	91	615
Mov Cap-2 Maneuver	-	-	-	-	-	-	73	93	-	62	91	-
Stage 1	-	-	-	-	-	-	557	545	-	316	241	-
Stage 2	-	-	-	-	-	-	200	239	-	437	532	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.3	42.7	88
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	211	1116	-	-	1079	-	-	95
HCM Lane V/C Ratio	0.573	0.009	-	-	0.227	-	-	0.598
HCM Control Delay (s)	42.7	8.3	0	-	9.3	0	-	88
HCM Lane LOS	E	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	3.1	0	-	-	0.9	-	-	2.8

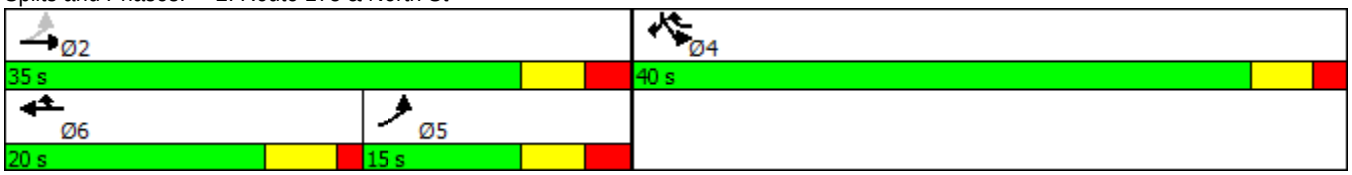


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	174	290	249	168	561	385
Future Volume (vph)	174	290	249	168	561	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1773	1818	1599	1728	1561
Flt Permitted	0.459				0.950	
Satd. Flow (perm)	814	1773	1818	1599	1728	1561
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				191		423
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.86	0.86	0.88	0.88	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	0%
Adj. Flow (vph)	202	337	283	191	616	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	337	283	191	616	423
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	11.5		11.5	11.5
Total Split (s)	15.0	35.0	20.0		40.0	40.0
Total Split (%)	20.0%	46.7%	26.7%		53.3%	53.3%
Maximum Green (s)	8.8	28.8	14.5		34.5	34.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.5	2.5		2.0	2.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	25.2	25.2	13.3	46.5	27.6	27.6
Actuated g/C Ratio	0.39	0.39	0.21	0.72	0.43	0.43
v/c Ratio	0.50	0.49	0.76	0.16	0.84	0.47
Control Delay	23.7	19.2	41.5	0.8	28.6	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	19.2	41.5	0.8	28.6	3.3
LOS	C	B	D	A	C	A
Approach Delay		20.9	25.1		18.3	
Approach LOS		C	C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 64.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	10.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	69	33	6	845	384	9
Future Vol, veh/h	69	33	6	845	384	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	92	92	91	91
Heavy Vehicles, %	0	3	0	1	0	33
Mvmt Flow	130	62	7	918	422	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1359	427	432	0	-	0
Stage 1	427	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Critical Hdwy	6.4	6.23	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.2	-	-	-
Pot Cap-1 Maneuver	165	625	1138	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	386	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	163	625	1138	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	381	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	84.7	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	1138	-	214
HCM Lane V/C Ratio	-	-	0.006	-	0.899
HCM Control Delay (s)	-	-	8.2	0	84.7
HCM Lane LOS	-	-	A	A	F
HCM 95th %tile Q(veh)	-	-	0	-	7.3

Intersection	
Int Delay, s/veh	6.8

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	588	326	5	280	113	1
Future Vol, veh/h	588	326	5	280	113	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	91	91	83	83
Heavy Vehicles, %	1	0	0	0	2	0
Mvmt Flow	639	354	5	308	136	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	993	0	1135	816
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	319	-
Critical Hdwy	-	-	4.1	-	7.12	6.2
Critical Hdwy Stg 1	-	-	-	-	6.12	-
Critical Hdwy Stg 2	-	-	-	-	6.12	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	704	-	179	380
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	693	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	704	-	178	380
Mov Cap-2 Maneuver	-	-	-	-	178	-
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	687	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	71.2
HCM LOS			F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	179	704	-	-	-
HCM Lane V/C Ratio	0.767	0.008	-	-	-
HCM Control Delay (s)	71.2	10.2	0	-	-
HCM Lane LOS	F	B	A	-	-
HCM 95th %tile Q(veh)	5	0	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	25	26	50	38	39
Future Vol, veh/h	120	25	26	50	38	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	27	28	54	41	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	158	0	255	144
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1422	-	734	903
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1422	-	719	903
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	896	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	802	-	-	1422	-
HCM Lane V/C Ratio	0.104	-	-	0.02	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	374	389	24	35	28
Future Vol, veh/h	19	374	389	24	35	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	86	86	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	23	462	452	28	44	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	480	0	-	0	975	466
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	509	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1093	-	-	-	281	601
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	608	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1093	-	-	-	273	601
Mov Cap-2 Maneuver	-	-	-	-	273	-
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	591	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1093	-	-	-	360
HCM Lane V/C Ratio	0.021	-	-	-	0.219
HCM Control Delay (s)	8.4	0	-	-	17.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

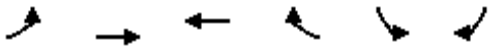
Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	340	41	211	299	12	19	10	75	23	12	15
Future Vol, veh/h	8	340	41	211	299	12	19	10	75	23	12	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	86	86	86	86	86	86	88	88	88
Heavy Vehicles, %	0	0	3	0	0	0	0	0	1	0	0	0
Mvmt Flow	10	420	51	245	348	14	22	12	87	26	14	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	362	0	0	470	0	0	1326	1317	445	1359	1335	355
Stage 1	-	-	-	-	-	-	465	465	-	845	845	-
Stage 2	-	-	-	-	-	-	861	852	-	514	490	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1208	-	-	1102	-	-	134	159	615	127	155	693
Stage 1	-	-	-	-	-	-	581	566	-	360	382	-
Stage 2	-	-	-	-	-	-	353	379	-	547	552	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1208	-	-	1102	-	-	93	113	615	78	111	693
Mov Cap-2 Maneuver	-	-	-	-	-	-	93	113	-	78	111	-
Stage 1	-	-	-	-	-	-	575	560	-	356	275	-
Stage 2	-	-	-	-	-	-	236	273	-	455	546	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.7	32	61
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	251	1208	-	-	1102	-	-	118
HCM Lane V/C Ratio	0.482	0.008	-	-	0.223	-	-	0.482
HCM Control Delay (s)	32	8	0	-	9.2	0	-	61
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.4	0	-	-	0.9	-	-	2.2

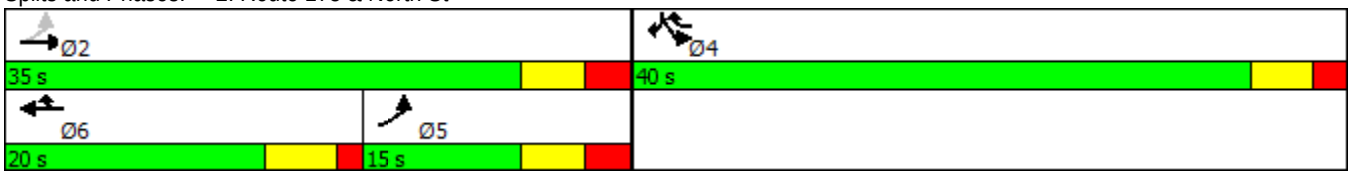


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	154	290	249	168	561	305
Future Volume (vph)	154	290	249	168	561	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1773	1818	1599	1728	1561
Flt Permitted	0.466				0.950	
Satd. Flow (perm)	826	1773	1818	1599	1728	1561
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				191		335
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.86	0.86	0.88	0.88	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	0%
Adj. Flow (vph)	179	337	283	191	616	335
Shared Lane Traffic (%)						
Lane Group Flow (vph)	179	337	283	191	616	335
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	11.5		11.5	11.5
Total Split (s)	15.0	35.0	20.0		40.0	40.0
Total Split (%)	20.0%	46.7%	26.7%		53.3%	53.3%
Maximum Green (s)	8.8	28.8	14.5		34.5	34.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.5	2.5		2.0	2.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	24.9	24.9	13.3	45.9	26.9	26.9
Actuated g/C Ratio	0.39	0.39	0.21	0.72	0.42	0.42
v/c Ratio	0.45	0.49	0.75	0.16	0.84	0.39
Control Delay	22.1	19.1	40.2	0.8	28.9	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	19.1	40.2	0.8	28.9	3.1
LOS	C	B	D	A	C	A
Approach Delay		20.1	24.3		19.8	
Approach LOS		C	C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 63.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 21.0		Intersection LOS: C	
Intersection Capacity Utilization 67.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	20.4

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	69	33	6	845	384	9
Future Vol, veh/h	69	33	6	845	384	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	92	92	91	91
Heavy Vehicles, %	0	3	0	1	0	33
Mvmt Flow	130	62	7	918	422	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1359	427	432	0	-	0
Stage 1	427	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Critical Hdwy	7.1	6.23	4.1	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.2	-	-	-
Pot Cap-1 Maneuver	~ 127	625	1138	-	-	-
Stage 1	610	-	-	-	-	-
Stage 2	322	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 126	625	1138	-	-	-
Mov Cap-2 Maneuver	~ 126	-	-	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	318	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	163.9	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	1138	-	170
HCM Lane V/C Ratio	-	-	0.006	-	1.132
HCM Control Delay (s)	-	-	8.2	0	163.9
HCM Lane LOS	-	-	A	A	F
HCM 95th %tile Q(veh)	-	-	0	-	10

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	588	326	5	280	113	1
Future Vol, veh/h	588	326	5	280	113	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	91	91	83	83
Heavy Vehicles, %	1	0	0	0	2	0
Mvmt Flow	646	354	5	308	136	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1001	0	1142	823
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	319	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	700	-	222	377
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	700	-	220	377
Mov Cap-2 Maneuver	-	-	-	-	220	-
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	730	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	44.8
HCM LOS			E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	221	700	-	-	-
HCM Lane V/C Ratio	0.621	0.008	-	-	-
HCM Control Delay (s)	44.8	10.2	0	-	-
HCM Lane LOS	E	B	A	-	-
HCM 95th %tile Q(veh)	3.7	0	-	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	120	25	106	50	38	59
Future Vol, veh/h	120	25	106	50	38	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	27	115	54	41	64

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	158	0	429	144
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	285	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1422	-	583	903
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1422	-	535	903
Mov Cap-2 Maneuver	-	-	-	-	535	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	700	-

Approach	EB	WB	NE
HCM Control Delay, s	0	5.3	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	711	-	-	1422	-
HCM Lane V/C Ratio	0.148	-	-	0.081	-
HCM Control Delay (s)	10.9	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.3	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	354	309	24	35	108
Future Vol, veh/h	39	354	309	24	35	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	416	343	27	44	135

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	370	0	-	0	865	357
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	508	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1189	-	-	-	324	687
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	604	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1189	-	-	-	308	687
Mov Cap-2 Maneuver	-	-	-	-	308	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	574	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	15.3
HCM LOS			C

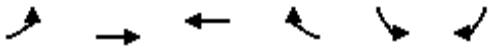
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1189	-	-	-	528
HCM Lane V/C Ratio	0.039	-	-	-	0.339
HCM Control Delay (s)	8.1	0	-	-	15.3
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.5

Intersection	
Intersection Delay, s/veh	72.1
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	35	324	34	0	208	347	79	0	14	18	72
Future Vol, veh/h	0	35	324	34	0	208	347	79	0	14	18	72
Peak Hour Factor	0.92	0.81	0.81	0.81	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	0	0	3	2	0	0	0	2	0	0	1
Mvmt Flow	0	43	400	42	0	242	403	92	0	16	21	84
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	30.1	122.5	13
HCM LOS	D	F	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	9%	33%	47%
Vol Thru, %	17%	82%	55%	15%
Vol Right, %	69%	9%	12%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	393	634	146
LT Vol	14	35	208	68
Through Vol	18	324	347	22
RT Vol	72	34	79	56
Lane Flow Rate	121	485	737	166
Geometry Grp	1	1	1	1
Degree of Util (X)	0.238	0.803	1.191	0.328
Departure Headway (Hd)	7.604	6.296	5.815	7.629
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	475	577	627	475
Service Time	5.604	4.296	3.873	5.629
HCM Lane V/C Ratio	0.255	0.841	1.175	0.349
HCM Control Delay	13	30.1	122.5	14.3
HCM Lane LOS	B	D	F	B
HCM 95th-tile Q	0.9	7.9	25.4	1.4

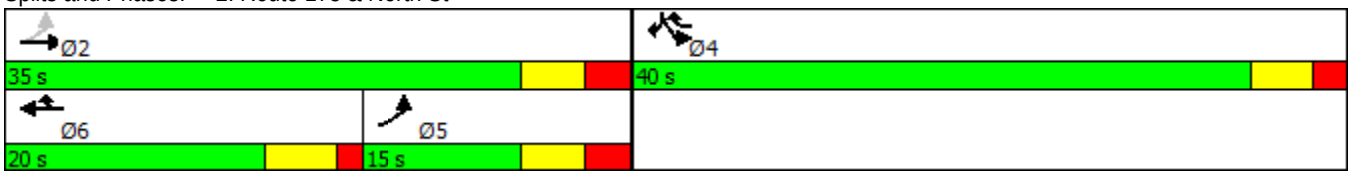


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	174	290	249	168	561	385
Future Volume (vph)	174	290	249	168	561	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1773	1818	1599	1728	1561
Flt Permitted	0.449				0.950	
Satd. Flow (perm)	796	1773	1818	1599	1728	1561
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				191		423
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.86	0.86	0.88	0.88	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	0%
Adj. Flow (vph)	202	337	283	191	616	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	337	283	191	616	423
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	5	2	6	6 4	4	4
Permitted Phases	2					
Detector Phase	5	2	6	6 4	4	4
Switch Phase						
Minimum Initial (s)	4.0	6.0	6.0		6.0	6.0
Minimum Split (s)	10.2	24.2	11.5		11.5	11.5
Total Split (s)	15.0	35.0	20.0		40.0	40.0
Total Split (%)	20.0%	46.7%	26.7%		53.3%	53.3%
Maximum Green (s)	8.8	28.8	14.5		34.5	34.5
Yellow Time (s)	3.6	3.6	4.0		3.5	3.5
All-Red Time (s)	2.6	2.6	1.5		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.2	6.2	5.5		5.5	5.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	2.5	3.0		3.0	3.0
Recall Mode	None	Min	Min		None	None
Act Effct Green (s)	26.4	26.4	13.7	48.4	29.2	29.2
Actuated g/C Ratio	0.39	0.39	0.20	0.72	0.43	0.43
v/c Ratio	0.50	0.49	0.77	0.16	0.83	0.46
Control Delay	24.1	19.6	43.3	0.8	28.0	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	19.6	43.3	0.8	28.0	3.2
LOS	C	B	D	A	C	A
Approach Delay		21.3	26.2		17.9	
Approach LOS		C	C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 67.5			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 20.7		Intersection LOS: C	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	20.4

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	69	33	6	845	384	9
Future Vol, veh/h	69	33	6	845	384	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	92	92	91	91
Heavy Vehicles, %	0	3	0	1	0	33
Mvmt Flow	130	62	7	918	422	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1359	427	432	0	-	0
Stage 1	427	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Critical Hdwy	7.1	6.23	4.1	-	-	-
Critical Hdwy Stg 1	6.1	-	-	-	-	-
Critical Hdwy Stg 2	6.1	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.2	-	-	-
Pot Cap-1 Maneuver	~ 127	625	1138	-	-	-
Stage 1	610	-	-	-	-	-
Stage 2	322	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 126	625	1138	-	-	-
Mov Cap-2 Maneuver	~ 126	-	-	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	318	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	163.9	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	1138	-	170
HCM Lane V/C Ratio	-	-	0.006	-	1.132
HCM Control Delay (s)	-	-	8.2	0	163.9
HCM Lane LOS	-	-	A	A	F
HCM 95th %tile Q(veh)	-	-	0	-	10

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	588	326	5	280	113	1
Future Vol, veh/h	588	326	5	280	113	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	91	91	83	83
Heavy Vehicles, %	1	0	0	0	2	0
Mvmt Flow	639	354	5	308	136	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	993	0	1135	816
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	319	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	704	-	224	380
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	704	-	222	380
Mov Cap-2 Maneuver	-	-	-	-	222	-
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	730	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	44
HCM LOS			E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	223	704	-	-	-
HCM Lane V/C Ratio	0.616	0.008	-	-	-
HCM Control Delay (s)	44	10.2	0	-	-
HCM Lane LOS	E	B	A	-	-
HCM 95th %tile Q(veh)	3.6	0	-	-	-

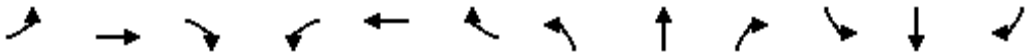
Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	25	26	50	38	39
Future Vol, veh/h	120	25	26	50	38	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	27	28	54	41	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	158	0	255	144
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1422	-	734	903
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1422	-	719	903
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	896	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	802	-	-	1422	-
HCM Lane V/C Ratio	0.104	-	-	0.02	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

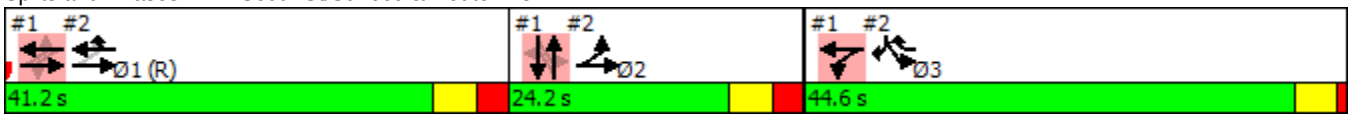


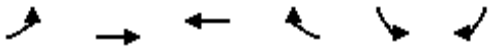
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	324	34	208	347	79	14	18	72	68	22	56
Future Volume (vph)	35	324	34	208	347	79	14	18	72	68	22	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	15	12	12	10	12	12	16	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.983			0.906			0.948	
Flt Protected		0.996			0.984			0.993			0.977	
Satd. Flow (prot)	0	1803	0	0	2022	0	0	1584	0	0	1994	0
Flt Permitted		0.889			0.518			0.926			0.728	
Satd. Flow (perm)	0	1609	0	0	1064	0	0	1477	0	0	1486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			14			84			25	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2112			139			182			107	
Travel Time (s)		48.0			3.2			4.1			2.4	
Peak Hour Factor	0.81	0.81	0.81	0.86	0.86	0.86	0.86	0.86	0.86	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	3%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	43	400	42	242	403	92	16	21	84	77	25	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	485	0	0	737	0	0	121	0	0	166	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.00	0.88	1.00	1.00	1.09	1.00	1.00	0.85	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	0		20	0		20	20		20	20	
Trailing Detector (ft)	0	0		0	0		0	-10		0	-10	
Detector 1 Position(ft)	0	0		0	0		0	-10		0	-10	
Detector 1 Size(ft)	20	6		20	6		20	30		20	30	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases		1		3	1 3			2			2	
Permitted Phases	1			1			2			2		
Detector Phase	1	1		3	1 3		2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		5.0			6.0	6.0		6.0	6.0	
Minimum Split (s)	24.2	24.2		9.5			24.2	24.2		24.2	24.2	
Total Split (s)	41.2	41.2		44.6			24.2	24.2		24.2	24.2	
Total Split (%)	37.5%	37.5%		40.5%			22.0%	22.0%		22.0%	22.0%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	35.0	35.0		40.1			18.0	18.0		18.0	18.0	
Yellow Time (s)	3.6	3.6		3.5			3.6	3.6		3.6	3.6	
All-Red Time (s)	2.6	2.6		1.0			2.6	2.6		2.6	2.6	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.2			6.2	
Lead/Lag	Lead	Lead					Lag	Lag		Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5		3.0			2.5	2.5		2.5	2.5	
Recall Mode	C-Min	C-Min		None			Min	Min		Min	Min	
Act Effct Green (s)		36.0			76.6			14.8			14.8	
Actuated g/C Ratio		0.33			0.70			0.13			0.13	
v/c Ratio		0.92			0.67			0.45			0.75	
Control Delay		59.8			13.1			20.9			59.1	
Queue Delay		0.0			0.9			0.0			0.0	
Total Delay		59.8			14.0			20.9			59.1	
LOS		E			B			C			E	
Approach Delay		59.8			14.0			20.9			59.1	
Approach LOS		E			B			C			E	

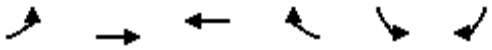
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 1:EBWB, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 34.2		Intersection LOS: C	
Intersection Capacity Utilization 86.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: South St/Sunoco & Route 173





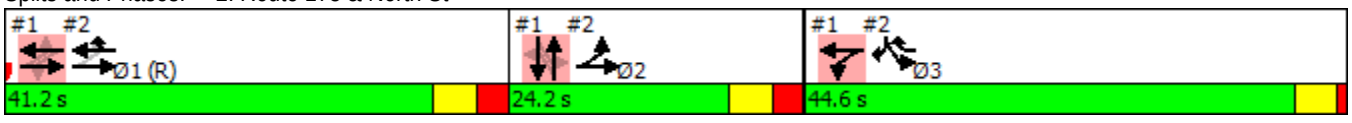
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	174	290	249	168	561	385
Future Volume (vph)	174	290	249	168	561	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1773	1818	1599	1728	1561
Flt Permitted	0.462				0.950	
Satd. Flow (perm)	819	1773	1818	1599	1728	1561
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				191		290
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.86	0.86	0.88	0.88	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	0%
Adj. Flow (vph)	202	337	283	191	616	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	337	283	191	616	423
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	2	1 2	1	1 3	3	3
Permitted Phases	1 2					
Detector Phase	2	1 2	1	1 3	3	3
Switch Phase						
Minimum Initial (s)	6.0		6.0		5.0	5.0
Minimum Split (s)	24.2		24.2		9.5	9.5
Total Split (s)	24.2		41.2		44.6	44.6
Total Split (%)	22.0%		37.5%		40.5%	40.5%
Maximum Green (s)	18.0		35.0		40.1	40.1
Yellow Time (s)	3.6		3.6		3.5	3.5
All-Red Time (s)	2.6		2.6		1.0	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.2		6.2		4.5	4.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.5		2.5		3.0	3.0
Recall Mode	Min		C-Min		None	None
Act Effct Green (s)	50.8	57.0	36.0	82.8	42.3	42.3
Actuated g/C Ratio	0.46	0.52	0.33	0.75	0.38	0.38
v/c Ratio	0.41	0.37	0.48	0.15	0.93	0.54
Control Delay	3.9	2.8	33.2	0.9	54.9	11.1
Queue Delay	1.6	2.4	1.1	0.0	0.0	0.4
Total Delay	5.5	5.3	34.2	0.9	54.9	11.6
LOS	A	A	C	A	D	B
Approach Delay		5.4	20.8		37.3	
Approach LOS		A	C		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 1:EBWB, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 25.1		Intersection LOS: C	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	10.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	69	33	6	845	384	9
Future Vol, veh/h	69	33	6	845	384	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	92	92	91	91
Heavy Vehicles, %	0	3	0	1	0	33
Mvmt Flow	130	62	7	918	422	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1359	427	432	0	-	0
Stage 1	427	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Critical Hdwy	6.4	6.23	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.2	-	-	-
Pot Cap-1 Maneuver	165	625	1138	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	386	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	163	625	1138	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	381	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	84.7	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	1138	-	214
HCM Lane V/C Ratio	-	-	0.006	-	0.899
HCM Control Delay (s)	-	-	8.2	0	84.7
HCM Lane LOS	-	-	A	A	F
HCM 95th %tile Q(veh)	-	-	0	-	7.3

Intersection	
Int Delay, s/veh	4.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	588	326	5	280	113	1
Future Vol, veh/h	588	326	5	280	113	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	91	91	83	83
Heavy Vehicles, %	1	0	0	0	2	0
Mvmt Flow	639	354	5	308	136	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	993	0	1135	816
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	319	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	704	-	224	380
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	704	-	222	380
Mov Cap-2 Maneuver	-	-	-	-	222	-
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	730	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	44
HCM LOS			E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	223	704	-	-	-
HCM Lane V/C Ratio	0.616	0.008	-	-	-
HCM Control Delay (s)	44	10.2	0	-	-
HCM Lane LOS	E	B	A	-	-
HCM 95th %tile Q(veh)	3.6	0	-	-	-

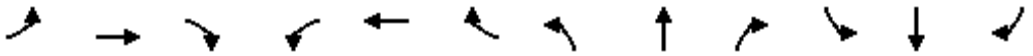
Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	25	26	50	38	39
Future Vol, veh/h	120	25	26	50	38	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	27	28	54	41	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	158	0	255	144
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1422	-	734	903
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1422	-	719	903
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	896	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	802	-	-	1422	-
HCM Lane V/C Ratio	0.104	-	-	0.02	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

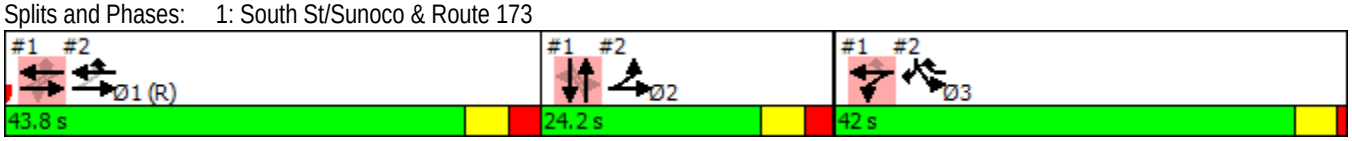


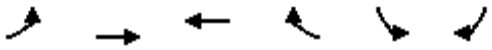
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	324	34	208	347	79	14	18	72	68	22	56
Future Volume (vph)	35	324	34	208	347	79	14	18	72	68	22	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	12	15	12	12	10	12	12	16	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988				0.850		0.906			0.948	
Flt Protected		0.996			0.982			0.993			0.977	
Satd. Flow (prot)	0	1803	0	0	2052	1615	0	1584	0	0	1994	0
Flt Permitted		0.801			0.504			0.926			0.728	
Satd. Flow (perm)	0	1450	0	0	1053	1615	0	1477	0	0	1486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				92		84			25	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2112			139			182			107	
Travel Time (s)		48.0			3.2			4.1			2.4	
Peak Hour Factor	0.81	0.81	0.81	0.86	0.86	0.86	0.86	0.86	0.86	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	3%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	43	400	42	242	403	92	16	21	84	77	25	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	485	0	0	645	92	0	121	0	0	166	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.00	0.88	1.00	1.00	1.09	1.00	1.00	0.85	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0	1	1	1		1	1	
Detector Template	Left			Left		Right	Left			Left		
Leading Detector (ft)	20	0		20	0	20	20	20		20	20	
Trailing Detector (ft)	0	0		0	0	0	0	-10		0	-10	
Detector 1 Position(ft)	0	0		0	0	0	0	-10		0	-10	
Detector 1 Size(ft)	20	6		20	6	20	20	30		20	30	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		D.P+P	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		1		3	1 3			2			2	
Permitted Phases	1			1		1 3	2			2		
Detector Phase	1	1		3	1 3	1 3	2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		5.0			6.0	6.0		6.0	6.0	
Minimum Split (s)	24.2	24.2		9.5			24.2	24.2		24.2	24.2	
Total Split (s)	43.8	43.8		42.0			24.2	24.2		24.2	24.2	
Total Split (%)	39.8%	39.8%		38.2%			22.0%	22.0%		22.0%	22.0%	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Maximum Green (s)	37.6	37.6		37.5			18.0	18.0		18.0	18.0	
Yellow Time (s)	3.6	3.6		3.5			3.6	3.6		3.6	3.6	
All-Red Time (s)	2.6	2.6		1.0			2.6	2.6		2.6	2.6	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		6.2						6.2			6.2	
Lead/Lag	Lead	Lead					Lag	Lag		Lag	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5		3.0			2.5	2.5		2.5	2.5	
Recall Mode	C-Min	C-Min		None			Min	Min		Min	Min	
Act Effct Green (s)		37.6			76.6	82.8		14.8			14.8	
Actuated g/C Ratio		0.34			0.70	0.75		0.13			0.13	
v/c Ratio		0.97			0.59	0.07		0.45			0.75	
Control Delay		70.8			8.2	0.1		20.9			59.1	
Queue Delay		0.0			0.9	1.1		0.0			0.0	
Total Delay		70.8			9.1	1.2		20.9			59.1	
LOS		E			A	A		C			E	
Approach Delay		70.8			8.1			20.9			59.1	
Approach LOS		E			A			C			E	

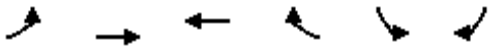
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 1:EBWB, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 34.9		Intersection LOS: C	
Intersection Capacity Utilization 81.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: South St/Sunoco & Route 173





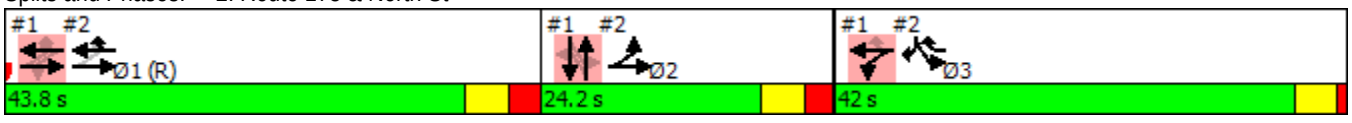
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	174	290	249	168	561	385
Future Volume (vph)	174	290	249	168	561	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	11	12	11	11
Storage Length (ft)	0			125	0	180
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1773	1818	1599	1728	1561
Flt Permitted	0.472				0.950	
Satd. Flow (perm)	837	1773	1818	1599	1728	1561
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				191		280
Link Speed (mph)		30	30		30	
Link Distance (ft)		139	420		290	
Travel Time (s)		3.2	9.5		6.6	
Peak Hour Factor	0.86	0.86	0.88	0.88	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	1%	0%
Adj. Flow (vph)	202	337	283	191	616	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	337	283	191	616	423
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		10	10		11	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.00	1.04	1.04
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	2	2	2	2	2
Detector Template						
Leading Detector (ft)	60	60	60	60	60	60
Trailing Detector (ft)	-10	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10	-10	-10	-10	-10
Detector 1 Size(ft)	30	30	30	30	30	30
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	30	30	30	30	30	30
Detector 2 Size(ft)	30	30	30	30	30	30
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	NA	pt+ov	Prot	Prot



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Protected Phases	2	1 2	1	1 3	3	3
Permitted Phases	1 2					
Detector Phase	2	1 2	1	1 3	3	3
Switch Phase						
Minimum Initial (s)	6.0		6.0		5.0	5.0
Minimum Split (s)	24.2		24.2		9.5	9.5
Total Split (s)	24.2		43.8		42.0	42.0
Total Split (%)	22.0%		39.8%		38.2%	38.2%
Maximum Green (s)	18.0		37.6		37.5	37.5
Yellow Time (s)	3.6		3.6		3.5	3.5
All-Red Time (s)	2.6		2.6		1.0	1.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.2		6.2		4.5	4.5
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?						
Vehicle Extension (s)	2.5		2.5		3.0	3.0
Recall Mode	Min		C-Min		None	None
Act Effct Green (s)	52.4	58.6	37.6	82.8	40.7	40.7
Actuated g/C Ratio	0.48	0.53	0.34	0.75	0.37	0.37
v/c Ratio	0.39	0.36	0.46	0.15	0.96	0.56
Control Delay	3.5	2.6	31.2	0.9	63.5	12.7
Queue Delay	1.9	3.2	0.2	0.0	0.0	0.1
Total Delay	5.4	5.8	31.4	0.9	63.5	12.8
LOS	A	A	C	A	E	B
Approach Delay		5.6	19.1		42.8	
Approach LOS		A	B		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 1:EBWB, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 27.6		Intersection LOS: C	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Route 173 & North St



Intersection	
Int Delay, s/veh	10.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	69	33	6	845	384	9
Future Vol, veh/h	69	33	6	845	384	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	92	92	91	91
Heavy Vehicles, %	0	3	0	1	0	33
Mvmt Flow	130	62	7	918	422	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1359	427	432	0	-	0
Stage 1	427	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Critical Hdwy	6.4	6.23	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.2	-	-	-
Pot Cap-1 Maneuver	165	625	1138	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	386	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	163	625	1138	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	381	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s	84.7	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1
Capacity (veh/h)	-	-	1138	-	214
HCM Lane V/C Ratio	-	-	0.006	-	0.899
HCM Control Delay (s)	-	-	8.2	0	84.7
HCM Lane LOS	-	-	A	A	F
HCM 95th %tile Q(veh)	-	-	0	-	7.3

Intersection	
Int Delay, s/veh	4.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	588	326	5	280	113	1
Future Vol, veh/h	588	326	5	280	113	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	91	91	83	83
Heavy Vehicles, %	1	0	0	0	2	0
Mvmt Flow	639	354	5	308	136	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	993	0	1135	816
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	319	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	704	-	224	380
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	704	-	222	380
Mov Cap-2 Maneuver	-	-	-	-	222	-
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	730	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.2	44
HCM LOS			E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	223	704	-	-	-
HCM Lane V/C Ratio	0.616	0.008	-	-	-
HCM Control Delay (s)	44	10.2	0	-	-
HCM Lane LOS	E	B	A	-	-
HCM 95th %tile Q(veh)	3.6	0	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	25	26	50	38	39
Future Vol, veh/h	120	25	26	50	38	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	27	28	54	41	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	158	0	255	144
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1422	-	734	903
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1422	-	719	903
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	896	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	802	-	-	1422	-
HCM Lane V/C Ratio	0.104	-	-	0.02	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-